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IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	Docket No. T-00000B-97-0238 **U S WEST COMMUNICATIONS, INC.'S SUPPLEMENTAL NOTICE OF INTENT TO FILE WITH FCC AND APPLICATION FOR VERIFICATION OF § 271(c) COMPLIANCE**

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Arizona Corporation Commission
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U S WEST Communications, Inc. ("U S WEST") hereby serves its supplemental notice to the Arizona Corporation Commission ("Commission") of its intent to file an application with the Federal Communications Commission ("FCC") to obtain approval for U S WEST to provide interLATA service in Arizona pursuant to Section 271 of the Telecommunications Act of 1996 (the "Act"). That application shall be submitted to the FCC no sooner than 90 days from the date of this filing. U S WEST provides this notice to the Commission under the terms of the Commission's Decision No. 60218, issued May 27, 1997, as supplemented by the order of Administrative Law Judge Rudibaugh dated March 19, 1999. [1] U S WEST attaches to this Supplemental Notice its responses to Attachments A and B, in compliance with this Commission's Order of May 27, 1997.

U S WEST requests that the Commission enter an Order verifying that U S WEST complies with the requirements of Section 271(c) of the Act, and recommending FCC approval

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[1] U S WEST submits this supplemental filing despite the fact that it has yet to receive the discovery to which it believes it is entitled. U S WEST is not privy to detailed customer data, market activities and market plans, projected demand for checklist items, and OSS functionality needs in order to compete in the Arizona market, which the CLECs consider proprietary. The Commission, and ultimately the FCC, need the best and most complete data regarding the extent to which all CLECs have acquired customers and access lines in order to make an informed assessment of competition in the state as well as U S WEST's compliance with Track A. The FCC has made it clear that it prefers data provided by the CLECs, rather than limited estimates provided by the RBOCs. In the Ameritech-Michigan Order the FCC stated:

> We encourage competing LECs, in future section 271 proceedings, to provide to the Commission information about their operations in the relevant state, including the number of access lines served.

The Commission should require all CLECs in Arizona to respond to U S WEST's discovery and provide actual numbers of business and residence customers and access lines being served, where they are being served, and their plans for serving additional markets. Only by receiving this data from the CLECs will the Commission be able to obtain a complete and accurate picture of the extent to which U S WEST's competitors have penetrated the local exchange telecommunications service markets. This evidence will verify that U S WEST has satisfied the requirements of Track A, will show how CLECs are competing, what they actually need to in order to compete, as well as the number of customers that CLECs could serve, but choose not to for financial reasons. U S WEST will continue to press for the discovery to which it is entitled and will supplement this filing with that information. Given the failure of the intervenors to respond to the discovery requests and their pattern of continual delay, U S WEST could not stand by idly while the 90-day period for this proceeding was stayed.

of U S WEST's application to provide interLATA service in the state of Arizona. This Application is submitted to the Commission pursuant to Section 271(d)(2)(B) of the Act.

I. INTRODUCTION AND SUMMARY

This proceeding affords the Arizona Commission an opportunity to help to bring lower-cost long distance telephone service, integrated "one-stop" packages of interLATA services and advanced, digital telecommunications services to all Arizona consumers. Arizona consumers will enjoy these public interest benefits on a broad scale only when U S WEST is permitted to provide interLATA service in Arizona. This proceeding is the first, indispensable regulatory step along that path.

In Section 271 of the Telecommunications Act of 1996, Congress assigned the states responsibility for verifying that a Bell Operating Company ("BOC") has fulfilled the statutory prerequisites to provide long distance service in the state(s) that it serves. Although the FCC is vested with the authority to determine ultimately whether a BOC may provide interLATA service in a given state, the FCC is legally obligated to consult with the state public service commission before making that determination.

The reason for giving the states this mandatory consultative role is clear: the state commissions are in the best position to understand the nature, likely sources and extent of competition in their states. When it comes to competition, one size does not fit all. The character of competition that has evolved, and the steps a BOC needs to take to meet that competition, are very different in a state such as Arizona compared to a state such as New York. The Commission and the FCC should tailor application of the principles contained in Section 271 to the unique circumstances of Arizona to prevent creation of rigid standards which would

deprive the citizens of Arizona of the benefits of competition among telecommunications services providers.[2]

The public interest is compelling in favor of verifying U S WEST's satisfaction of the Section 271 checklist. Consumers in Arizona, like consumers throughout the country, want "one-stop" shopping to enable them to purchase bundled packages of telecommunications services from one provider under one bill. Similarly, they want and deserve lower rates for long-distance telephone services. Allowing U S WEST into the interLATA market is crucial to Arizona's ability to participate fully in the Information Age economy of the 21st Century.

U S WEST's entry into interLATA services will generate significant benefits to Arizona consumers emanating from four main factors. First, the interLATA market currently is not fully competitive. For example, the three large IXC's currently control 89 percent of Arizona's intrastate residential long distance market. Moreover, the IXC's failure to reduce their rates in proportion to the large decreases in the access charges demonstrates that the market is far from perfectly competitive. Second, U S WEST is prepared to offer competitively priced packages of a wide range of telecommunications services to a broad group of Arizona consumers. Because U S WEST offers ubiquitous local service throughout much of Arizona, it can offer the benefits of packaged services to a broad range of customers, especially the residential, rural, and small business customers who are often ignored by the IXCs and other competitors. Third, U S WEST

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[2] The FCC has recognized that each application must be decided based upon its unique facts, and in light of the unique competitive landscape in the state. Thus, prior FCC 271 orders provide guidance as to the FCC's views on the issues, but should not be considered controlling or binding in this proceeding. As the FCC has stated:

> While this and prior orders identify certain types of information we would find helpful in our review of Section 271 applications, we reiterate that we remain open to approving an application based on other types of evidence if a BOC can persuade us that such evidence demonstrates nondiscriminatory treatment and other aspects of the statutory requirements.

FCC Order on BellSouth's Second 271 Application, para. 59.

will be an efficient and effective competitor in interLATA services markets. With strong brand recognition and the ability to take advantage of economies of scale and scope in marketing, U S WEST is in a position to provide meaningful, additional competition in Arizona's long distance market. Finally, U S WEST's entry into interLATA services will accelerate competitive entry in local markets. Experience has shown, particularly in Connecticut, that the IXCs have little interest in providing local services to a broad range consumers unless they are at risk of losing existing long distance customers. U S WEST's entry, into Arizona's long distance market, will likely force the major IXCs to quickly expand their local service offerings in order to protect their long distance business.

Despite the targeted entry of the major IXCs solely into the most profitable areas of the Arizona telecommunications market, there is strong empirical evidence in Arizona that entry into local markets has occurred and is accelerating via a large number of strategies and technologies resulting in U S WEST having lost more than 35,000 access lines to resale and facilities-based competitors. The competitors in Arizona have demonstrated the openness of all three avenues envisioned by the Act, by successfully competing through resale, the purchase of unbundled loops, and many types of facilities-based bypass: traditional wireline CAP-CLECs (MCI-World Com, AT&T-TCG, e*spire, ELI, GST), fixed wireless CLECs (Winstar, Teligent, ART), cable network upgrades (Cox Communications), mobile wireless networks, private networks (VSATs, PBXs) and shared tenant service providers in commercial buildings and multiple dwelling units. Competitors in Arizona have demonstrated that there are viable ways to enter local exchange markets in Arizona and that U S WEST's markets are open to competition.

In this proceeding, U S WEST will establish that it satisfies all fourteen checklist requirements enumerated in Section 271(c)(2)(B) of the Act. U S WEST's commitment to

competition has resulted in 73 Commission-approved interconnection agreements for the exchange of traffic between networks and for the purchase of unbundled network elements. Pursuant to these agreements, U S WEST is providing or is making legally and practically available each of the fourteen checklist items. U S WEST has established practices and procedures to enable it to fulfill any reasonably foreseeable CLEC orders for these items on a nondiscriminatory basis and at an acceptable level of quality.

The novel nature of the Section 271 process also casts the Arizona Commission as a potential agent for positive change. By verifying U S WEST's compliance to the FCC, the Commission could contribute in a direct and material way to promoting economic growth in the state and to providing Arizona subscribers with more, better and lower cost telecommunications services.

II. THE ARIZONA COMMISSION SHOULD EXERCISE ITS AUTHORITY TO DEVELOP A PROCOMPETITIVE ANALYSIS BASED UPON THE UNIQUE CIRCUMSTANCES OF ARIZONA.

A. Section 271 Gives the State Public Service Commission an Important Role in Determining Whether a BOC Should Be Permitted to Provide InterLATA Service Within The State.

Under Section 271 of the Telecommunications Act of 1996, and the related provisions of Sections 251 and 252, the state public service commission is assigned a pivotal role in assessing whether a BOC can gain entry into the interexchange market within that state. Although Section 271(d)(3) gives the FCC the ultimate responsibility to grant or deny a BOC application to provide interLATA service within a state, that decision can only be made following consultation with the state public service commission. Specifically, Section 271(d)(2)(B) provides:

> Before making any determination under this subsection, the Commission [FCC] shall consult with the State Commission of any state that is the subject of the

application in order to verify the compliance of the Bell operating company with the requirements of subsection (c).

A state commission's verification responsibility extends to whether facilities-based competitors have requested access and interconnection or, in the absence of a request by a CLEC for access and interconnection, whether the BOC is generally offering to provide access and interconnection to competitive providers. 47 U.S.C. §§ 271(c)(1)(A) and (B). It also encompasses whether there are state approved interconnection agreements or a statement of generally available terms that meet the 14 checklist items enumerated in 47 U.S.C. § 271(c)(2)(B).

In the past year, there has developed a growing, bipartisan appreciation of the importance of the role played by the state commissions in the Section 271 process. In January 1998, the National Telecommunications and Information Administration ("NTIA"), the agency within the U.S. Department of Commerce that speaks authoritatively for the Administration on matters of telecommunications policy, issued a staff working paper which extolled the role of the state commissions:

> *Because State Commissions will be more familiar than the [FCC] with local competitive conditions and will have reviewed and . . . arbitrated interconnection agreements between a BOC and potential competitors*, State Commissions should be well-positioned to assist the [FCC] in determining whether a BOC has complied with . . . Section 271(c) . . . . For these reasons, in determining whether a BOC has satisfied . . . Section 271(c), the [FCC] should respect the factual findings of the State Commissions with which it is legally obligated to consult.[3]

FCC Commissioner Michael Powell, in a statement released January 15, 1998 about Section 271 implementation, saw this local context as central to the goals of the Act:

> State-Tailored Solutions. The general guidelines . . . must be tailored to specific

[3] NTIA Staff Working Paper, "Section 271 of the Communications Act and the Promotion of Local Exchange Competition" at p. 67 (January 1998) (emphasis added, footnotes omitted).

> carriers in specific States . . . so that we can engage each BOC in a focused investigation designed *to yield solutions to the checklist puzzle that are customized to the particular State or region and carriers involved.* Cookie-cutter solutions . . . may unduly burden BOCs or deprive new entrants of a fighting chance to compete . . . if we do not tailor checklist solutions to particular States or regions, we may overlook small and mid-sized competitors . . . .[4]

The state commissions bring the local perspective that Congress required. Competition takes hold and grows differently depending upon the local economic, customer and business environment. The Arizona Commission is best situated to apply Section 271 principles to the unique circumstances of the telecommunications market in Arizona and to verify U S WEST's satisfaction of Section 271 within that context.

B. The Arizona Commission Should Examine U S WEST's Fulfillment of Section 271 Requirements Through the Arizona Experience.

In evaluating U S WEST's application, the Commission should focus on factors that matter most for Section 271 verification: the demographics of the state; the economics of service provision; the potential competitors that have incentives to provide service; the attributes showing that the local exchange market is open to competition; and the public benefits of BOC interLATA entry. These factors profoundly affect current and future local exchange competition in Arizona and how the Commission should evaluate U S WEST's satisfaction of the requirements contained in Section 271. They are detailed fully in the testimony of Dr. Robert G. Harris and Wayne Allcott, U S WEST's Arizona State Vice President.

It is time that all competing carriers in Arizona -- including U S WEST -- be allowed to pursue customers in all markets. Even more important, it is time that all customers in the state -- including those in areas not targeted by the competitors -- be given an opportunity to choose one-

[4] "Wake Up Call: FCC Commissioner Michael Powell Calls for New Collaborative Approach to Section 271," FCC White Paper, released January 15, 1998, p. 4.

stop shopping for their local telephone exchange and long distance services. Today, most of U S WEST's customers outside of the Phoenix and Tucson metropolitan areas do not have a realistic one-stop shopping choice. Only when U S WEST is allowed to fully participate in the interLATA market will these "no choice" customers finally experience one stop shopping for all their telecommunications needs. Moreover, all customers who make calls between Phoenix and Tucson, the heaviest intrastate long distance route, are prohibited from selecting U S WEST to carry these calls because it is bisected by a LATA boundary. Ironically, that leaves U S WEST, the company that has invested more than any other company in Arizona, as the only telecommunications company that cannot compete for such business. U S WEST should not be barred from providing additional customer choice over this and other in-state and interstate long distance, interLATA routes.

III. ARIZONA'S PUBLIC INTEREST WOULD BE SIGNIFICANTLY ADVANCED BY THE ARIZONA COMMISSION'S FAVORABLE RECOMMENDATION TO THE FCC ON U S WEST'S SECTION 271 APPLICATION.

Section 271(d)(3)(C) of the Telecommunications Act allows a BOC to enter an in-region interLATA market if the FCC finds that, among other things, such entry would be consistent with the "public interest, convenience, and necessity." The Arizona Commission is best situated to advise the FCC about the public interest considerations associated with U S WEST's Section 271 application because it understands both the realities of the telecommunications marketplace in Arizona and the needs and desires of Arizona's subscribers regarding telecommunications services. The public interest weighs very heavily in favor of allowing U S WEST to enter the interLATA market in Arizona. The grant of U S WEST's Section 271 application would produce a panoply of public benefits to residential and businesses consumers, including access to one-stop shopping for an array of telecommunications services and lower long distance prices.

A. *Allowing U S WEST's Entry Into the InterLATA Market Will Satisfy Consumer Demand for Integrated Telecommunications Services Packages*

The consumers of Arizona want one-stop shopping for telecommunications services. Several studies have shown very high consumer demand for bundled packages of telecommunications services, particularly those that combine local and long distance service. In one study, 80 per cent of consumers indicated that they likely would purchase an integrated package of telephony services.[5] The strength of this demand is also reflected in studies by J.D. Power and Associates, indicating that 65% of respondents would be interested in purchasing all of their telecommunications services from one provider and 50% would switch providers to obtain one-stop shopping.[6]

While IXCs and other competitors are responding to this demand by offering packaged services to high volume business customers and residences in urban areas, many residential and small business customers, outside of urban areas, are being ignored. These "no choice" customers are located in geographical areas that AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber, e.spire™, One Point, Arizona Dial Tone, Reconex, Telstar Telcom, and others have, apparently, decided are not attractive to serve at this time. Until U S WEST obtains Section 271 authority, it would appear that these customers will be denied the numerous benefits that flow from one stop shopping. Because U S WEST offers ubiquitous service throughout its Arizona service territory, U S WEST is in a position to market packaged services to a much broader range of consumers within its region.

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[5] "Branding and Bundling Telecommunications Services: Telephony, Video and Internet Access," MTA-EMCI Telecommunications Consultants, August 1996, p. 142

[6] J.D. Power & Associates, Residential Long Distance Report, 1996, at p. 10.

B. U S WEST's Entry into the InterLATA Market Would Result in Lower Long Distance Prices.

As detailed in Dr. Harris' testimony, the interLATA market remains highly concentrated and, except for the highest volume customers, interLATA prices exceed competitive levels. Nationally, AT&T, MCI WorldCom and Sprint still serve over 80 percent of the residential long distance market. In Arizona, 89 percent of residential customers obtain long distance service from one of these three interexchange carriers (IXCs).

Moreover, the basic tariffed interstate prices of AT&T, MCI WorldCom and Sprint have increased steadily over the last several years, despite decreases in access charges and an increase in the number of long distance competitors. Over the last six years, basic interstate rates, for a call from Phoenix to Denver, for the three largest IXCs increased between 13 and 31 percent, depending on the carrier. During the same time period, access charges, a major component of IXC costs, declined significantly. the long distance market is highly concentrated both nationally and in Arizona.

Hence, Arizona subscribers are being forced to pay needlessly high long distance rates because of oligopolistic pricing practices or broken promises by the IXCs regarding access charge reduction pass-throughs. It is clear that Arizona consumers are required to pay higher rates than would be the case if there were true competition in the long distance market.

U S WEST's history of providing ubiquitous service and its strong brand recognition place the company in a unique position to compete vigorously with the major IXCs, initially as a reseller, and in time, using its own facilities. Whether as a reseller or facilities-based carrier, U S WEST can realize legitimate economies of scale and scope in serving the interLATA market. U S WEST's entry into the long distance market would therefore reduce the amount of

concentration, generate enormous competitive pressure and, in turn, lower prices

In the expert opinion of Dr. Harris, a conservative estimate of an average interLATA price reduction in Arizona would be in the range of 15 to 20 percent. With this level of price reduction, U S WEST's entry into the long distance market would result in benefits to consumers in the range of $109 to $147 million, or $60 to $81 per access line, per year.

C. U S WEST's Entry into the Long Distance Market Will Increase Competition for Local Services in Arizona

An important effect of U S WEST's entry into the interLATA market is the increased incentive, particularly for the IXCs, to compete in Arizona's local markets. In the past, IXCs in Arizona faced limited competitive pressure in the provision of long distance service, particularly for residential customers. U S WEST's ability to offer a full range of telecommunications services, however, will create a strong incentive for the major IXCs to respond with comparable service offerings, or lower prices, to avoid losing their long distance customers. This is a healthy competitive activity that is beneficial to consumers.

IV. U S WEST HAS COMPLIED WITH ALL PROVISIONS OF SECTION 271(c)

The 1996 Act conditions BOC provision of in-region interLATA services on satisfaction with 47 U.S.C. § 271(c)(1)(A) or (B), known as "Track A" or "Track B" respectively, and compliance with the fourteen point checklist contained in 47 U.S.C. § 271.

A. U S WEST Meets the Requirements of Section 271(c)(1)(A), Known as "Track A"

Section 271(c)(1)(A) of the Act, known as "Track A," requires that a BOC demonstrate that it has at least one binding interconnection agreement with an operating facilities-based local exchange competitor. Specifically, Section 271(c)(1)(A) provides that:

> A [BOC] meets the requirements of this subparagraph if it has entered into one or more binding agreements that have been approved under section 252 specifying the terms and conditions under which the [BOC] is providing access and interconnection to its network facilities for the network facilities of one or more unaffiliated competing providers of telephone exchange service . . . to residential and business subscribers. For the purpose of this subparagraph, such telephone exchange service may be offered by such competing providers either exclusively over their own telephone exchange service facilities or predominantly over their own telephone exchange service facilities in combination with the resale of the telecommunications services of another carrier. . . .

Facilities-based competitors are operating in Arizona, and U S WEST has binding agreements with these competitors. Competitors in Arizona are successfully entering the local exchange market through all avenues available under the Act -- interconnection, resale, and unbundled network elements.

There is considerable and increasing competitive local entry in Arizona. To date, new entrants have captured over 35,000 access lines in U S WEST's Arizona markets, up from less than 8,300 a year ago. The entry strategies of these competitors are extremely varied:

In mid-1997, several competitive access providers (CAPs) began providing competitive local exchange service in Arizona. To date, seven traditional wireline CAP-CLECs have entered Arizona's local exchange markets.[7] These CAP-CLECs operate multiple networks in Arizona with at least 13 operating central office voice switches installed.[8] By targeting Phoenix and Tucson, these CLECs have direct access to the majority of U S WEST's customers and revenue, either through their own facilities or via U S WEST. By collocating in a U S WEST central office and leasing unbundled loops, a CLEC could offer service to every customer connected to

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[7] Subsequently, three of these CLECs, MCI Metro, Brooks Fiber, and MFS, have been acquired by WorldCom and now operate as one company.

[8] According to the LERG database, these five CAP-CLECs plus Cox Communications, Geotek Communications, Mountain Telecommunications, WinStar Telecommunications, and Westlink, have installed a total of 23 switches in the Phoenix and Tucson MSAs. According to U S WEST Internal Data, 13 of these switches have

that office. Currently CLECs in Arizona are leasing a total of 1,546 unbundled loops and have completed 127 collocation arrangements in 33 of U S WEST's wire centers. While that represents only a quarter of all U S WEST Arizona wire centers, these collocation arrangements give CLECs access to almost three-quarters of U S WEST's Arizona business lines and over half of all U S WEST Arizona residential lines.

The CAP-CLECs are responsible for the majority of U S WEST's facilities-based business losses in Arizona. For example, TCG provides services to Motorola's North American Telecom Group and Phoenix's Crown Plaza Hotel. GST is providing telecommunications services to Intuit Inc., in Tucson, and to Coldwell Banker and GE Capital in Phoenix. ELI's customers include Insight Enterprises, CyberHighway, Arizona and OrthoLogic Corp., and the Murphy School District.

Cox Communications is the cable service provider in much of the Phoenix and Tucson Metropolitan Statistical Areas (MSAs). Its cable network passes 1.1 million homes in Phoenix, and 250,000 in Tucson. In September 1998, Cox began providing local exchange service in Chandler, Arizona, initially to customers in multiple dwelling units (MDUs) such as apartment buildings and condominiums (see discussion of the MDU market below). Cox has since expanded its service offering to single family homes. By the end of the year, Cox expects to make its digital phone service available to 200,000 homes in parts of Phoenix and Mesa, and high-speed Internet service available to 550,000 homes. Cox plans to complete the more than $300 million upgrade of its Phoenix network so that it can offer local telephone service, as well as high-speed Internet access, to all its customers in its Phoenix service area by 2002. Cox's cable modem service (Cox@Home) is also a formidable competitor to U S WEST, competing

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interconnection trunks with U S WEST. See Exhibits WGA-1, WGA-2 and WGA-3 for maps of these switch

directly for second lines (and digital subscriber line (DSL) and integrated services digital network (ISDN) services) used for Internet access.

Because of the economies of density in telecommunications services, one of the first groups of residential customers to have competitive facilities-based alternatives in Arizona are those living in MDUs. The high revenue concentration relative to the cost of network construction in these buildings results in profitable opportunities for competitors. Competitors are targeting both existing and new complexes for entry and using both complete bypass of U S WEST's network and shared tenant services.

Cox Communications is U S WEST's strongest competitor for MDUs in Arizona. Apart from Cox, Shared Tenant Service (STS) providers such as OpTel, OnePoint, and Telephone Plus/Cable Plus are also competing in the Arizona MDU market. These companies locate PBXs on complexes' premises and aggregate individual customers' traffic onto shared trunks, reducing dependence on U S WEST. Importantly, these companies are beginning to build their own free standing local exchange networks, including central office switches. This means that competitors can migrate their traffic off of U S WEST's network and onto their new networks. OpTel successfully installed its first switch in Houston and is planning to do the same in Phoenix.

OnePoint provides local, long distance and cellular telephone service, cable and direct broadcast satellite television, and Internet access. OnePoint recently signed an agreement with Equity Residential Properties Trust to offer Equity's apartment residents a single source for telecommunications services. Equity is the largest real estate investment trust (REIT) focusing on apartment buildings. The firm's portfolio consists of more than 525 properties containing

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locations.

more than 190,000 units in 35 states, and currently serves multiple complexes in the Phoenix area. OnePoint has secured agreements with property owners such as Equity through revenue sharing plans.

Telephone Plus/Cable Plus is another shared tenant MDU competitor in the Phoenix area, with contracts covering over 2,000 new units and 150 existing units. This company provides a turnkey operation for voice and video. Telephone Plus builds the infrastructure at no cost to the developer and offers endorsement fees and revenue sharing as part of its package. Telephone Plus/Cable Plus is also targeting for its services certain neighborhoods in Tucson.

Fixed wireless networks are quick and inexpensive to deploy compared to landline networks and can provide competitive access services to businesses which are not located along CLEC fiber routes. This greatly expands the number of businesses in Phoenix and Tucson, that are addressable by competing carriers.

In May 1998, WinStar, a fixed wireless local competitor, began competing for local exchange customers in Phoenix. WinStar provides business customers with voice, data, and video services over high-speed wireless transmission links using point-to-multipoint technology. Given its relatively flat geography and mild weather, Phoenix is a perfect market for this technology.

Teligent is another broadband, fixed wireless local competitor in Arizona. Teligent has launched competitive local service in 25 markets, including Phoenix, and expects to offer service in 40 markets by the end of the year. The Phoenix switch is still under construction, but is expected to be operational in four to six weeks. Teligent's entry confirms both that fixed wireless is viable as an entry strategy into local exchange markets and that those markets are open to competition.

Another fixed wireless competitor is Advanced Radio Telecommunications (ART). ART uses its fixed wireless network to deliver competitive facilities-based broadband dedicated access and Internet services to small and medium-sized businesses. ART eliminates the need for businesses to deal with two separate vendors – an ISP and a dedicated access provider. ART began offering service to businesses in Phoenix in December 1998, and serves about 65 customers in the area. ART plans to expand its network to about 100 markets in five years, and plans to be in Tucson by June 1999.

Another fixed wireless carrier is Mountain Telecommunications, which uses an experimental license to serve the 56,000-acre Salt River Maricopa-Pima Reservation east of Phoenix. Notably, this carrier's strategy includes serving rural residential customers. In addition, Mountain Telecommunications is currently reselling U S WEST services to businesses and residents.

There is also growing evidence that as prices fall and quality improves, mobile wireless services (cellular, PCS and enhanced special mobile radio) are becoming increasingly competitive with traditional local wireline services, particularly second lines and intraLATA toll and long distance calling. In Arizona, for example, AT&T Wireless, Voicestream, AirTouch, Cellular One, Nextel, Sprint PCS and U S WEST Advanced PCS offer mobile wireless service.

There is overwhelming evidence that U S WEST's local exchange markets in Arizona are open to competition through resale. Currently, 30 resellers have entered U S WEST's local exchange markets and are actively providing resold competitive local exchange service in Arizona, 20 of which are serving residential customers. In fact, with resellers serving residential customers in 120 out of 123 wire centers in U S WEST's Arizona territory, it is safe to say that the majority, if not all, of Arizona's residential consumers have access to an alternative provider

of local exchange service. The same is true for business customers. Frontier, for example, has stated that it offers competitive local service to business customers throughout U S WEST's entire service territory in Arizona.

Resale competition in Arizona has been accelerating. In the past year, resold residential lines have increased by 800 percent, growing at a very rapid compound rate of 22 percent per month. Similarly, business resale has grown by almost 300 percent. Combined, resellers now serve close to 20,000 business and residential lines in Arizona. Together, these resellers have not only entered local exchange markets in Arizona successfully, but have demonstrated unequivocally that this path of entry is wide open.

B. U S WEST Actually Provides or Is Legally and Practically Able to Provide Each Item of the Competitive Checklist in a Manner that Complies with Section 271.

Congress made a BOC's entry into the interLATA market contingent on its compliance with a fourteen-item "competitive checklist" intended to ensure that a BOC's local exchange market is open to competition. The checklist is contained in section 271(c)(2)(B) of the Act.

A BOC may demonstrate that it is "providing" a checklist item in either of two ways: (1) by actually furnishing the item in a manner that satisfies the requirements of section 271 of the 1996 Act; or (2) by making the checklist item generally available, legally and practically, where no checklist item has been requested. This second alternative is absolutely critical because, without it, a BOC's ability to satisfy the checklist requirements would be foreclosed simply because competitors chose not to order all checklist items. The statute does not specify the types of measurements or methodologies needed to make these showings.

As detailed in the testimony submitted by U S WEST in this filing: 11 CLECs are currently interconnected with U S WEST via more than 47,000 interconnection trunks; more than

30 carriers are actively reselling U S WEST's services and have resold nearly 20,000 exchange service access lines; 20 carriers are reselling U S WEST's services to residential customers and 25 are reselling to business customers; U S WEST has completed 127 collocation arrangements at the request of its competitors and has requests for 104 additional arrangements from its competitors; more than 100 central office codes (or NXXs) have been assigned to CLECs so that they can provide unique telephone numbers to their existing and prospective customers; U S WEST is providing nearly 20,000 white page directory listings in its directories on behalf of competitors in the state; more than 43,000 telephone numbers originally provided by U S WEST have been "ported" to competitors so that customers can change providers with out being required to get a new telephone number; U S WEST's competitors have more than 20 switches in service in Arizona; 13 of those switches interconnect with U S WEST to exchange local traffic; and U S WEST has provided to four CLECs in Arizona over 1,500 unbundled loops.

To establish compliance with the remaining checklist items that have not been requested by facilities-based competitors, U S WEST relies on its various 73 interconnection agreements approved by the Arizona Commission and its proposed SGAT. It primarily relies on the prices set by the Commission in the permanent cost docket. Those prices are based on forward-looking, total element costs.

1. Interconnection in Accordance with the Requirements of Sections 251(c)(2) and 252(d)(1).

Section 271(c)(2)(B)(I) of the Act requires that a BOC provide "[i]nterconnection in accordance with the requirements of sections 251(c)(2) and 252(d)(1)." Section 251(c)(2) imposes the duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the incumbent local exchange carrier's

("ILEC") network "for the transmission and routing of telephone exchange service and exchange access . . . at any technically feasible point within the [LEC's] network. . . that is at least equal in quality to that provided by the [ILEC] to itself. . . ." Section 252(d) requires that the rates established by a state commission for interconnection under § 251(c)(2) be cost-based and nondiscriminatory, and expressly permits such rates to include a reasonable profit.

As demonstrated in the testimony of Michael Weidenbach, a Manager in the Wholesale Local Markets Organization, U S WEST complies with this checklist item, in that it actually provides interconnection for the exchange of local traffic under the terms of the various interconnection agreements between U S WEST and CLECs in Arizona, as well as through its proposed SGAT.

In Arizona, U S WEST provides interconnection through four types of arrangements: physical collocation, virtual collocation, mid-span meet arrangements, and entrance facilities. The quantity and location of interconnection facilities are collaboratively determined by the CLEC and U S WEST, with CLECs being able to choose between providing their own interconnection facilities, purchasing U S WEST's facilities, using third parties' facilities, or using a combination of the three. As a result of U S WEST's implementation of this checklist item in Arizona, U S WEST has interconnected its network with eleven CLEC networks, exchanging calls over approximately 350 local interconnection trunk groups involving over 47,000 trunks.

U S WEST offers a number of physical collocation options: caged, cageless, and interconnection distribution frame ("ICDF") collocation. A caged arrangement permits a CLEC to surround its equipment by a cage or wall providing an increased level of security to the CLEC's equipment. A cageless arrangement allows a CLEC to place its equipment in the

U S WEST central office without separation from other central office equipment by a cage or walls. ICDF collocation is offered to CLECs that do not require any of their own transmission equipment to be placed in the U S WEST central office, but that only require access to and ability to combine U S WEST's unbundled network elements. U S WEST is providing 70 units of physical collocation and 57 units of virtual collocation to twelve CLECs in 33 central office buildings under existing collocation agreements in Arizona.

U S WEST complies with the "equal in quality" standard of § 251(c)(2) by applying the same standards for engineering CLEC interconnection trunk groups as it engineers for itself. In addition, U S WEST has implemented performance measures to ensure that its provision of interconnection to competitors is at least equal in quality to that which it provides to itself.

U S WEST's prices for its interconnection and collocation offerings are contained in its approved interconnection agreements and its proposed SGAT and were developed pursuant to appropriate forward-looking cost methodology in the consolidated cost docket.

2. Nondiscriminatory Access to Network Elements in Accordance with the Requirements of Sections 251(c)(3) and 252(d)(1).

a) Combining Network Elements

Section 271(c)(2)(B)(ii) requires that U S WEST provide "[n]ondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)." Section 251(c)(3) obligates incumbent LECs to provide such access on an unbundled basis at any technically feasible point "in a manner that allows requesting carriers to combine such elements in order to provide [a] telecommunications service." Section 252(d)(1) requires the pricing for UNEs to be at a just and reasonable rate that is cost-based (including a reasonable profit) and nondiscriminatory, as determined by a state commission. Although this provision of the Act has

been complicated by the United States Supreme Court decision in *AT&T Corp. v. Iowa Utils. Bd.*, No. 97-826, slip op. (U.S. Jan. 25, 1999), the testimony of Karen Stewart, Director, Markets-Regulatory Strategy, demonstrates that U S WEST satisfies this checklist item.

In its First Report and Order, the FCC required that a BOC make available the following UNEs, at a minimum: local loop, network interface device ("NID"), switching capability (including local switching, vertical features, and tandem switching), interoffice transmission facilities (including unbundled dedicated interoffice transport and shared interoffice transport), call-related databases and signaling systems, operator services and directory assistance, and operation support systems. However, the Supreme Court recently held that the FCC applied the wrong standard when developing this list and ordered that the FCC's rule concerning unbundled elements be vacated. U S WEST anticipates that the FCC will produce a shorter list when it revisits the issue. Nevertheless, all UNEs listed by the FCC in its First Report and Order have been made legally and practically available to CLECs under the terms of approved interconnection agreements and the proposed SGAT in the state of Arizona. For example, as of March 1, 1999, U S WEST had provided four CLECs with access to 1,546 unbundled loops in Arizona.

A CLEC is able to access U S WEST's UNEs through virtual collocation, and through caged or cageless physical collocation. CLECs may also access U S WEST's UNEs at the ICDF, without having physically to collocate any of their own transmission equipment at the U S WEST central office. In addition, a CLEC may use the bona fide request ("BFR") process to request unique or nonstandard access to UNE configurations. Today, CLECs are collocated in 33 of U S WEST's Arizona central offices, through 70 physical collocation cages and 57 virtual collocations, through which almost 60% of the total Arizona access lines currently served by

U S WEST can be reached and targeted, and through which access to U S WEST's UNEs for that purpose can be and is obtained.

U S WEST's UNE and related collocation prices are contained in its approved interconnection agreements and its proposed SGAT. U S WEST's SGAT reflects the uncertainty that exists after the Supreme Court opinion and until the FCC issues a new rule on UNEs. Currently, there is no rule listing which network elements that U S WEST is required to unbundle. The FCC will hold proceedings to consider which network elements need to be unbundled pursuant to the more stringent test imposed by the Supreme Court. Until the FCC issues a new rule, U S WEST has agreed with the FCC to maintain the status quo by providing the UNEs contained in its interconnection agreements.

U S WEST anticipates that, when the FCC issues a new rule on UNEs, the list of UNEs that are required to be unbundled will contain less network elements than the FCC's former rule. U S WEST anticipates that switching and shared transport will not be included as UNEs. However, switching and transport are checklist items, but Section 271 does <u>not</u> require that checklist items that are not UNEs need to be priced at forward-looking, cost-based rates. Consequently, switching and shared transport, which are not currently UNEs, are priced above TELRIC in the SGAT. If the status of switching or shared transport changes, the SGAT will be amended to reflect existing law.

The Supreme Court in *AT&T Corp. v. Iowa Util. Bd.*, upheld the FCC's rule 51.315(b), which requires the LECs provide CLECs with pre-existing combinations of unbundled network elements. However, other portions of the FCC's 315 rules remain vacated, including the rules that require LECs to combine previously-uncombined network elements on behalf of CLECs. As

a result of this rule, U S WEST will be required to provide a limited set of combinations of unbundled network elements to CLECs – but only pre-existing combinations.

At the present time, however, Rule 315(b) cannot be effectuated, since there are currently no unbundled network elements subject to that rule. That will remain the case until the FCC establishes a list of unbundled network elements pursuant to the Supreme Court's interpretation of the "necessary and impair" standard. The Supreme Court specifically recognized the interrelationship between Rule 315(b) and the list of unbundled network elements in its vacation of the FCC's list of UNEs contained in Rule 319. In its review of Rule 51.315(b), the Court addressed ILEC concerns that such a rule would result in price arbitrage of resale through UNE-based rates by stating: "As was the case for the all-element rule, our remand of Rule 319 may render the incumbents' concern on this score academic."

U S WEST will therefore continue to provide CLECs access to the UNEs listed in the vacated Rule 319, and will provide a means for CLECs to combine those accessed UNEs, until the FCC develops a lawful list of UNEs to which Rule 315(b) would apply.

b) Operations Support Systems

(1) Requirements for nondiscriminatory access to OSS

The Telecommunications Act of 1996 does not refer at all to OSS. Nevertheless, in paragraph 516 of its First Interconnection Order, the FCC concluded that "operations support systems and the information they contain fall squarely within the definition of 'network element' and must be unbundled upon request." FCC Interconnection Order ¶ 516 (emphasis added). The FCC incorporated this conclusion into its Rule 319, which included OSS as one of the seven enumerated network elements to which ILECs must provide unbundled access.

In its recent decision, the Supreme Court upheld the FCC's decision that OSS is a "network element." AT&T Corp., et al. v. Iowa Utilities Board, et al., 1999 WL 245568, p. 9 (S. Ct. January 25, 1999). However, the Supreme Court held that the FCC applied the wrong standard when it decided which network elements are required to be unbundled, and it vacated Rule 319. Id. As a result, the FCC will reconsider Rule 319 and issue a new rule using a more stringent standard. When it reconsiders Rule 319, the FCC may determine that OSS is not a network element that need be unbundled, or more likely, it may limit the extent to which ILECs are required to provide access to OSS. In the interim, U S WEST has agreed to comply with its existing contracts regarding access to unbundled elements, including OSS.

In its opinions on the applications of other BOCs, using the old Rule 319, the FCC established a two-part inquiry regarding OSS. First, "the [FCC] must determine whether the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions [pre-ordering, ordering, provisioning, repair an maintenance, and billing] and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them." Ameritech Michigan Order ¶ 136; see also BellSouth Louisiana II Order ¶ 85. The FCC described this to mean that the BOC must demonstrate that: (1) it has developed sufficient electronic and manual interfaces to allow competing carriers to access all necessary OSS functions; (2) for those functions that the BOC accesses electronically, it has provided equivalent access for competing carriers; (3) it has provided technical specifications to enable competing carriers to design or modify their computer systems; and (4) its OSS are able to handle current and reasonably foreseeable demand. See Ameritech Michigan Order ¶ 137. Second, the FCC must assess "whether the OSS functions that

the BOC has deployed are operationally ready, as a practical matter." Ameritech Michigan Order ¶ 136; see also BellSouth Louisiana II Order ¶ 85.

For those OSS functions that are analogous to OSS functions the BOC performs for itself (such as pre-ordering, ordering and provisioning for resale), the BOC must offer access that is "equivalent" to the access it provides itself. See BellSouth Louisiana II Order ¶ 87; BellSouth South Carolina Order ¶ 98. Equivalency is not defined as identical, however, but rather as access so that CLECs are able to perform OSS functions in "substantially the same time and manner" as the BOC. Id. The FCC has specifically recognized that the ordering and provisioning of unbundled network elements does not have a retail analogue. BellSouth Louisiana II Order ¶ 87; Ameritech Michigan Order ¶ 141. For those functions with no retail analogue (such as ordering and provisioning of UNEs), the BOC must establish that its interfaces provide efficient CLECs with a "meaningful opportunity to compete." BellSouth Louisiana II Order ¶ 87; Ameritech Michigan Order ¶ 141. As demonstrated below, U S WEST meets these standards.

(2) U S WEST's OSS Interfaces

In identifying OSS as an unbundled network element, the FCC has established that an ILEC must provide CLECs access to the ILEC's internal OSS legacy systems for five areas of functionality: (1) preordering; (2) ordering; (3) provisioning; (4) maintenance and repair, and (5) billing. The testimony of Dean Buhler, Regulatory Manager – Information Technologies Wholesale Systems Regulatory Support Group, demonstrates that U S WEST provides non-discriminatory access to all of these functions through its interfaces. U S WEST has deployed several electronic interfaces, including computer-to-computer and human-to-computer interfaces. U S WEST has spent over $100 million developing these interfaces and adjusting its systems to

meet the demands of CLECs. U S WEST's interfaces provide CLECs with access to the same OSS systems which U S WEST service representatives access.

The most used of U S WEST's interfaces is its real-time human-to-computer interface, which is an electronic interface called Interconnection Mediated Access, or IMA. In Arizona, all CLECs using U S WEST's OSS use IMA. U S WEST has also deployed two real-time computer-to-computer electronic interfaces: EDI (electronic data interchange) and EB-TA (electronic bonding - trouble administration). Both IMA and EDI support preordering, ordering and provisioning, while both IMA and EB-TA support repair transactions.

Consistent with the FCC's BellSouth South Carolina Order, both IMA and EDI have integrated preordering and ordering, which means a user need not back out of preordering to go into ordering. U S WEST's electronic interfaces comply with industry standards. Where applicable, U S WEST's interfaces provide real-time access. For example, IMA and EDI provide real-time access for all preorder transactions. Where real-time processing is not possible, practical or necessary (e.g. completion reporting and billing), the interfaces provide batch processing on a nondiscriminatory basis.

(3) Functionalities

As more fully described in the testimony of Mr. Buhler, IMA and EDI support preorder and order transactions in substantially the same time and manner as the OSS that U S WEST's retail units use. The transactions include:

(1) address validation;
(2) carrier listing;
(3) service availability;
(4) facility check;
(5) obtain CSR;
(6) telephone number selection;

(7) product and service selection;
(8) customer listing creation;
(9) billing number establishment;
(10) appointment scheduling;
(11) summary information review;
(12) order submission;
(13) supplemental order submission;
(14) order inquiry;
(15) order completion; and,
(16) posting to the customer service record.

CLECs and the U S WEST retail unit use the same underlying OSS and product tables to process the specific transaction.

U S WEST's OSS interfaces can be used by CLECs for virtually all products and services that CLECs are ordering in Arizona today and are likely to order in the future. The products supported by U S WEST's electronic interfaces include: (1) POTS resale; (2) ISDN basic rate interface; (3) private line; (4) Centrex; (5) unbundled loop; (6) local number portability; (7) interim number portability; (8) unbundled loop with long term number portability; (9) unbundled loop with interim number portability; (10) unbundled line-side analog and digital switch ports; and (11) DID trunks.

The IMA and EB-TA repair electronic interfaces support repair transactions for all products and services in substantially the same time and manner as the OSS used by the U S WEST retail unit. These interfaces allow the CLEC and the U S WEST retail unit to create, inquire about, modify, cancel, authorize closure of, and receive status of trouble reports.

In many ways, U S WEST's OSS interfaces provide service superior to that which U S WEST's retail representatives enjoy. For example, a U S WEST retail service representative must determine from the end-user's location which of the many U S WEST's legacy systems to log onto. By contrast, IMA and EDI make that determination automatically for the CLEC.

(4) Assistance to CLECs

As set forth in the testimony of Mr. Buhler, U S WEST has devoted significant resources to providing CLECs with information and training about its OSS. It has developed internal organizations devoted to assisting CLECs with resale, interconnection, and OSS issues. U S WEST also has assigned Account Managers to each CLEC to provide the CLEC with a single point of contact within U S WEST. It also provides help desks to assist CLECs with issues relating to interconnection, IMA access and deployment, and repair services. Of course, U S WEST provides CLECs with the information they need to build their own OSS interfaces and provides numerous IMA training opportunities. U S WEST provides interface specifications to CLECs who want to build to the interfaces, and U S WEST dedicates technical teams to those CLECs to help them build the interfaces. U S WEST provides training sessions to CLECs to help them use the OSS interfaces and provides CLECs technical specifications, business rules, and other documentation to assist their use of the interfaces.

(5) Operational Readiness

As described in the direct testimony of Mr. Williams, U S WEST has implemented all necessary performance measures to ensure that U S WEST provides CLECs with nondiscriminatory access to OSS.

Finally, as Mr. Buhler testifies, U S WEST has thoroughly tested the operational readiness of its OSS interfaces. In Mr. Buhler's testimony, U S WEST has produced the results of thousands of tests that have been performed on its OSS, including internal testing, carrier-to-carrier testing, and third party testing. Lastly, U S WEST has performed process capacity planning and has staffed its Interconnect Service Centers ("ISCs") to respond to realistic, foreseeable demand.

3. Nondiscriminatory Access to Poles, Ducts, Conduits, and Rights-of-Way at Just and Reasonable Rates in Accordance with the Requirements of Section 224

Section 271(c)(2)(B)(iii) of the Act requires that U S WEST provide nondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by it at just and reasonable rates in accordance with § 224 (the 1978 Pole Attachment Act). As detailed in the testimony of Michael Weidenbach, a Manager in the Wholesale Local Markets Organization, U S WEST complies with this checklist item through broad joint-use agreements into which U S WEST has entered with other telecommunications carriers pursuant to the 1978 Pole Attachment Act. The resultant Pole and Anchor Attachment and/or Duct Occupancy Agreements – which U S WEST has been successfully negotiating for years – contain the terms and conditions pursuant to which competing providers of telecommunications services may obtain nondiscriminatory access to U S WEST's poles, ducts, conduit, and rights-of-way. Under those agreements, U S WEST provides access to poles, conduits, and rights-of-way on a first-come, first-served basis, and CLECs may obtain relevant plats, maps, engineering records and other data upon making a bona fide request. The fees associated with such access are consistent with Section 224, and with the FCC rules.

4. Local Loop Transmission from the Central Office to the Customer's Premises, Unbundled from Local Switching or Other Services

Section 271(c)(2)(B)(iv) of the Act requires that U S WEST provide "local loop transmission from the central office to the customer's premises, unbundled from local switching or other services." Two separate UNEs listed in the vacated Rule 319 are associated with provision of this checklist item: (a) the local loop itself, defined as "a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and an end

user customer premises"; and (b) the network interface device ("NID"), defined as "a cross-connect device used to connect loop facilities to inside wiring."

As of March 1, 1999, U S WEST had successfully installed 1,546 unbundled loops for CLECs in Arizona. This demonstrates U S WEST's ability to adequately provide this unbundled element. U S WEST further satisfies this checklist item through the terms and conditions of its various interconnection agreements and its proposed SGAT, as well as its practical ability to provide unbundled loops in sufficient quantities and on a nondiscriminatory basis.

As described in full in the testimony of Karen Stewart, Director, Markets-Regulatory Strategy at U S WEST, U S WEST provides CLECs with access to unbundled loops that connect an end user's premises to a U S WEST central office. U S WEST provides two wire and four wire analog voice grade loops, as well as loops for HDSL, ADSL or DS1 services. U S WEST also conditions existing loops, if technically feasible, to provide for new capabilities, such as the provisioning of digital loop functionality. Where U S WEST has deployed Integrated Digital Loop Carrier ("IDLC") systems or similar technologies to serve its customers, U S WEST will furnish unbundled loops through alternative means such as Universal Digital Loop Carrier ("UDLC") or copper facilities.

U S WEST also provides a variety of options to CLECs who order unbundled loops, including testing and coordinated cutovers. The prices charged by U S WEST for unbundled local loops are cost-based and nondiscriminatory, and thus comply with the requirements of the competitive checklist.

The terms and conditions of its interconnection agreements and proposed SGAT demonstrate U S WEST's commitment to installing and repairing unbundled loops in a manner that is nondiscriminatory. U S WEST has established specific procedures to ensure the

provisioning of unbundled loops within a reasonable time. A CLEC may choose among three different installation options for these loops: a basic installation option for existing service; a basic installation with performance testing option for new service; and a coordinated installation with cooperative testing option. U S WEST similarly has instituted specific repair procedures that apply to unbundled loops. Moreover, to ensure the provision of unbundled loops on a nondiscriminatory basis, U S WEST has in place performance measures to test the installation and repair of unbundled loops based on multiple indicators. U S WEST is required under its interconnection agreements to maintain complete and accurate records of its performance, which U S WEST will furnish as proprietary information.

U S WEST also provides access to the Network Interface Device (NID), which allows a CLEC to terminate its own loop facility at a customer premises and access the inside wiring. For access to the NID, U S WEST provides two options: the CLEC may install its own NID, and run a jumper from its NID to the U S WEST NID; or, space permitting, a CLEC may terminate its loops directly into the U S WEST NID. The CLEC also has the option to order a modular NID to replace an existing non-modular NID, for ease in end-user testing.

5. Local Transport from the Trunk Side of a Wireline Local Exchange Carrier Switch Unbundled from Switching or Other Services

Section 271(c)(2)(B)(v) of the Act requires that U S WEST provide "[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services." In its rules that the Supreme Court has ordered vacated, the FCC has defined two general categories of local transport: dedicated transport – incumbent LEC transmission facilities dedicated to a particular customer or carrier; and shared transport – transmission facilities shared by more than one carrier, including the incumbent LEC. As detailed in the

testimony of Karen Stewart, Director, Markets-Regulatory Strategy at U S WEST, U S WEST satisfactorily provides to CLECs both dedicated and shared transport.

As reflected in the recently filed proposed SGAT and its interconnection agreements, U S WEST provides unbundled dedicated transport through its "unbundled dedicated interoffice transport" ("UDIT") element, at all technically feasible transmission capability levels, such as DSO, DS1, DS3, SONET and optical carrier levels (e.g., OC-3/12/48/96), that a CLEC could use to provide telecommunications services. Interoffice facilities are provided, at a minimum, between end offices and serving wire centers ("SWCs"), SWCs and interexchange carriers' points of presence, tandem switches and SWCs, end office or tandems of U S WEST, and the wire centers of U S WEST and requesting carriers. Although no CLEC in Arizona has placed an appropriate order for UDIT to date, UDIT is available under various interconnection agreements and U S WEST's proposed SGAT, ordering processes are in place, and testing has been performed to ensure that UDIT will be successfully installed when ordered.

As also reflected in the recently filed proposed SGAT, U S WEST offers shared transport including all transmission facilities connecting U S WEST's switches – facilities between an end office and a tandem switch, between two end offices, or between two tandem switches. Shared transport is available only in conjunction with unbundled switching, because switches necessarily perform the routing functions for access to the shared transport network. Through a CLEC's use of U S WEST's shared transport, that CLEC's end users will use the same local network as U S WEST's retail customers. Although no Arizona CLEC has ordered shared transport to date, U S WEST has included shared transport in its proposed SGAT, and has put in place all necessary processes for shared transport to be ordered and installed.

U S WEST ensures that, if a CLEC experiences difficulty in using its unbundled local transport once it has been requested and provisioned, U S WEST will restore a CLEC's access to its transport facilities with the same procedures and timeliness as for U S WEST retail customers. To that end, U S WEST has developed performance measures to ensure non-discriminatory treatment in the quality of service provided to CLECs. U S WEST will track CLEC service order and repair requests on a monthly basis and generate performance reports. The prices U S WEST charges for UDIT are cost-based and thus consistent with the requirements of the Act for the pricing of an unbundled network element. Because of the Supreme Court's vacation of the FCC's Rule 319, which listed shared transport as an unbundled network element, U S WEST does not offer in its SGAT shared transport at cost-based rates. Instead, the rate for shared transport was established so that when shared transport, unbundled switching and the unbundled local loop are combined, the resulting rate is consistent with the resale rate for business exchange services.

6. Local Switching Unbundled from Transport, Local Loop Transmission, or Other Services

U S WEST satisfies § 271(c)(2)(B)(vi) of the Act if it provides nondiscriminatory access to "[l]ocal switching unbundled from transport, local loop transmission, or other services." The testimony of Ms. Stewart demonstrates that U S WEST satisfies these requirements.

As reflected in its recently filed proposed SGAT, U S WEST offers both unbundled local switching and unbundled tandem switching; access to all vertical features installed in the switch (with the CLEC using the BFR process to request features installed but not yet activated in the switch); and customer routing (to the extent technically feasible). Although no Arizona CLEC has appropriately ordered unbundled local switching or features to date, that should not serve as a

barrier to U S WEST's entry into the interLATA market in Arizona, where U S WEST makes unbundled switching practically available, and where CLECs have successfully entered the market without them. U S WEST is legally committed to provide local switching under approved interconnection agreements and to provide all vertical features on an unbundled basis under its recently filed proposed SGAT. All necessary processes are in place to enable a CLEC to order unbundled local switching and features, and installation has been successfully tested. In addition, U S WEST makes available in its interconnection agreements prices for unbundled local switching that are cost-based in compliance with section 252(d). All of these measures taken by U S WEST ensure that the Arizona market is open to competitive entry with respect to the availability of switching.

7. Nondiscriminatory Access to 911 and E911 Services

Section 271(c)(2)(B)(vii)(I) of the Act requires that a BOC provide nondiscriminatory access to 911 and E911 services. U S WEST meets this requirement by providing 911 and E911 services to competing carriers pursuant to various Commission-approved interconnection agreements and its proposed SGAT. Full details of U S WEST's satisfaction of this checklist item are presented in the testimony of Margaret Bumgarner, a Manager in the Federal Regulatory Issues Department in the Public Policy Organization at U S WEST.

As Ms. Bumgarner explains, U S WEST provides access to 911/E911 services to CLECs in the same manner as U S WEST obtains such access. U S WEST has provided E911 service to ten facility-based CLECs in Arizona by providing E911 trunking between the CLECs' switches and the U S WEST selective router. U S WEST has also provided 911/E911 services to thirty resellers in Arizona, who obtain 911/E911 services using the same facilities as U S WEST's end user customers. U S WEST also stands ready to provide 911/E911 services to CLECs who

purchase unbundled switching through its proposed SGAT and interconnection agreements, although there is no demand for unbundled switching at this time. U S WEST will provide CLECs with performance measures that demonstrate the non-discriminatory provisioning of 911/E911 trunking and E911 database updates. The process and detailed procedures for providing access to 911/E911 services have been documented for the CLECs.

8. Nondiscriminatory Access to Directory Assistance Services to Allow the Other Carrier's Customers to Obtain Telephone Numbers; and Operator Call Completion Services

Section 271(c)(2)(B)(vii) requires a LEC to provide nondiscriminatory access to directory assistance ("DA") and operator services ("OS"). Under FCC rules, a LEC that provides DA, OS or directory listings to its customers, or provides telephone numbers must permit competing providers nondiscriminatory access to these services or features, with no unreasonable dialing delays. As summarized here and detailed in the testimony of Ms. Lori Simpson, a Director in the Wholesale Markets Division of U S WEST, U S WEST satisfies these requirements by providing nondiscriminatory DA and OS access in any of three ways at the CLEC's option: subscription to US WEST's OSS and DA services; provision of its own services; or purchase of the services from a third party.

Customers of CLECs who choose to purchase U S WEST's OS or DA services have access to all the same services as U S WEST customers. The CLEC may opt to brand the services, as U S WEST can provide CLEC branding through custom routing and dedicated transport in accord with FCC rules, and does so on a first-come, first-served basis.

For CLECs opting to provide their own OS and DA services, U S WEST provides nondiscriminatory access through provision of custom routing to resale-based CLECs and

CLECs purchasing unbundled local switching. U S WEST also provides services to assist CLECs to provision their own OS and DA, and offers CLECs online access to U S WEST's DA database. Customers of CLECs that provide their own OS and DA may dial the same numbers as U S WEST customers, unless the CLEC selects a different dialing pattern.

U S WEST accommodates the provision of third party OS and DA by resale-based CLECs and CLECs that purchase unbundled local switching through its provision of custom routing. Customers of CLECs purchasing third party OS and DA may dial the same numbers as U S WEST customers, if the CLEC has chosen the same dialing pattern. When a CLEC customer accesses the U S WEST OS or DA services, the call is intermingled with all other end user calls, uses the same DA or OS platform and is handled in an equal manner.

U S WEST currently provides directory assistance and/or operator services to 30 resellers and four facility-based CLECs in Arizona. Prices for DA and OS access are cost-based, "just, reasonable and non-discriminatory," as required by section 252(d) of the Act.

9. White Pages Directory Listings for Customers of the Other Carrier's Telephone Exchange Service

Section 271(c)(2)(B)(viii) of the Act requires that a BOC provide white pages directory listings for customers of another carrier's telephone exchange service. Section 251(b)(3) obligates LECs to permit all competing providers of telephone exchange service and telephone toll service to have nondiscriminatory access to directory listings. Full details of U S WEST compliance are set forth in the testimony of Ms. Simpson, and are summarized briefly here.

U S WEST satisfies this checklist item through 1) its actual processing of more than 19,900 white pages directory listings for CLECs in the State of Arizona; 2) its various interconnection agreements and proposed SGAT, which require nondiscriminatory access to

white pages directory listings on the same terms and conditions as those applicable to U S WEST retail customers; and 3) its provision of the same types of directory listings, under identical terms, to facilities-based, resale and unbundled network element CLECs, and to itself. U S WEST includes all primary listings in its listing database at no charge to the CLEC.

To assure nondiscriminatory compliance, U S WEST includes CLEC listings, as it does its own, in U S WEST Directory Assistance ("DA") records and local directories prepared by U S WEST DEX ("DEX") on behalf of U S WEST. Listings Service includes: placing CLEC end user listings in U S WEST's listing database; updating U S WEST's DA records consistent with the CLEC's direction for use of the listing information; and furnishing listings to DEX and other publishers for use in local directories. To ensure accuracy in processing CLEC listing orders, there are several check points before a listing is made available for publication: manual review, mechanical editing, manual correction and reentry if necessary, and pre-publication CLEC review of a verification proof at CLEC request.

10. Nondiscriminatory Access to Telephone Numbers for Assignment to the Other Carrier's Telephone Exchange Service Customers

Section 271(c)(2)(B)(ix) of the Act requires a BOC to provide, until the date by which telecommunications numbering administration guidelines, plan, or rules are established, nondiscriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers. In addition, Section 251(b)(3) of the Act requires all LECs to permit access to telephone numbers by all providers of telephone exchange and toll service. Full details of U S WEST compliance are provided in the testimony of Margaret Bumgarner, a Manager of Federal Regulatory Issues in the Public Policy Organization of U S WEST.

The FCC established a transition plan to transfer the numbering administration functions

to an independent third party administrator. Prior to that transfer, the FCC established two requirements for nondiscriminatory access to telephone numbers: it required a Local Exchange Carrier (LEC) administrator to charge a uniform fee and to use standard assignment procedures for all carriers, including itself. Prior to the transfer of these functions, U S WEST provided nondiscriminatory access to telephone numbers through the assignment of central office codes (NXXs) to itself and other carriers using the national industry guidelines and forms. U S WEST assigned NXX codes using industry guidelines. U S WEST is no longer the Central Office Code Administrator in its region. The responsibility for numbering administration transitioned to Lockheed Martin IMS on September 1, 1998.

11. Nondiscriminatory Access to Databases and Associated Signaling Necessary for Call Routing and Completion

As detailed in the testimony of Ms. Bumgarner, U S WEST satisfies § 271(c)(2)(B)(x) of the Act by providing "[n]ondiscriminatory access to databases and associated signaling necessary for call routing and completion." Section 271(c)(2)(B)(x) of the Act requires that a BOC provide "[n]ondiscriminatory access to databases and associated signaling necessary for call routing and completion." As interpreted by the FCC pursuant to its vacated Rule 319, such databases and signaling systems include the Line Information Database ("LIDB"), 800/888, AIN and number portability databases, and access to the Service Management System ("SMS"), which facilitates the entry of data into these call-related databases.

Several carriers operating in Arizona have interconnected with U S WEST's signaling network, and there are third party signaling network providers interconnected to U S WEST's signaling network providing access for other carriers. In addition, U S WEST complies fully with the requirements of section 271(c)(2)(B)(x) through its interconnection agreements and its

proposed SGAT. U S WEST provides competing carriers with access to unbundled signaling through the following network elements: the Signal Transfer Point ("STP") port, the entrance facility, and the Direct Link Transport ("DLT"). U S WEST provision of unbundled signaling through these elements permits a CLEC to access call-related databases such as the LIDB and the 800/888 database. U S WEST provides for signaling access to the LIDB and the 800/888 database, as well as access to Advanced Intelligent Network ("AIN") functions through the STP.

U S WEST also provides, on a nondiscriminatory basis, unbundled access to the Service Management System, which allows CLECs to create, modify or update information in call-related databases. The CLEC may update information in the LIDB through service centers that enter information into U S WEST's service order process interface system ("SOPI"). For AIN services, U S WEST permits access to the SMS through its Service Creation Environment ("SCE"). U S WEST currently is developing processes to allow third party access to its SMS system. The rates for unbundled access to databases and signaling are cost-based under section 252(d).

12. Number Portability

U S WEST satisfies § 271(c)(2)(B)(xi) of the Act if it provides "interim telecommunications number portability through remote call forwarding, direct inward dialing trunks, or other comparable arrangements, with as little impairment of functioning, quality, and convenience as possible." This section also requires full compliance with the FCC's permanent or long-term number portability ("LNP") regulations; the FCC has required LNP deployment in the nation's 100 largest metropolitan areas ("MSAs") – including the Phoenix and Tucson MSAs – by the end of 1998. Beyond the top 100 MSAs, LNP will be deployed within six months of a bona fide request.

As Ms. Bumgarner explains in her testimony, U S WEST has specific legal commitments to make number portability available under its various approved interconnection agreements and under its recently-filed proposed SGAT.

Preparations for the provision of LNP in Arizona were timely completed for the Phoenix MSA on August 3, 1998, and for the Tucson MSA on November 2, 1998. As a result, LNP is now available to approximately 90% of U S WEST's Arizona access lines. U S WEST's procedures for LNP are fully documented, and LNP may be ordered both manually and electronically. Pricing for LNP will be pursuant to two federally tariffed charges (a monthly end-user charge to last for no more than five years, and an inter-carrier charge for query services) through which the FCC has provided for LNP cost recovery. U S WEST filed federal tariffs for these charges, pursuant to FCC rules, on January 26, 1999.

U S WEST still provides interim number portability in areas outside of Phoenix and Tucson through four different mechanisms: remote call forwarding, direct inward dialing, route indexing (both direct and tandem), and local exchange routing guide reassignment. U S WEST has documented procedures for INP ordering (which may be done either manually or electronically) and provisioning, and proactively manages the provisioning of INP and coordination of related service orders to provide the service with as little impairment of quality, reliability, and convenience as possible.

As of February 28, 1999, U S WEST had ported 43,294 numbers in Arizona.

13. Nondiscriminatory Access to Such Services or Information As Are Necessary to Allow the Requesting Carrier to Implement Local Dialing Parity in Accordance with the Requirements of Section 251(b)(3)

Ms. Bumgarner also explains in her testimony how U S WEST satisfies § 271(c)(2)(B)(xii) of the Act, which requires "[n]ondiscriminatory access to such services or

information as are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements of section 251(b)(3)." Section 251(b)(3) requires each LEC "to provide dialing parity to competing providers of telephone exchange service. . ., and the duty to permit nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays."

U S WEST customers and CLEC customers dial the same number of digits to make local calls. These local calls include calls to other customers regardless of their local service provider, and calls to operator services, directory assistance, and provisions for directory listings. There are no unreasonable dialing delays because any given local call is made in the same manner with the same number of dialed digits by U S WEST customers and CLEC customers.

14. Reciprocal Compensation Arrangements in Accordance with the Requirements of Section 252(d)(2)

Section 271(c)(2)(B)(xiii) of the Act requires that a BOC provide "reciprocal compensation arrangements in accordance with the requirements of section 252(d)(2)." Section 252(d)(2), in turn, provides that a state commission may not consider the terms and conditions for reciprocal compensation to be just and reasonable unless they: (1) provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination of calls that originate on the network facilities of the other carrier, and (2) determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls. In addition, section 251(b)(5) of the Act imposes on all LECs "the duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications."

The basic premise of these statutory provisions is that the originator of a local call is responsible for the costs of completing that call, including the costs associated with call

transport. As Mr. Weidenbach explains in his testimony, U S WEST meets the requirements of section 271(c)(2)(B)(xiii) through it various interconnection agreements and the proposed SGAT, pursuant to which U S WEST and CLECs provide interconnection and reciprocal compensation for the exchange of local traffic. The reciprocal compensation rates provided for in these agreements are cost-based under section 252(d)(2).

U S WEST has made all required reciprocal compensation payments in a timely fashion (with the exception of payments for traffic delivered to internet service providers – an issue still pending and unresolved before the FCC and this Commission), and has billed CLECs in a timely fashion as well.

15. Telecommunications Services for Resale in Accordance with the Requirements of Sections 251(c)(4) and 252(d)(3)

Section 271(c)(2)(B)(xiv) of the Act requires that U S WEST make available "telecommunications services for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3)." Section 251(c)(4) requires incumbent LECs "to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers," and "not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service." Section 252(d)(3) provides that "wholesale rates" must be based upon "retail rates charged to subscribers for the telecommunications service requested, excluding the portion. . . attributable to any marketing, billing, collection, and other costs that will be avoided. . . ."

Through its Commission-approved resale agreements with CLECs in Arizona and its proposed SGAT, U S WEST makes all of its retail telecommunications services available for resale, including: residence exchange service; business exchange service and PBX; ISDN; toll;

vertical features; private line; public access lines; optional calling plans; volume discounted services, contract service arrangements; listings; AIN services; and WATS. The wholesale discount rates were set in the consolidated cost docket, at 12% for residential exchange access, and 18% for business and PBX, ISDN, toll, vertical features, non-recurring charges, and private line.

As Ms. Simpson details in her testimony, any resale limitations are consistent with those permitted by the Act. Services that are not retail telecommunications services – including customer premises equipment, enhanced services, inside wire, calling card, promotions of 90 days or less, lifeline, and technical trials – are not available for resale. In addition, some services may be resold only to the same class of customers eligible to purchase them from U S WEST (e.g., residential service).

U S WEST has procedures in place for CLEC ordering of services for resale (either manually or electronically), and provides extensive documentation and assistance (through on-line resource guides, training programs, help desk, account manager support, etc.) to assist CLECs in ordering and obtaining services for resale.

U S WEST's provisioning and maintenance procedures are nondiscriminatory as between CLECs and U S WEST's retail operations. Reseller CLECs receive the same provisioning/installation intervals and the same maintenance/repair commitments for the same services as do U S WEST end users. The same technicians and other personnel handle CLEC and U S WEST installation orders and repair orders using the same systems, processes and procedures. U S WEST has also developed extensive performance indicators to ensure that nondiscriminatory service is provided to CLECs.

CLECs have resold, and U S WEST currently provides, 19,734 local exchange lines and numerous other services to 30 CLECs in Arizona. This includes 10, 642 residential lines and 9,092 business lines.

V. U S WEST SATISFIES THE REQUIREMENTS OF SECTION 272.

Section 272 of the Act describes how U S WEST must conduct itself once it obtains interLATA authority. See 47 U.S.C. Section 272. The testimony of Theresa K. Million, Manager, Technical Accounting – Regulatory at U S WEST Communications, Inc., and Judith L. Brunsting, Director, Regulatory of U S WEST Long Distance, Inc. ("U S WEST LD") demonstrates that U S WEST meets all requirements of Section 272. In particular, U S WEST has established a separate long distance affiliate, U S WEST LD, a wholly-owned subsidiary of U S WEST, Inc. U S WEST LD is a separate corporate entity from U S WEST Communications, which is also a wholly-owned subsidiary of U S WEST, Inc. U S WEST Communications does not own any stock in U S WEST LD, and U S WEST LD owns no stock in U S WEST Communications, Inc.

The testimony of Ms. Million and Ms. Brunsting demonstrates that U S WEST LD will operate independently from U S WEST Communications. 47 U.S.C. Section 272(b)(1). U S WEST Communications and U S WEST LD currently operate independently in accordance with the FCC's Non-Accounting Safeguards Order.[9] U S WEST Communications, Inc., and U S WEST LD do not and will not jointly own switching or transmission facilities or land and buildings where those facilities are located so long as this restriction applies under FCC rules.

[9] First Report and Order and Further Notice of Proposed Rulemaking, Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, CC Docket No. 96-149, 11 FCC Rcd 21905 (1996) ("Non-Accounting Safeguards Order").

U S WEST Communications has not transferred any facilities to U S WEST LD that must be unbundled under 47 U.S.C. Section 251(c)(3).

The testimony of Ms. Million and Ms. Brunsting also demonstrates that U S WEST will maintain books, records, and accounts in accordance with FCC requirements that are separate from the books, records, and accounts U S WEST LD maintains. 47 U.S.C. Section 272(b)(2). U S WEST LD issues separate financial statements from U S WEST Communications, maintains a separate Chart of Accounts, maintains separate internal financial controls, has its own federal tax ID number, and maintains separate assets.

Pursuant to Section 272(b)(3), U S WEST Communications and U S WEST LD must have separate officers, directors, and employees. U S WEST LD's Chief Operating Officer is not an officer of U S WEST Communications, no U S WEST Communications officer or employee is also an officer or employee of U S WEST LD, and no U S WEST LD officer, director or employee is also an officer, director or employee of U S WEST Communications. The members of the Board of Directors for U S WEST Communications are not officers or directors of U S WEST LD, and both subsidiaries pay their respective employees from separate payrolls. U S WEST Communications also provides services to U S WEST LD as an independent contractor, not as an agent or employee of U S WEST LD.

Section 272(b)(4) provides that U S WEST LD cannot "obtain credit under any arrangement that would permit a creditor, upon default, to have recourse to the assets of" U S WEST Communications. See 47 U.S.C. Section 272(b)(4). U S WEST meets this requirement because: (a) U S WEST Communications and U S WEST LD are separately capitalized; (b) U S WEST Communications issues its own commercial paper to obtain financing, separate from debt financing of unregulated affiliates which is obtained through

U S WEST, Inc.; and (c) neither U S WEST, Inc. nor U S WEST Communications has co-signed a contract or any other instrument that would allow U S WEST LD to obtain credit in a manner that would permit creditors to have recourse to U S WEST Communications' assets.

Section 272(b)(5) requires that all transactions between U S WEST Communications and U S WEST LD must be conducted at arms' length, in writing, and publicly available. 47 U.S.C. Section 272(b)(5). All services that U S WEST Communications provides to U S WEST LD are either tariffed services or provided under separate contract. For tariffed services, U S WEST LD obtains services through the same processes and on the same terms as any non-affiliated telecommunications customer. U S WEST Communications provides non-tariffed services under stand-alone agreements and under "umbrella" agreements, such as the Master Services Agreement with associated Work Orders. All transactions between U S WEST Communications and U S WEST LD can be inspected on the U S WEST Internet Home Page site.

The testimony of Ms. Million and Ms. Brunsting also demonstrates that U S WEST Communications does not discriminate in favor of U S WEST LD or any other entity in the provision of goods, services, facilities, information, or the establishment of standards. 47 U.S.C. Section 272(c)(1). U S WEST must account for all transactions between U S WEST Communications and U S WEST LD in accordance with FCC-approved accounting principles. Arthur Andersen, L.L.C., has independently verified that U S WEST Communications complies with GAAP and FCC accounting rules.

Finally, U S WEST complies with the marketing and joint marketing restrictions in 47 U.S.C. Section 272(g). U S WEST LD will not market telephone exchange service unless U S WEST Communications permits other carriers offering similar services to market and sell U S WEST Communications' services. Furthermore, U S WEST Communications does not

currently market or sell interLATA services through U S WEST LD and will not until U S WEST LD receives Section 271 approval. Once U S WEST LD can provide in-region interLATA service, U S WEST Communications and U S WEST LD will be permitted to jointly market their services so long as their transactions are arms' length, in writing, available for public inspection, and properly accounted for under FCC rules.

Both U S WEST Communications and U S WEST LD conduct extensive compliance training for their respective employees to ensure that they understand and abide by the requirements of the Act and relevant FCC orders, including Section 272 and FCC orders implementing Section 272.

VI. CONCLUSION

For the reasons stated herein, and the testimony and evidence which is being presented in this docket, U S WEST respectfully requests that the Commission issue an order, within ninety days of this filing, that:

1. Verifies that U S WEST has satisfied the threshold requirement of Track A;

2. Verifies that U S WEST has satisfied the competitive checklist in Arizona;

3. Advises the FCC that it would be in public interest of the State of Arizona for the FCC to grant U S WEST authority to enter the interLATA toll market in this state; and
4. Recommends that the FCC approve U S WEST's section 271 application for the State of Arizona.

DATED this 25th day of March, 1999.

Respectfully submitted,

U S WEST COMMUNICATIONS, INC.

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ORIGINAL

Certificate of Service

I hereby certify that on this 25th day of March, 1999, a true and correct copy of the above and foregoing was served via Hand Delivery addressed to the following:

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I hereby certify that on this 25th day of March, 1999, a true and correct copy of the above and foregoing was served via Airborn Express, Overnight Delivery, postage prepaid thereon and addressed to the following:

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A

U S WEST Communications
ARIZONA 271 Application
Answers to Questions from Arizona Corporation Commission
Order 60218, Docket U-0000-97-238, issued May 27, 1997

Attachment A

General Telecommunications Market Conditions in Arizona

1) Status of state commission proceedings to implement the local competition provisions of the Telecommunications Act of 1996 ("1996 Act")

Response:
The following state commission proceedings to implement the local competition provisions of the Telecommunications Act of 1996 are pending:

Generic Service Quality Proceeding: The parties have been directed to submit a status report in the form of a joint matrix on or before April 23, 1999.

Consolidated Cost Proceeding, Docket No. T-03021A-96-0448. The parties have requested certain clarifications regarding the price list prepared in connection with the Commission's decision and are awaiting resolution of the requested clarification. In addition, the Commission held hearings with respect to OSS cost recovery and are the parties are awaiting a decision by the Commission.

In the Matter of the Petition by e.spire Communications, Inc., American Communications Services of Pima County, Inc. and ACSI Local Switched Services, Inc. for arbitration with U S WEST Communications, Inc. of Interconnection Rates, Terms and Conditions Pursuant to 47 U.S.C. Section 252(b) of the Telecommunications Act of 1996., Docket No. T-01051B-98-0406, T-03596A-98-0406, T 03597A-98-0406, T-03598A-98-0406. The Commission entered its order resolving the issues that were in dispute in this proceeding on February 19, 1999. The parties have been directed to submit an amendment to their interconnection agreement by April 5, 1999.

Appeals from the Commission's decisions in the Consolidated Cost Proceeding, Docket No. T-03021A-96-0448, and the arbitration's between U S WEST Communications, Inc. and various competitive local exchange carriers are now pending in the United States District Court for the District of Arizona in MCI Telecommunications Corporation v. U S WEST Communications, Inc., Lead Case No. CIV 97-0026-PHX-OMP. The parties in this proceeding have just recently briefed the impact of the United States Supreme Court's decision in AT&T Corp. v. Iowa Utils. Bd., No. 97-826, slip

op. (U. S. Jan. 25, 1999) on the issues that are the subject of pending motions in this consolidated appeal.

In addition, applications for the approval of the following interconnection agreements have been filed with the Commission since January 1, 1999:

CCCAZ/Connect: Application for approval filed on March 10, 1999.

DIECA/Covad: Application for approval filed on March 10, 1999.

ELI: Amendment to interconnection agreement filed on March 2, 1999.

Harmony: Application for approval filed January 7, 1999. Scheduled for March 10 open meeting.

JATO: Application for approval filed January 7, 1999. Scheduled for March 10 open meeting.

NET-tel: Application for approval filed on March 2, 1999.

NorthPoint: Amendment to interconnection agreement filed on March 2, 1999. Second amendment filed on March 10, 1999.

OpTel: Amendment to interconnection agreement filed on March 2, 1999.

TOPP: Application for approval filed January 7, 1999. Approved March 15, 1999.

2) Identity of the entities that have been certified by the state to provide:

a) facilities based local exchange service

b) resold local exchange service

c) exchange access service

Response:

Attachment 1 lists the certified providers in the state of Arizona. The attachment displays the name of the provider and the type of certification requested. There are two basic types of certification:

- Wireline – These providers can be facility based, can establish interconnection with the U S WEST network and can also provide service by reselling U S WEST services.
- Resale Only – These providers opt to utilize U S WEST services on a resale only basis.

In addition, Type 2 Paging and Wireless providers interconnect wireless services with the U S WEST network. In addition to the list of certified providers and wireless providers, Attachment 1 contains a list of providers who have filed for certification but have not yet received Commission approval.

3) Whether the entities in 2 are providing business exchange service, residential exchange service, business exchange access service, or residential exchange access service (identifying special or switched access). If the competitor is not providing any of these services, does it plan to? When?

Response:
Attachment 2 contains the list of entities that currently have negotiated agreements with U S WEST. The table identifies the type of agreement, whether the provider is actively selling services in Arizona, the type of service (residence and/or business), unbundled elements/ancillary services, interconnection trunks, and collocation arrangements. Competitors treat their service introduction strategy as proprietary information; therefore, U S WEST only possesses limited knowledge of competitors' entry plans.

The information sought through this Request is central to a Section 271 application. The amount and type of competition by CLECS directly affects the Track A, competitive checklist, and public interest components of Section 271. Because CLECs are in a better position than U S WEST to inform this Commission and ultimately the FCC about the number and type of customers that they are serving, U S WEST has served CLECs with discovery to obtain this information. CLECs are uniformly objecting to production of this information claiming it is confidential. U S WEST has offered to allow submission of this information subject to Protective Order to ensure its continued confidentiality. This information is so central to the case that its production should be deemed mandatory.

4) The identity of the entities that have requested:

a) interconnection from U S WEST

Response:
Attachment 2 identifies the providers that have negotiated agreements with U S WEST. Those providers identified as having Wireline agreements have expressed an interest in having the ability to interconnect with U S WEST . The LIS Trunk ("TRk") column identifies the providers that are interconnecting with U S WEST. The Collocation ("Collo") Column identifies those providers who have established collocation arrangements in Arizona. The Pending "Collo" column identifies those providers who have ordered collocation, but for whom the work is not yet completed.

Entities that are interconnecting with U S WEST through the utilization of LIS Trunks are AT&T, e.spire, Brooks Fiber, COX Arizona Telecom ("COX"), Electric Lightwave, Teligent, Tucson Lightwave, Mountain Telecom, TCG, Winstar, and MCI Metro.

Entities that are interconnecting with U S WEST through the utilization of Collocation are ACSI, Brooks, COX, e.spire, Electric Lightwave, GST, ICG, MCI, MFS, Mountain Telecommunications, Worldcom, and TCG.

Entities that have pending interconnection with U S WEST through the utilization of Collocation are ACI CORP., Covad Communications, NextLink, NorthPoint Communications and Sprint.

b) unbundled elements from U S WEST

Response:
Attachment 2 identifies the providers who have negotiated agreements with U S WEST. Providers with Wireline agreements can purchase unbundled elements pursuant to the language of such agreements. The UNE column identifies the providers that have purchased unbundled network elements.

c) the ability to resell U S WEST's services

Response:
Attachment 2 identifies the providers that have negotiated agreements with U S WEST. Providers with Wireline or Resale agreements can purchase resale services pursuant to the language of such agreements.

The Residence Exchange and Business Exchange column identifies the providers that are actually purchasing resale services.

d) The date the requests were made and the extent to which U S WEST and the requesting entity have entered into binding agreements, as well as copies of any such agreements.

Response:
Exhibit WGA-6 of Mr. Wayne Allcott's affidavit identifies the existing agreements, effective dates and the docket numbers.

5) a) The number of access lines in Arizona that are served by U S WEST's competitors.

Response:
To date, new entrants have captured over 35,000 access lines to end users in U S WEST's Arizona markets.[1]

Residence Facilities Based = 7,258
Residence Resale = 10,642
Business Facilities Based = 8,426
Business Resale = 9,092

Note that from an economic perspective, the competitive loss data cited above are highly conservative and understate the size and impact of U S WEST's losses for at least three reasons. First, not all lines served by competitors were originally with U S WEST.[2] Second, by using access line counts, U S WEST's competitive loss data do not capture the effect of high revenue concentrations. U S WEST loses a higher proportion of revenues than access lines because revenues tend to be concentrated in a relatively small number of access lines. Profits are even more concentrated than revenues because high revenue lines tend to be located in higher density areas and, therefore, cost less to serve. These high profit access lines are the ones most likely to switch to competitors. Any market share, revenue, or profit analysis based on access lines will therefore underestimate U S WEST's competitive losses. Third, these line loss figures do not account for the lines and revenues U S WEST has lost to certain other competing technologies such as private networks constructed with PBXs (an estimated loss of more than 600,000 access lines in Arizona), VSATs (an estimated loss of between 2,000 and 12,000 access lines in Arizona) or microwave transmission stations (See Exhibit RGH-2 for more details). Conservative forecasts predict that U S WEST will have lost more than 25,000 access lines by 1999 to mobile wireless competitors.[3] (See Exhibit RGH-3 for more details). These line losses to mobile wireless services are also not included in the estimate listed above. Finally, the 35,000 estimate does not include the loss of access line and DSL sales to Cox's cable modem services.

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1 See Affidavit of Robert Harris, Figure 1 and Wayne Allcott, Exhibit WGA-8.

2 Facilities-based business losses are identified based on service disconnection orders. If disconnecting customers declined to list the reason for disconnecting or listed a different reason than "switching to competitor" these losses might not be counted. Also, new business lines which were never served by U S WEST are likely to be undercounted.

3 Based on year-end number of access lines in 1997 and TFI's forecast of 1% and 2% of total access line loss in 1999 and 2000 respectively, due to wireless competition. Preliminary Statistics of Communications Common Carriers," FCC, 1998, Table 2.3. Vanston, Exhibit 3.10, p.28.

See Exhibit WGA 8 in Affidavit of Wayne G. Allcott and Figure-1 in Affidavit of Dr. Robert G. Harris for more details.

b) The number and location of U S WEST's switches that are connected to loops served by competitors.

Response:
CLECs have leased unbundled loops from the following wire centers:

Phoenix Main
Tucson - Craycroft
- East
- Flowing Wells
- Main
- Rincon
- South

No U S WEST switches are connected to loops provided by competitors in Arizona. It is interesting to note that no CLEC has ordered unbundled switching. This, in all likelihood, is because competitors have installed 23 switches in Arizona. Thus, it appears that it is not a necessary element for CLECs to provision competitive service.

c) The scope of the geographic areas for which the competitors' services are available.

Response:
Resale service is available from U S WEST throughout its Arizona territory. Facilities-based service is available in the downtown Phoenix and Tucson areas from wireline and fixed wireless CLECs.

In addition, Cox Communications is the cable service provider in much of the Phoenix and Tucson Metropolitan Statistical Areas (MSAs). Its cable network passes 1.1 million homes in Phoenix, and 250,000 homes in Tucson.[4] In September 1998, Cox began providing local exchange service in Chandler, Arizona, initially to customers in multiple dwelling units (MDUs) such as apartment buildings and condominiums. Cox has since expanded its service offering to single family homes. In addition, in the Phoenix metropolitan area, Cox cable modem service is available in a growing number of neighborhoods. The service is currently available in Chandler, East and South Phoenix, Ahwatukee, Paradise Valley, West

4 "Cox's 4th Quarter 1998 Financial Results," *Cox Website,* downloaded March 10, 1999. <www.cox.com>

Mesa; and in the neighborhoods of Wyndhaven in East Mesa, Grayhawk and Gainey Ranch in Scottsdale, and San Palmilla in Tempe. "Cox@Home Availability," *Cox Phoenix Website,* downloaded March 5, 1999. www.ph.cox.com

Mobile wireless service providers offer services to customer across the state. Moreover, private networks such as PBXs and VSATs have been installed by customers across the state.

See Exhibits, RGH-3, RGH-4, RGH-5, RGH-6, and Section II in the Affidavit of Dr. Robert G. Harris for more details.

Again, the information sought through this Request is central to a Section 271 application. The amount and type of competition by CLECS directly affects the Track A, competitive checklist, and public interest components of Section 271. Because CLECs are in a better position than U S WEST to inform this Commission and ultimately the FCC about the number and type of customers that they are serving, U S WEST has served CLECs with discovery to obtain this information. CLECs are uniformly objecting to production of this information claiming it is confidential. U S WEST has offered to allow submission of this information subject to Protective Order to ensure its continued confidentiality. This information is so central to the case that its production should be deemed mandatory.

d) The number and types of customers for which the competitors' services are available.

Response:
Competitors keep information about the number of customers who can access their services proprietary.

Again, the information sought through this Request is central to a Section 271 application. The amount and type of competition by CLECS directly affects the Track A, competitive checklist, and public interest components of Section 271. Because CLECs are in a better position than U S WEST to inform this Commission and ultimately the FCC about the number and type of customers that they are serving, U S WEST has served CLECs with discovery to obtain this information. CLECs are uniformly objecting to production of this information claiming it is confidential. U S WEST has offered to allow submission of this information subject to Protective Order to ensure its continued confidentiality. This information is so central to the case that its production should be deemed mandatory.

By the end of the year, Cox expects to make its digital phone service available to 200,000 homes in parts of Phoenix and Mesa, and it expects

to make high-speed Internet service available to 550,000 homes.[5] Cox plans to complete the more than $300 million upgrade of its Phoenix network so that it can offer local telephone service, as well as high-speed Internet access, to all its residential customers in its Phoenix service area by 2002.[6]

The wireline and fixed wireless CAPs-CLECs primarily offer service to business customers in the more dense areas of Phoenix and Tucson.

PBXs serve businesses and residential customers in large multiple dwelling units.

VSATs serve business customers.

Mobile wireless services are available for business and residential customers across the state

See Exhibits, RGH-2, RGH-3, RGH-4, RGH-5, RGH-6, and Section II in Affidavit of Dr. Robert G. Harris for more details.

e) The extent to which each competitor is using its own facilities to provide service or is using unbundled or resold services obtained from U S WEST.

Response:
It is extremely difficult for US WEST to identify or understand the full extent to which competitors use their own facilities to provide service to end user customers. Estimates based on available information have been made, but such estimates clearly understate the loss to facility-based competitors. Dr. Harris and Mr. Alcott describe the competitors' Arizona networks to the extent US WEST possesses such information. Information provided includes:

- 4 CLECs have purchased unbundled network-based elements
- 11 CLECs have interconnected with US WEST to exchange local traffic
- 127 collocation arrangements are in service; 85 additional arrangements are pending completion
- 30 resellers are offering service to residence and/or business customers

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5 Rebecca Rolwing, "Cox Communications Expands Phone Service in Phoenix Area," *The Arizona Republic,* January 11, 1999. See also Max Jarman, "Business News," *The Arizona Republic,* March 2, 1999. (Hereinafter, "Jarman Article.")

6 "Cox Communications' Fiber-Optic Upgrade FAQs," *Cox Website.* <www.phx.cox.com> See also Jarman Article.

f) A description of the competitors' facilities in operation in U S WEST's service area.

Response:
Competitors are entering through various paths:

1) Fiber optic networks:

Eight CAP-CLECs -- AT&T/TCG, Cox, MCI WorldCom, ELI, GST, TCI, ICG and e*spire -- have entered Arizona's local exchange markets and operate multiple networks in Phoenix and Tucson with thirteen central office voice switches.[7]

2) Upgraded cable networks:

Cox Communications cable network passes 1.1 million homes in Phoenix, and 250,000 in Tucson.[8] The company is upgrading its facilities to provide voice telephony and high speed Internet access to all its service area by 2002.

3) Fixed wireless networks:

WinStar and Teligent offer local service to business customers in Phoenix.[9] ART began offering Internet access and ISP service to businesses in Phoenix in December 1998,[10] and serves about 65 customers in the area.[11]

Mountain Telecommunications offers fixed wireless local service to residential customers in the Pima County Maricopa Indian Reservation.

4) Mobile wireless networks:

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7 See Figure-2 in direct testimony of Dr. Robert G. Harris submitted in this proceeding.

8 "Cox's 4th Quarter 1998 Financial Results," *Cox Website,* downloaded March 10, 1999. <www.cox.com>

9 Winstar installed a switch in May 1998 and Teligent expects to have a switch operational in four to six weeks. See Section II of direct testimony of Dr. Robert G. Harris.

10 "Fast Internet Provider," *The Arizona Republic,* December 24, 1998.

11 Conversation with ART representative.

Mobile services include cellular, PCS and enhanced special mobile radio. In Arizona, for example, seven main wireless providers (AT&T Wireless, VoiceStream, AirTouch, Cellular One, Nextel, Sprint PCS, and U S WEST Advanced PCS) offer mobile wireless service.

5) Resale:

More than 30 resellers have entered U S WEST's local exchange markets and are actively providing resold competitive local exchange service in Arizona, 25 of which are serving residential customers.

See Figure-7 in Affidavit of Dr. Robert G. Harris for more details.

6) PBXs:

By 1999, U S WEST will have lost an estimated 602,000 business and residential access line sales (net of PBX trunks) due to PBX usage in Arizona.

7) VSAT networks:

By 1999, U S WEST will have lost between 3,000 and 16,000 business access line sales due to VSAT usage in Arizona.

See Exhibits, RGH-2, RGH-3, RGH-4, RGH-5, RGH-6, and Section II in Affidavit of Dr. Robert G. Harris for more details.

g) Whether the competitor is currently expanding its facilities and when the expansion is expected to be completed.

Response:
By the end of the year, Cox expects to make its digital phone service available to 200,000 homes in parts of Phoenix and Mesa, and high-speed Internet service available to 550,000 home in Phoenix[12] By 2002 Cox plans to finish upgrading its Arizona networks so that all homes in its Phoenix and Tucson service areas have access to these services.

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12 Rebecca Rolwing, "Cox Communications Expands Phone Service in Phoenix Area," *The Arizona Republic,* January 11, 1999. See also Max Jarman, "Business News," *The Arizona Republic,* March 2, 1999. (Hereinafter, "Jarman Article.")

ART plans to enter Tucson by June 1999.[13]

U S WEST does not generally know the specific entry plans of competitors, because they have been kept proprietary. The Commission should therefore grant U S WEST's discovery requests regarding the entry plans, network size, and service offerings of competitors. Understanding these facts is critical for assessing the overall state of current and likely future competition in Arizona. The Commission needs this information to make a fully informed recommendation on U S WEST's 271 application.

CLECs refuse to produce this information claiming it is irrelevant and confidential. Again, U S WEST has offered to allow production pursuant to Protective Order; however, CLECs have refused the offer. U S WEST has explained the relevance of these materials in a Motion to Compel filed with the Commission on or about March 9, 1999.

h) The average provisioning intervals and maintenance times for services U S WEST provides to competitors compared to those it provides to itself.

Response:
See the affidavit of Michael G. Williams submitted in this proceeding.

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13 "Fast Internet Provider," December 24, 1998.

6) a) The number of access lines U S WEST serves in Arizona.

Response:
U S WEST has 2,738,417 access lines in service in Arizona as of 2/28/99.

b) The number, type, and location of U S WEST's switches in Arizona.

Response:
Please see Attachment 3 which provides this information.

c) The number and types of customers for which U S WEST's services are available.

Response:
As of 12/31/98, U S WEST offered services to 2,702,639 access lines in Arizona to the following types of customers:

Business		
Basic exchange lines	404,756	
CENTREX/Centron	237,157	
PBX	29,545	
ISDN	12,242	
Misc Bus Services	36,483	
Official Exch Services	15,180	
	735,363	Business-Access Lines
Unbundled loops	1,460	
Public	30,284	
Residence	1,935,532	
	2,702,639	access lines as of 12/31/98

Information on which U S WEST services are available to which customers by wire center is made available on a per transaction basis. That information can be made available both to end user customers by U S WEST service representatives querying systems to determine service availability and to CLECs using Service Availability pre-ordering transactions through IMA or EDI.

d) The amount of revenues that U S WEST derived from Arizona in the most recent year, broken down by basic residential service,

basic business service, intraLATA toll, access charges, and other services.

Response:

	1998 Arizona Revenues		
	Total State	Intrastate	Interstate
Residence	$333,940,747	$333,940,747	$ 0
Business	$328,823,551	$328,823,551	$ 0
IntraLATA Toll	$ 36,131,489	$ 36,055,113	$ 76,376
Access	$551,578,782	$120,809,335	$430,769,447
Other Services	$132,734,519	$ 28,855,328	$103,879,191

7) Any reports, studies, or analyses available, and created within the past year, that contain data on market shares of U S WEST and local telephone service competitors, or compare volumes of traffic, revenues, or facilities of the BOC and local competitors. Also, any evaluation of the likely entry, success or rate of growth of competitors or potential competitors. Proprietary information provided pursuant to this paragraph will be available pursuant to Protective Agreement, and will be disclosed only to the Commission, unless the parties can demonstrate compelling need for disclosure of information. Parties that file information designated as proprietary information are required to file a notice that generally describes what information is considered proprietary.

Response:
Pursuant to the directive in this question, U S WEST is submitting, to the Commission only, confidential studies, reports, and analyses regarding the state and likely development of competition.

8) A description of all complaints involving Arizona made to U S WEST, to the Arizona Corporation Commission, to the FCC, or other governmental authorities by other entities that have requested and/or received interconnection.

Response:

a) Cellular One filed informal complaint to the Arizona Corporation Commission on January 14, 1999. Alleges blockage for their cellular customers as high as 5.3% in Phoenix NW, Peoria, Goodyear, Bethany West and Midrivers central offices. NW central office conversion to 5E should clear 60% of problem. Balance of central offices scheduled to convert by April 1999.

b) Citizens filed informal complaint to the Arizona Corporation Commission in June of 1998. Alleges inability to fill customer orders because U S WEST has no facilities to meet them from Flagstaff to Winslow. Alternate short term solutions are being considered which will require joint planning. U S WEST retail orders are also being held.

c) ELI filed formal complaint to the Arizona Corporation Commission on November 30, 1998 (docket number T-01051B-98) regarding Reciprocal Compensation and late charges on local traffic, including traffic terminated to Internet Service Providers.

d) e.spire (ACSI) filed formal complaint to the Arizona Corporation Commission on March 18, 1998 (docket number T1051B-98-0144) alleging that U S WEST fails to provide adequate, sufficient and responsible Interconnection services including access to Unbundled Network Elements and Collocation. U S WEST filed a Motion to Dismiss on April 9, 1998, on the basis that e.spire had violated the terms of the Interconnection Agreement by failing to follow the dispute resolution provisions of its interconnection agreement. The motion to dismiss is pending.

e) Sprint filed formal to Arizona Corporation Commission on July 21, 1998 (docket number T-01051B-98-0738) that is filing of documentation related to the denial of Physical Collocation.

f) Western PCS III Corporation filed a formal complaint (Docket No. T-01051B-98-0737) alleging that it has suffered service outages relating to dedicated DS1 and DS3 facilities provided by U S WEST. U S WEST has filed an answer denying the allegations made in the complaint.

9) Information demonstrating that authorization of U S WEST to provide interLATA service will be carried out in accordance with the requirements of Section 272 as required by Section 271(d)(3)(B).

Response:
U S WEST Communications understands its obligations under Section 272 and has instituted processes to ensure that U S WEST will conduct business subject to the provisions of Section 272 once it receives 271 authority from the FCC. U S WEST continues to inform and educate employees about Section 272 and related FCC Orders. Employees undergo annual compliance training to certify their understanding of company policies and regulatory requirements, including the elements of Section 272. In addition, training manuals (i.e., Methods for Affiliate Transactions) have been updated and training conferences held for employees involved in processing affiliate transactions to explain the requirements of Section 272 and related regulations.

Specifically, U S WEST Communications satisfies the following:

- Section 272(a) – Separate Affiliate Requirement

  Section 272(a) requires that U S WEST Communications provide long distance services through a separate long distance affiliate. U S WEST Long Distance, Inc. ("U S WEST LD") has been created as the long distance affiliate through which such services will be offered following U S WEST's receipt of in-region interLATA authority in Arizona.

- Section 272(b) – Structural and Transactional Requirements

  Section 272(b) requires that the long distance affiliate:
  - maintain separate books, records, and accounts;
  - have its own directors, officers and employees;
  - obtain credit that will not provide recourse to U S WEST Communications' assets;
  - conduct all transactions with U S WEST Communications on an arm's length basis, with all such transactions reduced to writing, and available for public inspection.

  U S WEST Communications satisfies the requirements of Section 272(b). Its books and records are separate from U S WEST LD, and are based on a different Chart of Accounts. U S WEST Communications has no directors, officers or employees who are simultaneously directors, officers or employees of U S WEST LD. The companies are capitalized separately, and U S WEST LD is not permitted to obtain credit that gives creditors recourse to

U S WEST Communications' assets. Furthermore, all transactions between U S WEST Communications and U S WEST LD are in writing and available for inspection on the U S WEST internet homepage.

- Section 272(c) – Nondiscrimination Safeguards

  Section 272(c) prohibits U S WEST Communications from discriminating between U S WEST LD and any other entity in the provision or procurement of goods, services, facilities, and information, or in the establishment of standards. To ensure that U S WEST LD's access is on an equal basis, U S WEST LD uses the same channels as nonaffiliated interexchange carriers to access U S WEST Communications' goods, services, facilities, and information. In addition, services provided to U S WEST LD are extended to nonaffiliated interexchange carriers under the same terms and conditions, and at the same rates.

- Section 272(d) – Biennial Audit Requirement

  Section 272(d) requires U S WEST Communications to obtain and pay for a joint Federal/State audit every two years to determine whether the company has complied with the requirements of Section 272. The first biennial audit will be conducted 12 months after U S WEST Communications receives it first Section 271 approval. As is U S WEST Communications' practice, it will cooperate to the fullest extent possible to assist the auditor in accomplishing its objective.

- Section 272(e) – Fulfillment of Requests for Telephone Exchange Service

  Section 272(e) prohibits U S WEST Communications from discriminating against unaffiliated entities in the provision of telephone exchange service and exchange access. As stated above, U S WEST Communications requires U S WEST LD to access services, including telephone exchange service and exchange access, in the same manner, through the same channels, and at the same rates, terms and conditions as nonaffiliated interexchange carriers.

- Section 272(g) – Joint Marketing

  Section 272(g) permits U S WEST Communications to join in the marketing and sale of U S WEST LD's interLATA services once U S WEST LD is authorized to provide interLATA services under

Section 271(d). Such joint marketing will be exempt from the nondiscrimination provisions of Section 272(c). U S WEST Communications understands and will adhere to this provision.

For a more complete explanation, please see the testimony of Theresa Million and Judith Brunsting.

10) All evidence supporting U S WEST's assertion that U S WEST's provision of interLATA service will be in the public interest as required under Section 271(d)(3)(C).

Response:

Arizona consumers stand to benefit significantly from the introduction of competition to the interLATA market. U S WEST's entry into the long distance market will:

- **Introduce competition to a market that is highly concentrated and not fully competitive.** The three large IXC's currently control 89 percent of Arizona's residential market. Moreover, the IXC's failure to significantly reduce their rates, despite large decreases in the access charges, demonstrates that the market is far from competitive.

- **Provide Arizona consumers with lower quality-adjusted prices and new service offerings.** Because U S WEST offers ubiquitous service throughout Arizona, it can offer the benefits of packaged services to a broad range of customers, especially the residential, rural, and small business customers who are often ignored by the IXCs and other competitors.

- **Give the long distance market an efficient and effective competitor.** With strong brand recognition and the ability to take advantage of economies of scale and scope, U S WEST is in the unique position of being able to provide meaningful competition in Arizona's long distance market.

- **Accelerate the growth of competition in Arizona's local telephone market.** Experience has shown, particularly in Connecticut, that the IXCs have little interest in providing local services to a broad range consumers unless they are at risk of losing existing customers. U S WEST's entry into Arizona's long distance market will force the major IXCs to expand their local service offerings in order to protect their long distance business.

See the testimony and attachments of Robert Harris for evidence supporting U S WEST's assertion that U S WEST's provision of interLATA service will be in the public interest as required under Section 271(d)(3)(C).

Approved Agreements	Type of Agreement
ACI Corp.	Wireline
Ameritech Comm. International Inc.	Wireline
AT&T	Wireline
Brooks Fiber Comm. of Tucson Inc.	Wireline
Cable Plus Company, L.P.	Wireline
Compass Telecommunications Inc.	Wireline
Cox Arizona Telcom Inc	Wireline
Dakota Services LTD	Wireline
DPI Teleconnect Inc	Wireline
Electric Lightwave, Inc. (ELI)	Wireline
Earnest Communications Inc.	Wireline
e.spire Comm. Inc (formerly ACSI)	Wireline
Frontier Local Services Inc.	Wireline
Great West Svcs. Ltd. dba Simcom Comm.	Wireline
GST Telecom, Inc.	Wireline
Intermedia Communications Inc.	Wireline
Level 3 Communications	Wireline
MCImetro Access Transmission Svcs. Inc	Wireline
MFS Intelenet, Inc.	Wireline
Mountain Telecommunications Inc. (MTI)	Wireline
NextLink Arizona Inc.	Wireline
North County Communications	Wireline
NorthPoint Communications Inc.	Wireline
Optel Telecom Inc	Wireline
RCN Telcom Services of AZ	Wireline
Sprint Communications Company L.P	Wireline
TCG-Phoenix	Wireline
Teligent Inc.	Wireline
Winstar Wireless of Arizona, Inc.	Wireline
Access Network Services Inc.	Resale
Advanced Telecommmunications Inc. (ATI)	Resale
Alternate Communications, Inc.	Resale
Arizona Dialtone Inc.	Resale
BG Enterprises, Inc.	Resale
Buy-Tel Communications	Resale
Choctaw Comm. dba Smoke Signals	Resale
Comm South Companies Inc.	Resale
DMJ Communications Inc.	Resale

Approved Agreements	Type of Agreement
Easy Phone Inc.	Resale
EZ Talk Communications LLC	Resale
Knight Communications Inc.	Resale
Local Telcom Services	Resale
Max-Tel Communications Inc.	Resale
Metro Connection dba TransAmerica Tele Inc.	Resale
Momentum Telcom Inc.	Resale
OnePoint Communications-Colorado LLC	Resale
Preferred Carrier Services (PCS)*	Resale
QTEL Inc.	Resale
Quick-Tel Communications Inc.	Resale
Regal Telephone Company	Resale
Sterling International Funding dba "Reconex"	Resale
Telephone Restorations dba TelNet	Resale
Telstar Communications LLC	Resale
Tin Can Communications Company	Resale
U S Dial Tone Inc.	Resale
US TELCO, Inc.	Resale
United States Telecommunications Inc.	Resale
WEST TEL Communications, LLC	Resale

Wireless Providers

Interstate Wireless Inc. dba Handy Page	Type2Page
Pager Promotions Inc.	Type2Page
Touch Tone Interactive, Inc. dba Banana Comm.	Type2Page
AT&T Wireless Services, Inc.	Wireless#2
Century Yuma Cellular Corporation dba Centennial Wireless (Carrier)	Wireless#2
CommNet Cellular, Inc	Wireless#2
Nextel West Corp.	Wireless#2
New Vector Grp / AirTouch	Wireless#2
PCS Plus Inc. dba Magnacom Wireless L.L.C.	Wireless#2
Smith Bagley Inc. dba Cellular One of N.E. AZ	Wireless#2
Southwestco Wireless dba Cellular One	Wireless#2
Sprint Spectrum L.P.	Wireless#2
Triad Utah L.P.	Wireless#2
U S WEST Wireless L.L.C. (Access2)	Wireless#2
Western Wireless Corporation	Wireless#2

Pending Agreements	Type	Filed
Connect		
Covad Comm (DIECA)	Wireline	9/23/94
Eclipse Communication	Wireline	7/8/98
Frontier Local Services, Inc.	Wireline	11/10/98
GTE Comm Corp	Wireline	10/2/97
Harmony International	Wireline	
JATO Communications	Wireline	12/22/98
M&L Enterprises	Facilities Only	1/28/98
NPG Cable of AZ	Wireline	7/2/1998
Supra Telecomm	Wireline	5/19/98
Group Long Distance	Resale	9/4/97
HJN	Resale	1/15/99
LCI	Resale	7/15/96
Long Distance Direct	Resale	7/11/97
MiComm	Resale	8/7/1997
Mohave Cooperative	Resale	4/23/98
MSN	Resale	1/7/97
NET-tel	Resale	
North American Telephone Network	Resale	1/28/99
Pac-West Telecomm	Resale	1/28/99
Preferred Carrier (PCS)	Resale	6/29/98
PRE-PAID PHONES, LTD.	Resale	2/5/99
Quintelco Inc	Resale	10/2/97
Tel-Save (The Phone Company)	Resale	2/18/95
Topp Comm, Inc.	Resale	

	Providers	Type of Agreement	Active	Res Exch	Bus Exch	Loops	LIS TRK	Collo	Pending Collo
1	ACI Corp.	Wireline							Yes
2	Ameritech Comm. International Inc.	Wireline							
3	AT&T	Wireline					Yes		
4	Brooks Fiber Comm. of Tucson Inc.	Wireline	Yes		Yes	Yes	Yes	Yes	
5	Cable Plus Company, L.P.	Wireline	Yes		Yes				
6	Compass Telecommunications Inc.	Wireline	Yes	Yes	Yes				
7	Cox Arizona Telcom Inc	Wireline					Yes	Yes	
8	Dakota Services LTD	Wireline							
9	DPI Teleconnect Inc	Wireline							
10	Electric Lightwave, Inc. (ELI)	Wireline	Yes		Yes		Yes	Yes	
11	Earnest Communications Inc.	Wireline							
12	* e.spire Comm. Inc (formerly ACSI)	Wireline	Yes	Yes	Yes	Yes	Yes	Yes	
13	Frontier Local Services Inc.	Wireline	Yes		Yes				
14	Great West Svcs. Ltd. dba Simcom Comm.	Wireline							
15	GST Telecom, Inc. (Tuscon Lightwave - TRKs)	Wireline	Yes		Yes		Yes	Yes	
16	Intermedia Communications Inc.	Wireline							
17	Level 3 Communications	Wireline							
18	#MCImetro Access Transmission Svcs	Wireline	Yes	Yes	Yes	Yes	Yes	Yes	
19	MFS Intelenet, Inc.	Wireline	Yes		Yes			Yes	
20	Mountain Telecomm. Inc. (MTI)	Wireline	Yes	Yes	Yes	Yes	Yes	Yes	
21	NextLink Arizona Inc.	Wireline	Yes		Yes				Yes
22	North County Communications	Wireline							

	Providers	Type of Agreement	Active	Res Exch	Bus Exch	Loops	LIS TRK	Collo	Pending Collo
23	NorthPoint Communications Inc.	Wireline							**Yes**
24	Optel Telecom Inc	Wireline							
25	RCN Telcom Services of AZ	Wireline							
26	Sprint Communications Company L.P	Wireline	**Yes**	**Yes**	**Yes**				**Yes**
27	TCG-Phoenix	Wireline	**Yes**		**Yes**		**Yes**	**Yes**	
28	Teligent Inc.	Wireline					**Yes**		
29	Winstar Wireless of Arizona, Inc.	Wireline	**Yes**		**Yes**		**Yes**		
	*ACSI dba e.spire							**Yes**	
	#Worldcom - MCI							**Yes**	
1	Access Network Services Inc.	Resale							
2	Advanced Telecomm. Inc. (ATI)	Resale							
3	Alternate Communications, Inc.	Resale							
4	Arizona Dialtone Inc.	Resale	**Yes**	**Yes**					
5	BG Enterprises, Inc.	Resale							
6	Buy-Tel Communications	Resale	**Yes**	**Yes**					
7	Choctaw Comm. dba Smoke Signals	Resale							
8	Comm South Companies Inc.	Resale							
9	DMJ Communications Inc.	Resale							
10	Easy Phone Inc.	Resale							
11	EZ Talk Communications LLC	Resale	**Yes**		**Yes**				
12	Knight Communications Inc.	Resale	**Yes**	**Yes**	**Yes**				
13	Local Telcom Services	Resale	**Yes**	**Yes**					
14	Max-Tel Communications Inc.	Resale							

	Providers	Type of Agreement	Active	Res Exch	Bus Exch	Loops	LIS TRK	Collo	Pending Collo
15	Metro Connection dba TransAmerica Tele Inc.	Resale	**Yes**	**Yes**	**Yes**				
16	Momentum Telcom Inc.	Resale	**Yes**	**Yes**	**Yes**				
17	OnePoint Communications-Colorado LLC	Resale	**Yes**	**Yes**	**Yes**				
18	Preferred Carrier Services (PCS)	Resale	**Yes**	**Yes**					
19	QTEL Inc.	Resale	**Yes**	**Yes**					
20	Quick-Tel Communications Inc.	Resale							
21	Regal Telephone Company	Resale							
22	Sterling International Funding dba "Reconex"	Resale	**Yes**	**Yes**	**Yes**				
23	Telephone Restorations dba TelNet	Resale							
24	Telstar Communications LLC	Resale	**Yes**	**Yes**	**Yes**				
25	Tin Can Communications Company	Resale							
26	U S Dial Tone Inc.	Resale	**Yes**	**Yes**	**Yes**				
27	US TELCO, Inc.	Resale	**Yes**	**Yes**					
28	United States Telecommunications Inc	Resale	**Yes**	**Yes**					
29	WEST TEL Communications, LLC	Resale	**Yes**	**Yes**	**Yes**				
1	Interstate Wireless Inc. dba Handy Page	Type2Page							
2	Pager Promotions Inc.	Type2Page							
3	Touch Tone Interactive, Inc. dba Banana Comm.	Type2Page							
4	AT&T Wireless Services, Inc.	Wireless#2							

	Providers	Type of Agreement	Active	Res Exch	Bus Exch	Loops	LIS TRK	Collo	Pending Collo
5	Century Yuma Cellular Corporation dba Centennial Wireless (Carrier)	Wireless#2							
6	CommNet Cellular, Inc	Wireless#2							
7	Nextel West Corp.	Wireless#2							
8	New Vector Grp / AirTouch	Wireless#2							
9	PCS Plus Inc. dba Magnacom Wireless L.L.C.	Wireless#2							
10	Smith Bagley Inc. dba Cellular One of N.E. AZ	Wireless#2							
11	Southwestco Wireless dba Cellular One	Wireless#2							
12	Sprint Spectrum L.P.	Wireless#2							
13	Triad Utah L.P.	Wireless#2							
14	U S WEST Wireless L.L.C. (Access2)	Wireless#2							
15	Western Wireless Corporation	Wireless#2							

	Pending U S WEST Agreements	Type	
1	CCCAZ Inc. dba Connect!	Wireline	
2	Covad Communications Company	Wireline	Yes
3	Harmony International	Wireline	
4	JATO Communications Corp	Wireline	
5	NET-tel Corporation	Resale	
6	Pre-Paid Phones Ltd.	Resale	

Providers	Type of Agreement	Active	Res Exch	Bus Exch	Loops	LIS TRK	Collo	Pending Collo
7 Topp Comm Inc	Resale							

CLLI11	SERV_WC	EQPT_TYPE	ADDRESS	CITY	STATE_ABBR	ZIP	COMPANY_CO
AGFIAZSRDS0	SUNRISE	5E	22203 N 83RD AV	PEORIA	AZ	85382	USW
ASFKAZMARS1	ASHFORK	5ER	1/4 MI S OF ASHFORK	ASH FORK	AZ	86320	USW
AZCYAZ03RS1	ARIZONA CITY	RSC	102 DEL RIO RD	ARIZONA CITY	AZ	85223	USW
BCKYAZMARS1	BUCKEYE	RSC	110 S 5TH ST	BUCKEYE	AZ	85326	USW
BISBAZMARS1	BISBEE	RSC	11 BISBEE RD	BISBEE	AZ	85603	USW
BLCNAZMARS1	BLACK CANYON	5ER	STATE HIGHWAY 69	BLACK CANYON	AZ	85324	USW
BNSNAZMADS0	BENSON	DMT	313 5TH ST	BENSON	AZ	85602	USW
BNSNAZSDDS0	ST DAVID	DMT	US HWY 80	SAINT DAVID	AZ	85630	USW
BRDSAZMADS0	BEARDSLEY	5E	19002 GRAND AV	BEARDSLEY	AZ	85345	USW
CHNDAZMADS0	CHANDLER MAIN	5E	151 N OREGON	CHANDLER	AZ	85224	USW
CHNDAZSODS0	CHANDLER SOUTH	5E	10029 EA CHANDLER HT	CHANDLER	AZ	85249	USW
CHNDAZWEDS0	CHANDLER WEST	5E	7031 W GALVESTON ST	CHANDLER	AZ	85226	USW
CHVYAZMARS1	CHINO VALLEY	5ER	US HIGHWAY 89	CHINO VALLEY	AZ	86323	USW
CLDGAZMARS1	COOLIDGE	RSC	391 W CENTRAL	COOLIDGE	AZ	85228	USW
CMVRAZMARS1	CAMP VERDE	5ER	LANE & 3RD ST	CAMP VERDE	AZ	86322	USW
CMVRAZRRRS1	RIMROCK	5ER	STONEMAN LK & LO PT	CAMP VERDE	AZ	86322	USW
CRCYAZMARS1	CIRCLE CITY	5ER	US HIGHWAY 60	CIRCLE CITY	AZ	85342	USW
CRNDAZMADS1	CORONADO	DMH	16649 N AVENDIA DEL ORO	CORONADO	AZ	85711	USW
CSGRAZMADS0	CASA GRANDE	DMH	202 E 4TH ST	CASA GRANDE	AZ	85222	USW
CTWDAZMADS0	COTTONWOOD MAIN	5E	17 E PINAL	COTTONWOOD	AZ	86326	USW
CTWDAZSORS1	COTTONWOOD SOUTH	5ER	WESTERN DR & HWY 279	COTTONWOOD	AZ	86326	USW
CVCKAZMADS0	CAVE CREEK	5E	7153 CAVECREEK RD	CAVE CREEK	AZ	85331	USW
DDVLAZNMRS1	DUDLEYVILLE	RSC	AZ ST HWY 77	DUDDLEYVILLE	AZ	85292	USW
DGLSAZMARS1	DOUGLAS	RSC	650 12TH STREET	DOUGLAS	AZ	85608	USW
DRVYAZNO00W	DEER VALLEY NORTH	STP	2041 W DR VALLEY RD	PHOENIX	AZ	85027	USW
DRVYAZNODS0	DEER VALLEY NORTH	5E	2041 W DEER VALLEY	DEER VALLEY	AZ	85027	USW
ELOYAZ01RS1	ELOY	RSC	5TH AND MAIN	ELOY	AZ	85231	USW
FLGSAZEADS0	FLAGSTAFF EAST	5E	3600 EAST LOCKETT DR	FLAGSTAFF	AZ	86004	USW
FLGSAZMA02W	FLAGSTAFF MAIN	DPH	24 WEST ASPEN/112 N BEAVER	FLAGSTAFF	AZ	86001	USW
FLGSAZMADS0	FLAGSTAFF MAIN	5E	24 W ASPEN	FLAGSTAFF	AZ	86001	USW
FLGSAZSORS1	FLAGSTAFF SOUTH	5ER	LOT 83 UN 1 KACHINA	FLAGSTAFF	AZ	86001	USW
FLRNAZMARS1	FLORENCE	RSC	11TH & BAILEY	FLORENCE	AZ	85232	USW
FTMDAZMADS0	FT MCDOWELL	5E	16310 E PALISADES BV	FORT MCDOWELL	AZ	85269	USW
FTMDAZNORS1	RIO VERDE	5ER	18901 E AVEN DEL REY	FT MCDOWELL	AZ	85255	USW
GDYRAZCWDS0	COLDWATER	DMH	250 WESTERN AV	GOODYEAR	AZ	85338	USW
GLBNAZMARS1	GILA BEND	RSC	20 W PAPAGO ST	GILA BEND	AZ	85337	USW

GLDLAZMACG0	GLENDALE	1AE	7029 N 58TH AVE	GLENDALE	AZ	85301	USW
GLDLAZMARS1	GLENDALE	ORM	7029 N 58TH AVE	GLENDALE	AZ	85301	USW
GLOBAZMARS1	GLOBE	RSC	150 EAST CEDAR	GLOBE	AZ	85501	USW
GNVYAZMADS0	GREEN VALLEY	DMH	10 N LA CANADA DR	GREEN VALLEY	AZ	85614	USW
GRCNAZMARS1	GRAND CANYON	5ER	150 CIRCLE DR.	GRAND CANYON	AZ	86023	USW
HGLYAZMADS0	HIGLEY	DMT	112 WILLIAMS FIELD R	HIGLEY	AZ	85236	USW
HGLYAZQCDS0	QUEEN CREEK	DMT	ELLSWORTH & CHND HTS	HIGLEY	AZ	85236	USW
HMBLAZMARS1	HUMBOLDT	5ER	140 N MARINA	PRESCOTT	AZ	86301	USW
HYDNAZMARS1	HAYDEN	RSC	236 4TH ST	HAYDEN	AZ	85235	USW
JSCYAZMARS1	JOSEPH CITY	RSC	151 1ST ST	JOSEPH CITY	AZ	86032	USW
KRNYAZMARS1	KEARNY	RSC	385 ALDEN RD	KEARNY	AZ	85237	USW
LTPKAZMARS1	LITCHFIELD PARK	5ER	107 N DESERT AV	LITCHFIELD PARK	AZ	85340	USW
MARNAZ02RS1	MARANA WEST	RSC	12450 N ANWAY RD	MARANA	AZ	85238	USW
MARNAZ03RS1	MARANA SOUTH	RSC	12194 W ORANGE GROVE RD	MARANA	AZ	85238	USW
MARNAZMARS1	MARANA MAIN	RSC	13750 N SANDRIO RD	MARANA	AZ	85653	USW
MAYRAZMARS1	MAYER	5ER	140 N MARINA	PRESCOTT	AZ	86301	USW
MESAAZGIDS0	GILBERT	5E	27 E GUADALUPE RD	MESA	AZ	85225	USW
MESAAZMA00W	MESA	STP	25 W PEPPER ST	MESA	AZ	85201	USW
MESAAZMADS0	MESA	5E	25 W PEPPER ST	MESA	AZ	85201	USW
MIAMAZMARS1	MIAMI	RSC	608 SULLIVAN STREET	MIAMI	AZ	85539	USW
MMTHAZMARS1	MAMMOTH	RSC	155 W CLARK	MAMMOTH	AZ	85618	USW
MRCPAZMARS1	MARICOPA	RSC	500 W EDWARDS AV	MARICOPA	AZ	85239	USW
MSPKAZMADS0	MUNDS PARK	DMT	I17 & MORMON LAKE RD	MUNDS PARK	AZ	86017	USW
NGLSAZ03RS2	NOGALES RIO RICO	5ER	I19 -CALLE DEL CMRC.	NOGALES	AZ	85621	USW
NGLSAZMARS1	NOGALES MAIN	5ER	300 RODRIGUEZ	NOGALES	AZ	85621	USW
NGLSAZMWDS0	NOGALES MIDWAY	5EH	3230 TUCSON NGLS HWY	NOGALES	AZ	85621	USW
NWRVAZMARS1	NEW RIVER	5ER	BLACK CANYON HWY	NEW RIVER	AZ	85020	USW
ORCLAZMARS1	ORACLE	RSC	RAY & CHERRY	ORACLE	AZ	85623	USW
PAGEAZMADS0	PAGE	DMT	106 6TH AV	PAGE	AZ	86040	USW
PHNXAZ81DS0	FOOTHILLS	5E	7TH ST S OF CHANDLER	PHOENIX	AZ	85034	USW
PHNXAZ93RS1	PHOENIX	5ER	8900 N 22ND	PHOENIX	AZ	85021	USW
PHNXAZBWDS0	BETHANY WEST	5E	5217 N 99TH AV	PHOENIX	AZ	85039	USW
PHNXAZCADS0	CACTUS	5E	3102 E THUNDERBIRD RD	PHOENIX	AZ	85032	USW
PHNXAZEADS0	PHOENIX EAST	5E	2946 E VAN BUREN ST	PHOENIX	AZ	85008	USW
PHNXAZEARS1	PHOENIX EAST	5ER	2946 E VAN BUREN	PHOENIX	AZ	85008	USW
PHNXAZGRDS0	GREENWAY	5E	3532 WE GREENWAY RD	PHOENIX	AZ	85023	USW
PHNXAZLVDS0	LAVEEN	DMT	9023 S 51ST AV	PHOENIX	AZ	85339	USW

PHNXAZMA01T	PHOENIX MAIN	DM2	211 W MONROE ST	PHOENIX	AZ	85003	USW
PHNXAZMA04T	PHOENIX MAIN	DM2	211 W MONROE	PHOENIX	AZ	85003	USW
PHNXAZMA10W	PHOENIX MAIN	DPH	211 WEST MONROE	PHOENIX	AZ	85003	USW
PHNXAZMA1CD	PHOENIX MAIN	ACD	211 W MONROE	PHOENIX	AZ	85003	USW
PHNXAZMA5CD	PHOENIX MAIN	ACD	211 W MONROE	PHOENIX	AZ	85003	USW
PHNXAZMADS1	PHOENIX MAIN	DMH	211 W MONROE	PHOENIX	AZ	85003	USW
PHNXAZMADS4	PHOENIX MAIN	5E	211 W MONROE ST	PHOENIX	AZ	85003	USW
PHNXAZMRCG0	MID RIVERS	1AE	13202 N 111TH AV	PHOENIX	AZ	85363	USW
PHNXAZMRRS0	MID RIVERS	RSC	13202 N 111TH AV	PHOENIX	AZ	85363	USW
PHNXAZMRRS1	MID RIVERS	ORM	13202 111TH AVE	PHOENIX	AZ	85363	USW
PHNXAZMYCG0	MARYVALE	1AE	4119 N 67TH AV	PHOENIX	AZ	85033	USW
PHNXAZNE03W	PHOENIX NORTHEAST	DPH	3640 E INDIAN SCHOOL RD	PHOENIX	AZ	85018	USW
PHNXAZNEDS0	PHOENIX NORTHEAST	5E	3640 E INDIAN SCHOOL	PHOENIX	AZ	85018	USW
PHNXAZNEDS1	PHOENIX NORTHEAST	FTX	3640 E INDIAN SCHOOL	PHOENIX	AZ	85018	USW
PHNXAZNO03W	PHOENIX NORTH	DPH	215 E INDIAN SCHOOL RD	PHOENIX	AZ	85012	USW
PHNXAZNODS1	PHOENIX NORTH	5E	215 EA INDIAN SCHOOL	PHOENIX	AZ	85012	USW
PHNXAZNODS2	PHOENIX NORTH	ACD	215 E INDIAN SCHOOL BSMT	PHOENIX	AZ	85012	USW
PHNXAZNODS3	PHOENIX NORTH	5E	215 E INDIAN SCHOOL BSMT	PHOENIX	AZ	85012	USW
PHNXAZNWCG0	PHOENIX NORTHWEST	1AE	6246 N 27TH AV	PHOENIX	AZ	85017	USW
PHNXAZNWRS1	PHOENIX NORTHWEST	ORM	215 EA INDIAN SCHOOL	PHOENIX	AZ	85012	USW
PHNXAZPPDS0	PECOS	5E	16420 S 32ND ST	PHOENIX	AZ	85040	USW
PHNXAZPRCG0	PEORIA	1E	7648 W CACTUS RD	PHOENIX	AZ	85029	USW
PHNXAZSECG0	PHOENIX SOUTHEAST	1AE	5827 S 40TH ST	PHOENIX	AZ	85040	USW
PHNXAZSOCG0	PHOENIX SOUTH	1AE	115 W SOUTHERN	PHOENIX	AZ	85041	USW
PHNXAZSYDS0	SUNNYSLOPE	5E	18 W DUNLAP AVE	PHOENIX	AZ	85021	USW
PHNXAZSYRS1	SUNNYSLOPE	ORM	18 W DUNLAP AVE	PHOENIX	AZ	85021	USW
PHNXAZWECG0	PHOENIX WEST	1AE	3526 WE VAN BUREN	PHOENIX	AZ	85009	USW
PHNXAZWERS1	PHOENIX WEST	ORM	215 EA INDIAN SCHOOL	PHOENIX	AZ	85012	USW
PHNXAZWJ11B	PHOENIX	ACD	211 W MONROE	PHOENIX	AZ	85003	USW
PIMAAZMARS1	PIMA	RSC	124 W 1ST N	PIMA	AZ	85543	USW
PINEAZMARS1	PINE	5ER	1ST & HARDSCRAPPLE RD	PINE	AZ	85544	USW
PLMNAZMARS1	PALOMINAS	RSC	113 PALOMINAS RD	PALOMINAS	AZ	85603	USW
PRSCAZEARS2	PRESCOTT EAST	ORM	2227 N COYOTE DR	PRESCOTT	AZ	86314	USW
PRSCAZMA45T	PRESCOTT MAIN	5E	140 N MARINA	PRESCOTT	AZ	86301	USW
PRSCAZMADS0	PRESCOTT MAIN	5E	140 N MARINA	PRESCOTT	AZ	86301	USW
PRVYAZPPDS0	PINNACLE PEAK	5E	8648 E PINNACLE PEAK	PARADISE VALLEY	AZ	85253	USW
PTGNAZELRS1	ELGIN	RSC	8 MI SE OF SONOITA	PATAGONIA	AZ	85624	USW

PTGNAZMARS1	PATAGONIA	RSC	313 W SONITA AV	PATAGONIA	AZ	85624	USW
SCDLAZMADS0	SCOTTSDALE	5E	7145 1ST ST	SCOTTSDALE	AZ	85251	USW
SCDLAZSHDS0	SHEA	5E	1050 N 110TH ST	SCOTTSDALE	AZ	85259	USW
SCDLAZTHDS0	THUNDERBIRD	5E	6916 E DOUBLETREE	SCOTTSDALE	AZ	85253	USW
SEDNAZMADS0	SEDONA MAIN	5E	1 SMITH ROAD	SEDONA	AZ	86336	USW
SEDNAZSORS3	SEDONA SOUTH	5ER	VERDE VY SCH RD&H179	SEDONA	AZ	86341	USW
SFFRAZMADS0	SAFFORD	DMH	725 7TH ST	SAFFORD	AZ	85546	USW
SMTNAZMARS1	SOMERTON	RSC	136 W GEORGE ST	SOMERTON	AZ	85350	USW
SNMNAZMADS0	SAN MANUEL	DMH	105 NORTH AV	SAN MANUEL	AZ	85631	USW
SPRRAZMARS1	SUPERIOR	RSC	468 HEINER RD	SUPERIOR	AZ	85273	USW
SPRSAZEADS0	SUPER EAST	DMH	1330 E BROADWAY	SUPERSTITION	AZ	85220	USW
SPRSAZMACG0	SUPER MAIN	1E	9639 EA APACHE TRL	SUPERSTITION	AZ	85207	USW
SPRSAZWEDS0	SUPER WEST	DMH	4755 E UNIVERSITY DR	SUPERSTITION	AZ	85205	USW
SRVSAZMADS0	SIERRA VISTA MAIN	DMH	50 GARDEN AV	SIERRA VISTA	AZ	85635	USW
SRVSAZNORS1	SIERRA VISTA NORTH	RSC	PINAL & COCHISE AV	SIERRA VISTA	AZ	85635	USW
SRVSAZSORS1	SIERRA VISTA SOUTH	RSC	80 S CARMICHALL	SIERRA VISTA	AZ	85635	USW
STFDAZMARS1	STANFIELD	RSC	50 N STANFIELD RD	STANFIELD	AZ	85272	USW
TCSNAZCADS0	CATALINA	DMH	5770 N SWAN RD	TUCSON	AZ	85718	USW
TCSNAZCODS0	CORTARO	5E	5340 CORTARO FARM RD	TUCSON	AZ	85741	USW
TCSNAZCRCG0	CRAYCROFT	1AE	5445 E 29TH ST	TUCSON	AZ	85711	USW
TCSNAZEA00W	TUCSON EAST	STP	1028 N COUNTRY CLUB	TUCSON	AZ	85716	USW
TCSNAZEADS0	TUCSON EAST	5E	1028 N COUNTRY CLUB RD	TUCSON	AZ	85716	USW
TCSNAZEARS1	TUCSON EAST	ORM	1028 N COUNTRY CLUB	TUCSON	AZ	85716	USW
TCSNAZFWDS0	FLOWING WELLS	DMH	4425 N FLOWING WELLS	TUCSON	AZ	85705	USW
TCSNAZMA00W	TUCSON MAIN	STP	126 E ALAMEDA	TUCSON	AZ	85701	USW
TCSNAZMA04T	TUCSON MAIN	DM2	126 E ALAMEDA	TUCSON	AZ	85701	USW
TCSNAZMA04W	TUCSON MAIN	DPH	126 EAST ALAMEDA	TUCSON	AZ	88012	USW
TCSNAZMADS1	TUCSON MAIN	5E	126 E ALAMEDA ST	TUCSON	AZ	85701	USW
TCSNAZMLRS2	MT LEMMON	5ER	MOUNT LEMMON	TUCSON	AZ	85619	USW
TCSNAZNOCG0	TUCSON NORTH	1AE	1111 WE MAGEE RD	TUCSON	AZ	85704	USW
TCSNAZNODS0	TUCSON NORTH	5E	1111 W MAGEE RD	TUCSON	AZ	85704	USW
TCSNAZRNCG0	RINCON	1AE	8545 EA BROADWAY	TUCSON	AZ	85710	USW
TCSNAZRNRS1	RINCON	ORM	8545 E BROADWAY BLVD	TUCSON	AZ	85710	USW
TCSNAZSERS3	TUCSON SOUTHEAST	RSC	6501 BENSON HWY	TUCSON	AZ	85706	USW
TCSNAZSOCG0	TUCSON SOUTH	1AE	6300 S 6TH AV	TUCSON	AZ	85706	USW
TCSNAZSODS0	TUCSON SOUTH	5E	6300 S 6TH AV	TUCSON	AZ	85706	USW
TCSNAZSORS0	TUCSON SOUTH	RSC	6300 S 6TH AV	TUCSON	AZ	85706	USW

TCSNAZSWDS0	TUCSON SOUTHWEST	DMH	4431 WE IRVINGTON RD	TUCSON	AZ	85746	USW
TCSNAZTVDS0	TANQUE VERDE	5E	3800 NORTH HOUGHTON	TUCSON	AZ	85749	USW
TCSNAZWERS1	TUCSON WEST	RSC	3420 DEL MORAGA DR	TUCSON	AZ	85705	USW
TEMPAZMA04W	TEMPE	DPH	25 W 5TH ST	TEMPE	AZ	85281	USW
TEMPAZMADS0	TEMPE	DMH	25 W 5TH ST	TEMPE	AZ	85281	USW
TEMPAZMCCG0	MCCLINTOCK	1AE	6016 S MCCLINTOCK DR	TEMPE	AZ	85283	USW
TEMPAZMCDS0	MCCLINTOCK	5E	6016 S MCCLINTOCK DR	TEMPE	AZ	85283	USW
TLSNAZMARS1	TOLLESON	5ER	9201 W. MONROE	TOLLESON	AZ	85353	USW
TMBSAZMARS1	TOMBSTONE	RSC	9 N 3RD ST	TOMBSTONE	AZ	85638	USW
TNCKAZMARS1	TONTO CREEK	5ER	TONTO CREEK	TONTO CREEK	AZ	85	USW
TUBCAZMARS1	TUBAC	5ER	40 W CAMINO	TUBAC	AZ	85640	USW
VAILAZNORS1	VAIL NORTH	RSC	14100 EA OLD SPANISH	VAIL	AZ	85641	USW
VAILAZSODS0	VAIL SOUTH	DMT	212 S HOUGHTON RD	VAIL	AZ	85641	USW
WCBGAZMARS1	WICKENBURG	5ER	54 N FRONTIER	WICKENBURG	AZ	85358	USW
WHTKAZMARS2	WHITE TANKS	5ER	2522 N PERRYVILLE	WHITE TANKS	AZ	85340	USW
WHTLAZMADS0	WHITLOW	DMT	QUEEN CREEK DR	WHITLOW	AZ	85219	USW
WLCXAZMARS1	WILLCOX	RSC	181 S CURTIS AV	WILLCOX	AZ	85643	USW
WLMSAZMARS1	WILLIAMS	5ER	303 W GRANT	WILLIAMS	AZ	86046	USW
WLTNAZMARS1	WELLTON	RSC	100 S HELEN ST	WELLTON	AZ	85356	USW
WNBGAZ01RS1	WINTERSBURG	RSC	E 371ST AV & BUCKEYE	WINTERSBERG	AZ	85326	USW
WNSLAZMADS1	WINSLOW	DMH	301 KINSLEY	WINSLOW	AZ	86047	USW
YRNLAZMARS1	YARNELL	5ER	DEERWAY & LOOKAWAY	YARNELL	AZ	85362	USW
YUMAAZFTDS1	FORTUNA	DMH	19201 HIGHWAY 80	YUMA	AZ	85365	USW
YUMAAZMADS0	YUMA MAIN	DMH	285 2ND AV	YUMA	AZ	85364	USW
YUMAAZSEDS0	YUMA SOUTHEAST	DMH	2895 E PALO VERDE ST	YUMA	AZ	85365	USW
FLRNAZAFCM1	FLORENCE	CMC	15347 N HWY 79	FLORENCE	AZ	85232	WIRELESS
GLOBAZ06CM1	GLOBE	CMC	1992 N. HWY. 88	GLOBE	AZ	85501	WIRELESS
NGLSAZ10CM1	NOGALES	CMC	251 E INTERNATIONAL	NOGALES	AZ	85621	WIRELESS
PHNYAZWJCM1	PHOENIX	CMC	3300 N. CENTRAL AVE.	PHOENIX	AZ	85012	WIRELESS
PYSNAZ05CM1	PAYSON	CMC	902 B N. HILLCREST	PAYSON	AZ	85541	WIRELESS
RDRKAZAACM1	RED ROCK	CMC	22623 E SASCO ROAD	RED ROCK	AZ	85245	WIRELESS
SFFRAZ03CM1	SAFFORD	CMC	1741 S 20TH AV	SAFFORD	AZ	85546	WIRELESS
SFFRAZ03CM2	SAFFORD	CMC	1741 S 20TH AV	SAFFORD	AZ	85546	WIRELESS
SRVSAZ09CM1	SIERRA VISTA	CMC	70 GARDEN AV	SIERRA VISTA	AZ	85635	WIRELESS
SRVSAZ12CM1	SIERRA VISTA	CMC	999 E FRY SUITE 103	SIERRA VISTA	AZ	85635	WIRELESS
TCSMAZALCM1	TUCSON	CMC	1020 E PALMDALE,#160	TUCSON	AZ	85714	WIRELESS
WNSLAZQACM1	WINSLOW	CMC	5 MILES SE ON HWY 99	WINSLOW	AZ	9636	WIRELESS

OCN_NAME	OCN_CATE	PHYS_WC	PHYS_CLLI	MSA	OC_NAME
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUNRISE	AGFIAZSR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	ASHFORK	ASFKAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	ELOY	ELOYAZ01	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BUCKEYE	BCKYAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BISBEE	BISBAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BLACK CANYON	BLCNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BENSON	BNSNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	ST DAVID	BNSNAZSD		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BEARDSLEY	BRDSAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CHANDLER MAIN	CHNDAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CHANDLER SOUTH	CHNDAZSO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CHANDLER WEST	CHNDAZWE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CHINO VALLEY	CHVYAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	COOLIDGE	CLDGAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CAMP VERDE	CMVRAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	RIMROCK	CMVRAZRR		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CIRCLE CITY	CRCYAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CORONADO	CRNDAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CASA GRANDE	CSGRAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	COTTONWOOD MAIN	CTWDAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	COTTONWOOD SOUTH	CTWDAZSO		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CAVE CREEK	CVCKAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	DUDLEYVILLE	DDVLAZNM	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	DOUGLAS	DGLSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	DEER VALLEY NORTH	DRVYAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	DEER VALLEY NORTH	DRVYAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	ELOY	ELOYAZ01	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLAGSTAFF EAST	FLGSAZEA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLAGSTAFF MAIN	FLGSAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLAGSTAFF MAIN	FLGSAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLAGSTAFF SOUTH	FLGSAZSO	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLORENCE	FLRNAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FT MCDOWELL	FTMDAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FT MCDOWELL	FTMDAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	COLDWATER	GDYRAZCW	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GILA BEND	GLBNAZMA	PHX	U S WEST

US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GLENDALE	GLDLAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GLENDALE	GLDLAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GLOBE	GLOBAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GREEN VALLEY	GNVYAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GRAND CANYON	GRCNAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	HIGLEY	HGLYAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	QUEEN CREEK	HGLYAZQC	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MAYER	MAYRAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	HAYDEN	HYDNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	JOSEPH CITY	JSCYAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	KEARNY	KRNYAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	LITCHFIELD PARK	LTPKAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARANA MAIN	MARNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARANA MAIN	MARNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARANA MAIN	MARNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	HUMBOLDT	HMBLAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GILBERT	MESAAZGI	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MESA	MESAAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MESA	MESAAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MIAMI	MIAMAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MAMMOTH	MMTHAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARICOPA	MRCPAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MUNDS PARK	MSPKAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	NOGALES RIO RICO	NGLSAZ03		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	NOGALES MAIN	NGLSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	NOGALES MIDWAY	NGLSAZMW		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	NEW RIVER	NWRVAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	ORACLE	ORCLAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PAGE	PAGEAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FOOTHILLS	PHNXAZ81	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BETHANY WEST	PHNXAZBW	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CACTUS	PHNXAZCA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX EAST	PHNXAZEA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX EAST	PHNXAZEA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GREENWAY	PHNXAZGR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	LAVEEN	PHNXAZLV	PHX	U S WEST

US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MID RIVERS	PHNXAZMR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MID RIVERS	PHNXAZMR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MID RIVERS	PHNXAZMR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARYVALE	PHNXAZMY	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTHEAST	PHNXAZNE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTHEAST	PHNXAZNE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTHEAST	PHNXAZNE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTH	PHNXAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTH	PHNXAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTH	PHNXAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTH	PHNXAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTHWEST	PHNXAZNW	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTHWEST	PHNXAZNW	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PECOS	PHNXAZPP	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PEORIA	PHNXAZPR	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX SOUTHEAST	PHNXAZSE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX SOUTH	PHNXAZSO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUNNYSLOPE	PHNXAZSY	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUNNYSLOPE	PHNXAZSY	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX WEST	PHNXAZWE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX WEST	PHNXAZWE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX MAIN	PHNXAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PIMA	PIMAAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PINE	PINEAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PALOMINAS	PLMNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PRESCOTT EAST	PRSCAZEA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PRESCOTT MAIN	PRSCAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PRESCOTT MAIN	PRSCAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PINNACLE PEAK	PRVYAZPP	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PATAGONIA	PTGNAZMA		U S WEST

US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PATAGONIA	PTGNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SCOTTSDALE MAIN	SCDLAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SHEA	SCDLAZSH	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	THUNDERBIRD	SCDLAZTH	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SEDONA MAIN	SEDNAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SEDONA SOUTH	SEDNAZSO	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SAFFORD	SFFRAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SOMERTON	SMTNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SAN MANUEL	SNMNAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUPERIOR	SPRRAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUPER EAST	SPRSAZEA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUPER MAIN	SPRSAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SUPER WEST	SPRSAZWE	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SIERRA VISTA MAIN	SRVSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SIERRA VISTA NORTH	SRVSAZNO		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SIERRA VISTA SOUTH	SRVSAZSO		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	STANFIELD	STFDAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CATALINA	TCSNAZCA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CORTARO	TCSNAZCO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	CRAYCROFT	TCSNAZCR	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON EAST	TCSNAZEA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON EAST	TCSNAZEA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON EAST	TCSNAZEA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLOWING WELLS	TCSNAZFW	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON MAIN	TCSNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON MAIN	TCSNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON MAIN	TCSNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON MAIN	TCSNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MT LEMMON	TCSNAZML	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON NORTH	TCSNAZNO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON NORTH	TCSNAZNO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	RINCON	TCSNAZRN	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	RINCON	TCSNAZRN	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON SOUTHEAST	TCSNAZSE	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON SOUTH	TCSNAZSO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON SOUTH	TCSNAZSO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON SOUTH	TCSNAZSO	TUC	U S WEST

US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON SOUTHWEST	TCSNAZSW	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TANQUE VERDE	TCSNAZTV	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUCSON WEST	TCSNAZWE	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TEMPE	TEMPAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TEMPE	TEMPAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MCCLINTOCK	TEMPAZMC	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MCCLINTOCK	TEMPAZMC	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TOLLESON	TLSNAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TOMBSTONE	TMBSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TONTO CREEK	TNCKAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	TUBAC	TUBCAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	VAIL NORTH	VAILAZNO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	VAIL SOUTH	VAILAZSO	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WICKENBURG	WCBGAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WHITE TANKS	WHTKAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WHITLOW	WHTLAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WILLCOX	WLCXAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WILLIAMS	WLMSAZMA	FLG	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WELLTON	WLTNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	BUCKEYE	BCKYAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WINSLOW	WNSLAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	YARNELL	YRNLAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FORTUNA	YUMAAZFT	YUM	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC				
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	YUMA SOUTHEAST	YUMAAZSE	YUM	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLORENCE	FLRNAZMA	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	GLOBE	GLOBAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	NOGALES MAIN	NGLSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PHOENIX NORTH	PHNXAZNO	PHX	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	PAYSON	PYSNAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	MARANA MAIN	MARNAZMA	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SAFFORD	SFFRAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SAFFORD	SFFRAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SIERRA VISTA MAIN	SRVSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	SIERRA VISTA MAIN	SRVSAZMA		U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	FLOWING WELLS	TCSNAZFW	TUC	U S WEST
US WEST COMMUNICATIONS - MOUNTAIN BELL	RBOC	WINSLOW	WNSLAZMA		U S WEST

B

Attachment B

Information Directly Relevant to the Competitive Checklist

1) Interconnection in accordance with the requirements of sections 251(c)(2) and 251(d)(1).

a) What points are available for interconnection with U S WEST?

Response:
The FCC has established a minimum of six required points of interconnection U S WEST must provide. The minimum points of interconnection are:

1) Line-side of a local switch;
2) Trunk-side of a local switch;
3) Trunk interconnection points for a tandem switch;
4) Central Office cross-connection points;
5) Signal Transfer Points; and
6) Points of access to Unbundled Elements.[1]

Section 7.1.1 of the U S WEST proposed Statement of Generally Available Terms (SGAT) creates a specific legal obligation to provide interconnection at these points.

b) Do these points include physical collocation, virtual collocation or another form of collocation?

Response:
Yes, U S WEST in accordance with the Act and FCC's requirements, provides several alternative arrangements that facilitate the interconnection of a CLEC network with U S WEST's network, including physical collocation, virtual collocation, mid-span meet arrangements, entrance facilities and hub locations. Section 7.1.2 of the proposed SGAT specifies the legal obligation to provide these methods of interconnection.[2]

c) What is the pricing methodology used for interconnection?

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1 First Interconnection Order at para. 212.

2 First Interconnection Order at para. 551 through 553.

Response:
The pricing methodology for interconnection - LIS Trunks is based upon the Arizona Commission consolidated cost proceeding #U-3021-96-448, Decision No. 60635, that concluded on January 8, 1998.

The pricing methodology for interconnection – Physical caged and virtual collocation is based upon the Arizona Commission consolidated cost proceeding #U-3021-96-448, Decision No. 60635, that concluded on January 8, 1998. Collocation products offered after the Commission's decision are TELRIC-based or ICB.

d) What competitors have interconnected with U S WEST?

Response:
Competitors that are interconnecting with U S WEST through the utilization of LIS Trunks include: AT&T, e.spire, Brooks Fiber, COX Communications, Electric Lightwave, Tucson Lightwave, Mountain Telecom, TCG, Teligent, Winstar, and MCI Metro.

Competitors that are interconnecting with U S WEST through the utilization of Collocation are: ACSI, Brooks, COX, e.spire, Electric Lightwave, GST, ICG, MCI, MFS, Mountain Telecommunications, Worldcom, and TCG.

Competitors that have pending interconnection with U S WEST through the utilization of Collocation are: ACI Corp., Covad Communications, NextLink, NorthPoint and Sprint.

e) At what U S WEST switching equipment (central office, end office, tandem, etc.) have competitors interconnected and by what means for each office?

Response:
Competitors have interconnected with U S WEST through the utilization of LIS Trunks at the Wire Centers listed below.

Beardsley	Glendale Main	Phoenix-Northwest	Superstition West
Casa Grande	Green Valley	Phoenix-Pecos	Tanque Verde
Catalina	Higley	Phoenix-Peoria	Tempe Main
Cave Creek	McClintock	Phoenix-South	Thunderbird
Chandler Main	Mesa	Phoenix-Southeast	Tucson East
Chandler South	Payson	Phoenix-Sunnyslope	Tucson Main
Chandler West	Phoenix-Bethany West	Phoenix-West	Tucson Main Tandem
Coldwater	Phoenix-Cactus	Pinnacle Peak	Tucson North

Coronado	Phoenix-East	Prescott Main	Tucson South
Cortaro	Phoenix-Foothills	Queen Creek	Tucson Southwest
Cottonwood-Main	Phoenix-Greenway	Rincon	Vail South
Craycroft	Phoenix-Laveen	San Manuel	Winslow
Deer Valley North	Phoenix-Main	Scottsdale Main	Yuma
Flagstaff East	Phoenix-Main Tandem	Shea	Yuma Fortuna
Flagstaff Main	Phoenix-Maryvale	Sierra Vista Main	Yuma Southeast
Flowing Wells	Phoenix-Mid Rivers	Sunrise	
Fort Mcdowell	Phoenix-North	Superstition East	
Gilbert	Phoenix-Northeast	Superstition Main	

Competitors have interconnected with U S WEST through the utilization of Collocation at the Wire Centers listed below:

Casa Grande	Mesa Main	Phoenix South East	Tucson Flowing Wells
Chandler Main	Payson Main	Phoenix Sunnyslope	Tucson Main
Chandler West	Phoenix Cactus	Phoenix West	Tucson Rincon
Cottonwood Main	Phoenix East	Prescott Main	Tucson South
Deer Valley North	Phoenix Greenway	Scottsdale Main	Winslow
Douglas	Phoenix Main	Scottsdale Thunderbird	Yuma Main
Flagstaff Main	Phoenix North	Tempe Main	
Globe	Phoenix North East	Tucson Craycroft	
Mesa Gilbert	Phoenix North West	Tucson East	

2) Nondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1).

a) What network elements are offered by U S WEST?

Response:
U S WEST offers all the unbundled network elements the FCC specified in 47 C.F.R. 51.319 ("Rule 319"). This rule required the unbundling of a more extensive list of unbundled network elements than were explicitly stated in Section 271 of the Act. Rule 319 required the unbundling of the following elements:

(a) Local Loops
(b) Network Interface Device (NID)
(c) Local Switching, including
  (1) Vertical Features
  (2) Tandem Switching
(d) Interoffice Transmission Facilities (i.e., Transport), including
  (1) Shared Transport
(e) Signaling Networks and Call Related Databases
(f) Operation Support Systems (OSS)
(g) Operator Services and Directory Assistance

However, On January 25, 1999, the United States Supreme Court issued a decision in AT&T Corp. v. Iowa Utilities Bd. vacating the FCC Rule that defined the list of unbundled network elements (UNEs), FCC Rule 319. The Court vacated this rule, because it did not comport with the "necessary" and "impair" standards of the Telecommunications Act of 1996. The FCC is soon expected to issue new rules, and, possibly, to define a different list of UNEs, to comport with the "necessary" and "impair" standards of the Act.

In the interim, U S WEST will provide requesting telecommunications carriers access to network elements contained in the CLEC's respective interconnection agreement. In addition, the U S WEST proposed Statement of Generally Available Terms and conditions for Interconnection (SGAT) provides CLECs access to all the unbundled network elements identified in the vacated FCC Rule 319. The SGAT characterizes sefveral of the UNEs as "ancillary services". For the sake of simplicity, this document will refer to the unbundled network elements identified in the vacated FCC Rule 319 as UNEs, although technically , as a result of the Supreme Court's Action, there are no network elements that are required to be unbundled.

b) What is the pricing methodology used for the elements?

Response:
The United States Supreme Court's decision in AT&T Corp. v. Iowa Utilities Bd. vacated the FCC Rule that defined the list of UNEs, FCC Rule 319; and remanded the FCC's pricing rules, including the rules for pricing of unbundled network elements, to the Eighth Circuit Court for further review.[3] The final pricing rules will not be settled until the Eighth Circuit reviews the merits of the challenges to the pricing rules. This review is likely to take several months.

In the interim, U S WEST will provide requesting telecommunications carriers access to network elements at the rates contained in the CLEC's respective interconnection agreements. The rates in the interconnection agreements are consistent with the FCC's pricing methodology as established in the Arizona Cost Docket No. U-3021-96-448, which is generally consistent with the FCC's rules.

U S WEST's proposed SGAT offers each of the unbundled network elements required by vacated Rule 319. However, since there is no list of network elements that must be unbundled pursuant to Section 251(c)(3),the proposed SGAT offers a few services, such as shared transport, that are not contained in interconnection agreements, but are contained in the Section 271 checklist. Those elements are not required to be priced on a forward-looking cost basis.

The Arizona cost docket did not establish rates for shared transport. Pending the FCC's promulgation of new UNE rules, and the Eighth Circuit Court's review of the current FCC pricing rules, the proposed SGAT establishes rates for shared transport, and the associated local switching elements.
Specifically, the rates for shared transport and local switching were established so that the rate resulting from the combination of shared transport, unbundled switching and the unbundled local loop is consistent with the resale rate for business exchange services.

c) What elements have been requested by entities seeking interconnection and access?

Response:
CLECs in Arizona have requested interconnection. Details regarding interconnection are included in the response to question 1. This response deals specifically with the issues associated with access to network elements.

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[3] 47 C.F.R. 51.501-51.515, 51.601-51.611, 51.701-51.717.

Generally, entities with interconnection agreements have requested access to the following unbundled network elements:

(a) Local Loops
(b) Network Interface Device (NID)
(c) Local Switching, including
  (1) Vertical Features
  (2) Tandem Switching
(d) Interoffice Transmission Facilities (i.e., Transport), including
  (1) Shared Transport
(e) Signaling Networks and Call Related Databases
(f) Operation Support Systems (OSS)
(g) Operator Services and Directory Assistance

Individual interconnection agreements may not contain access to every unbundled network element.

d) What is the record concerning U S WEST's responsiveness to such requests?

Response:
U S WEST has responded to requests for UNEs in a timely and comprehensive manner. For more detailed information, see the testimony of Michael Williams.

e) What elements have actually been sold to entities seeking interconnection and access?

Response:
CLECs have purchased unbundled analog loops.

f) What entities have requested elements?

Response:
All entities that have interconnection agreements have indirectly requested access to unbundled network elements. Pursuant to their interconnection agreements, e*spire, Brooks Fiber, Mountain Tel and MCI Metro have all specifically ordered access to unbundled loops.

g) What entities have actually purchased the elements?

Response:
e*spire, Brooks Fiber, Mountain Tel and MCI Metro have all purchased unbundled loops. As of March 1, 1999 U S WEST has installed 1,546 loops for CLECs in Arizona.

h) What entities are actually providing service utilizing, in part, elements purchased from U S WEST?

Response:
U S WEST does not require entities that have purchased elements to disclose to U S WEST whether they utilize such elements to provide service to end users or for internal network applications. U S WEST believes that e*spire, Brooks Fiber, Mountain Tel and MCI Metro are using unbundled loops to provide services for end users. U S WEST will serve data requests on each entity to confirm the accuracy of its answer to this question.

3) Nondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the Bell operating company at just and reasonable rates in accordance with the requirements of section 224.

a) Do U S WEST and other providers have the same access to poles, ducts, and rights-of-way?

Response:
Section 271(c)(2)(B)(iii) of the Act requires that U S WEST provide nondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by it at just and reasonable rates in accordance with § 224 (the 1978 Pole Attachment Act). As detailed in the testimony of Michael Weidenbach, a Manager in the Wholesale Local Markets Organization, U S WEST complies with this checklist item through broad joint-use agreements into which U S WEST has entered with other telecommunications carriers pursuant to the 1978 Pole Attachment Act. The resultant Pole and Anchor Attachment and/or Duct Occupancy Agreements – which U S WEST has been successfully negotiating for years – contain the terms and conditions pursuant to which competing providers of telecommunications services may obtain nondiscriminatory access to U S WEST's poles, ducts, conduit, and rights-of-way. Under those agreements, U S WEST provides access to poles, conduits, and rights-of-way on a first-come, first-served basis, and CLECs may obtain relevant plats, maps, engineering records and other data upon making a bona fide request. The fees associated with such access are consistent with Section 224, and with the FCC rules.

b) What price does U S WEST charge and what is the pricing methodology for access to poles, ducts, and rights-of-way?

Response:
Rates charged by U S WEST are consistent with section 224 of the Telecommunications Act of 1996 and they are uniformly applied. U S WEST's rates are in Section 10.8.3 of the proposed Arizona SGAT.[4] U S WEST and other telecommunications carriers have entered into broad joint-use agreements for the use of poles, ducts, conduits, and rights-of-way, pursuant to the 1978 Pole Attachment Act. For years, U S WEST has been successfully negotiating such joint use agreements.

The rate elements associated with providing access to poles, conduits and rights-of-way, allow U S WEST to recover recurring and nonrecurring cost associated with providing space. U S WEST may quote the attaching

[4] See the Arizona SGAT §10.8.3, Rate Elements.

party the following fees: Inquiry Fee, Field Verification Fee, required Make Ready/Modification Work and Annual Usage.[5]

c) Concerning operation in Arizona, does U S WEST believe that they have a different legal status concerning access to rights of way than a competitive provider? If so, what is the justification for any such difference?

Response:
U S WEST's poles, conduits ducts, and rights-of-way are located either in public rights-of-way, such as streets, alleys, bridges or dedicated utility easements, or on property owned by private or public entities.
U S WEST's authority to have its poles and conduit systems on public rights-of-way is subject to state and local ordinances and laws, zoning regulations, or other permissions or authorities granted by government entities. On private or public property (other than public rights-of-way), U S WEST obtains an easement or license from the owner to place and maintain its poles and conduit systems. Sometimes, easements or licenses from adjoining property owners are necessary to occupy public rights-of-way. In some instances, U S WEST may have poles, ducts or conduits on private property without any right (or an incomplete right) to grant access to third parties. U S WEST's ability to maintain its poles and conduit systems is subject to the terms, conditions and limitations of these various laws and agreements so U S WEST must condition an attaching party's access to its poles and conduit systems on those same terms and conditions.[6] If U S WEST loses its right to have a pole, duct, conduit or right-of-way at any particular location, it obviously cannot provide an attaching party with a right to use such structure. The Federal Act does not require the controlling LECs to acquire grants of authority on behalf of other carriers.

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5 See the Arizona SGAT, Section 10.8.3, Access to Poles, Ducts, Conduits, and Rights of Way, Rate Elements descriptions.

6 First Report and Order, Para. 1179.

4) Local loop transmission from the central office to the customer's premises, local loop unbundled from local switching or other services.

a) What network elements are offered by U S WEST?

Response:
U S WEST offers nondiscriminatory access to unbundled local loops. An unbundled loop establishes a transmission path between a central office distribution frame (or equivalent) up to, and including, U S WEST's Network Interface Device (NID) and/or demarcation point. For existing loops, the inside wire connection to the NID and/or demarcation point will remain intact. Unbundled Loops are available in three categories: (i) 2-Wire or 4-Wire Analog, (ii) 2-Wire or 4-Wire Non-Loaded and (iii) Digital Capable - either Basic Rate ISDN or DS1.

b) What is the pricing methodology used for the elements?

Response:
The United States Supreme Court's decision in AT&T Corp. v. Iowa Utilities Bd., vacated the FCC Rule that defined the list of UNEs, Rule 319; and remanded the FCC's pricing rules, including the rules for pricing of unbundled network elements, to the Eighth Circuit Court for further review.[7] The final pricing rules will not be settled until the Eighth Circuit reviews the merits of the challenges to the pricing rules. This review is likely to take several months.

In the interim, U S WEST will provide requesting telecommunications carriers access to network elements at the rates contained in the CLEC's respective interconnection agreements. The rates in the interconnection agreements for unbundled loops are consistent with the FCC's pricing methodology as established in the Arizona Cost Docket No. U-3021-96-448, which is generally consistent with the FCC's rules.

c) What elements have been requested by entities seeking interconnection and access?

Response:
All entities with interconnection agreements have indirectly requested access to unbundled loops. Per their interconnection agreement, e*spire, Brooks Fiber, Mountain Tel and MCI Metro have specifically requested access to unbundled loops.

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[7] 47 C.F.R. 51.501-51.515, 51.601-51.611, 51.701-51.717.

d) What is the record concerning U S WEST's responsiveness to such requests?

Response:
U S WEST has the following record for installation commitments met for analog unbundled loops, for the period from July 1998 through January 1999:

Month	# CLEC Analog	Installation Interval	# Installation Comm. Met	Result
July 98	403	6.4	375	93.0%
August 98	81	3.0	79	98.0%
September 98	54	8.2	46	85.0%
October 98	84	14.6	73	87.0%
November 98	89	7.1	81	91.0%
December 98	69	9.9	43	62.0%
January 99	67	13.0	59	88.0%

e) What elements have actually been sold to entities seeking interconnection and access?

Response:
As of March 1, 1999, U S WEST has installed 1,546 loops for CLECs in Arizona.

f) What entities have requested elements?

Response:
Generally, entities with interconnection agreements have indirectly requested access to unbundled loops. Pursuant to their interconnection agreements, e*spire, Brooks Fiber, Mountain Tel and MCI Metro have all specifically ordered access to unbundled loops.

g) What entities have actually purchased the elements?

Response:
e*spire, Brooks Fiber, Mountain Tel and MCI Metro have all purchased unbundled loops. As of March 1, 1999 U S WEST has installed 1,546 loops for CLECs in Arizona.

h) What entities are actually providing service utilizing, in part, elements purchased from U S WEST?

Response:
U S WEST does not require entities that have purchased elements to disclose to U S WEST whether they are utilizing such elements to provide service to end users or for internal network applications. U S WEST believes that e*spire, Brooks Fiber, Mountain Tel and MCI Metro are using unbundled loops to provide services for end users. U S WEST will serve data requests on each entity to confirm the accuracy of its answer to this question.

5) Local transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services.

a) What network elements are offered by U S WEST?

Response:
U S WEST provides access to the two general categories of local transport defined by the FCC in its Rule 319:

- Dedicated Transport - incumbent LEC transmission facilities dedicated to a particular customers or carrier
- Shared Transport - transmission facilities shared by more than one carrier, including the incumbent LEC

As previously discussed, the Supreme Court vacated these rules. However, U S WEST still offers the unbundled network elements, including both types of transport, contained in each CLEC's approved interconnection agreement. U S WEST's proposed SGAT also offers both types of transport unbundled from local switching and other services.

Unbundled Dedicated Interoffice Transport (UDIT) provides for dedicated interoffice transport between U S WEST Wire Centers in the same LATA and state.[8] U S WEST provides interoffice facilities between its end offices and serving wire centers (SWC), its SWCs and IXC POPs, its tandem switches and SWCs. UDIT is available in DS0, DS1 and DS3 where facilities are available. UDIT is also available in OC-n bandwidths on an ICB basis where available.

U S WEST provides shared transport in Arizona, as described in the proposed SGAT.[9] Shared transport utilizes interoffice transmission facilities which are shared between U S WEST and one or more requesting CLEC. The shared transport facilities connect U S WEST end office switches with other U S WEST end office switches and/or with U S WEST tandem switches for the delivery of traffic within the local calling area.

b) What is the pricing methodology used for the elements?

Response:
U S WEST will provide requesting telecommunications carriers access to network elements at the rates contained in the CLEC's respective

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8 SGAT at 10.9.1

9 SGAT at 10.10.1.1 to 10.10.1.4

interconnection agreements. The rates in the interconnection agreements are consistent with the FCC's pricing methodology as established in the Arizona Cost Docket No. U-3021-96-448, which is generally consistent with the FCC's rules.

The Arizona cost docket did not establish rates for shared transport. Because shared transport is no longer a network element that needs to be unbundled pursuant to Section 251(c), there is no requirement to price it on a forward-looking, cost-based basis. Pending the FCC's promulgation of new UNE rules, and the Eighth Circuit Court's review of the current FCC pricing rules, the proposed SGAT establishes rates for shared transport, and the associated local switching elements. Specifically, the rate for shared transport was established so that the rate resulting from the combination of shared transport, unbundled switching and the unbundled local loop is consistent with the resale rate for business exchange services.

c) What elements have been requested by entities seeking interconnection and access?

Response:
Generally, entities that have interconnection agreements have indirectly requested access to unbundled transport. Individual interconnection agreements may not contain access to both types of transport. No entity in Arizona has specifically ordered access to unbundled transport.

d) What is the record concerning U S WEST's responsiveness to such requests?

Response:
No CLECS in Arizona have ordered access to unbundled transport.

e) What elements have actually been sold to entities seeking interconnection and access?

Response:
No CLECS in Arizona have purchased unbundled transport.

f) What entities have requested elements?

Response:
No CLECS in Arizona have ordered unbundled transport.

g) What entities have actually purchased the elements?

Response:
No CLECS in Arizona have purchased unbundled transport.

h) What entities are actually providing service utilizing, in part, elements purchased from U S WEST?

Response:
No CLECS in Arizona have purchased unbundled transport, therefore, U S WEST does not believe that CLECs are using unbundled transport to provide service to their end users.

6) Local switching unbundled from transport, local loop transmission, or other services.

a) What network elements are offered by U S WEST?

Response:
U S WEST offers line-side ports and switching, including the connection between a line equipment termination at a main distribution frame (MDF) or COSMIC frame and a switch line card. U S WEST's local switching element includes the connection between the trunk-side of the switch (the trunk card) and a termination at the trunk main distribution frame (the trunk-side cross-connect panel).

In the proposed SGAT, the unbundled switching element includes the line-side and trunk-side cards, plus the features, functions, and basic switching capabilities of the switch.[10] The same basic capabilities are available to U S WEST's customers. Unbundled switching also includes access to all the vertical features that the switch is capable of providing and any technically-feasible customized routing functions. A CLEC can use a combination of a trunk-side port and custom routing to direct originating traffic to a dedicated trunk such as a directory assistance trunk.

b) What is the pricing methodology used for the elements?

Response:
The United States Supreme Court's decision in AT&T Corp. v. Iowa Utilities Bd. vacated the FCC Rule that defined the list of UNEs, Rule 319; and remanded the FCC's pricing rules, including the rules for pricing of unbundled network elements, to the Eighth Circuit Court for further review.[11] The final pricing rules will not be settled until the Eighth Circuit reviews the merits of the challenges to the pricing rules. This review is likely to take several months.

In the interim, U S WEST will provide requesting telecommunications carriers access to unbundled local switching at the rates contained in the CLEC's respective interconnection agreements. The rates in the interconnection agreements for unbundled local switching are consistent with the FCC's pricing methodology as established in the Arizona Cost Docket No. U-3021-96-448, which is generally consistent with the FCC's rules.

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10 SGAT at 10.13.1

11 47 C.F.R. 51.501-51.515, 51.601-51.611, 51.701-51.717.

Pending the FCC's promulgation of new UNE rules, and the Eighth Circuit Court's review of the current FCC pricing rules, the proposed SGAT establishes the rate for unbundled local switching. Specifically, the rate for unbundled local switching was established so that the rate resulting from the combination of shared transport, unbundled switching, and the unbundled local loop is consistent with the resale rate for business exchange services.

c) What elements have been requested by entities seeking interconnection and access?

Response:
Generally, entities that have interconnection agreements have indirectly requested access to unbundled local switching. No entity in Arizona has specifically ordered access to unbundled local switching.

d) What is the record concerning U S WEST's responsiveness to such requests?

Response:
No CLECS in Arizona have purchased unbundled local switching.

e) What elements have actually been sold to entities seeking interconnection and access?

Response:
No CLECS in Arizona have purchased unbundled local switching.

f) What entities have requested elements?

Response:
No CLECS in Arizona have ordered unbundled local switching.

g) What entities have actually purchased the elements?

Response:
No CLECS in Arizona have purchased unbundled local transport.

h) What entities are actually providing service utilizing, in part, elements purchased from U S WEST?

Response:
No CLECS in Arizona have purchased unbundled local switching, so, U S WEST does not believe that CLECs are using unbundled local switching to provide service to their end users.

7) Nondiscriminatory access to 911 and E911 services, directory assistance services to allow the other carrier's customers to obtain telephone numbers, and operator call completion services.

(I) 911 and E911 services.

a) Does U S WEST offer 911 or E911 services to new customers/providers?

Response:

Yes, U S WEST offers access to Basic 911 (911) and Enhanced 911 (E911) services on a nondiscriminatory basis to other local service providers. U S WEST makes access to 911/E911 services available to CLECs who resell U S WEST service and to facility-based CLECs who operate their own switch or who purchase unbundled switching. Such access includes access to the various components of a 911/E911 system: 911/E911 trunking, 911/E911 routing, and the E911 database and associated database updates. U S WEST provides access to 911/E911 services in the same manner as U S WEST obtains such access.

b) What entities have requested to purchase 911 and/or E911 services from U S WEST?

Response:

First, it should be clarified that other carriers do not "purchase" 911/E911 services from U S WEST – see answer to d) below.

Facility-based CLECs:

1. Mountain Tel
2. Winstar Tel
3. Brooks Fiber Tucson
4. AT&T Phoenix Metro
5. Cos Comm Chandler
6. MCIMetro Phoenix
7. American Comm Tucson
8. Electric Lightwave
9. GST Tel Phoenix & Tucson
10. Teligent

Reseller CLECs:
U S WEST provides 911/E911 services to CLECs that resell U S WEST's local exchange services. Those resellers include the following:

1) ACSI	11) Knight Comm	21) Reconex (Sterling)
2) AZ Dial Tone	12) Local Telecom	22) Sprint
3) Brooks	13) MCI Metro	23) TCG
4) Buy-Tel	14) MFS	24) Telstar
5) Cable Plus	15) Momentum Tel	25) Transamerican Tel
6) Compass	16) Mountain Tel	26) U. S. Telcom
7) ELI	17) Nextlink	27) U S Dial Tone
8) EZ Talk	18) One Point Comm	28) U S Telco
9) Frontier	19) Preferred Carrier	29) West Tel
10) GST	20) Qtel	30) Winstar

c) What entities have purchased 911 and/or E911 services from U S WEST?

Response:

See answer to b).

d) What are the prices and pricing methodology for 911 and E911 services?

Response:

U S WEST does not charge other carriers for access to 911/E911 services. The 911/E911 services offered by U S WEST to other carriers, including independent telephone companies, do not involve payments from one carrier to another. The costs of facilities deployed to provide other carriers with access to 911/E911 services are billed to the Public Safety Answering Point (PSAP) operator (government agency). U S WEST bills its customers a 911/E911 surcharge which is remitted to the PSAP operator. U S WEST assumes the CLECs will bill a similar surcharge to their customers on behalf of the PSAP operator. The third-party database administrator, SCC, may assess charges to both U S WEST and other carriers for updates to the E911 databases and other services performed.

(II) Directory assistance services.

a) What entities have requested to purchase directory assistance services from U S WEST?

Response:
U S WEST provides directory assistance service to CLECs that resell U S WEST's local exchange services. Those resellers include the following:

1) ACSI	11) Knight Comm	21) Reconex (Sterling)
2) AZ Dial Tone	12) Local Telecom	22) Sprint
3) Brooks	13) MCI Metro	23) TCG
4) Buy-Tel	14) MFS	24) Telstar
5) Cable Plus	15) Momentum Tel	25) Transamerican Tel
6) Compass	16) Mountain Tel	26) U. S. Telcom
7) ELI	17) Nextlink	27) U S Dial Tone
8) EZ Talk	18) One Point Comm	28) U S Telco
9) Frontier	19) Preferred Carrier	29) West Tel
10) GST	20) Qtel	30) Winstar

U S WEST provides its directory services to the following facility-based CLECs:

1) Brooks Fiber
2) MCI Metro
3) Mountain Tel
4) Winstar Wireless

b) What entities have purchased directory assistance services from U S WEST?

Response:
See response "a" above.

c) What are the prices and pricing methodology for directory assistance services?

Response:
The proposed SGAT provides prices for directory assistance services. The SGAT incorporates the wholesale discount rate for Arizona as ordered by the Commission in Docket Number U-3021-96-448 et al.

The price for directory assistance service provided to end users of reseller CLECs is the tariffed price for the service, less the wholesale discount. (Access to directory assistance service is included in the price of the resold local exchange service.)

The price for directory assistance service provided to end users of facility-based CLECs is based on TELRIC methodology.

(III) Operator Services.

a) What entities have requested to purchase operator call completion services from U S WEST?

Response:
U S WEST provides operator services to CLECs that resell U S WEST's local exchange services. Those resellers include the following:

1) ACSI	11) Knight Comm	21) Reconex (Sterling)
2) AZ Dial Tone	12) Local Telecom	22) Sprint
3) Brooks	13) MCI Metro	23) TCG
4) Buy-Tel	14) MFS	24) Telstar
5) Cable Plus	15) Momentum Tel	25) Transamerican Tel
6) Compass	16) Mountain Tel	26) U. S. Telcom
7) ELI	17) Nextlink	27) U S Dial Tone
8) EZ Talk	18) One Point Comm	28) U S Telco
9) Frontier	19) Preferred Carrier	29) West Tel
10)GST	20) Qtel	30) Winstar

U S WEST provides its directory services to the following facility-based CLECs:

1) Winstar Wireless

b) What entities have purchased operator call completion services from U S WEST?

Response:
See response "a" above.

c) What are the prices and pricing methodology for operator call completion services?

Response:
The proposed SGAT provides prices for operator services. The SGAT incorporates the wholesale discount rate for Arizona as ordered by the Commission in Docket Number U-3021-96-448 et al.

The price for operator services provided to end users of reseller CLECs is the tariffed price for the service, less the wholesale discount. (Access to operator services is included in the price of the resold local exchange service.)

The price for operator services provided to end users of facility-based CLECs is based on TELRIC methodology.

8) White pages directory listings for customers of the other carrier's telephone exchange service.

a) What entities have requested to include their customers in the listings of U S WEST?

Response:
All entities are included in the White pages listings upon request. See answer "b" below.

b) What entities have their customers included in the listings of U S WEST?

Response:
The following entities include their customers in U S WEST White pages listings:

Arizona Dial Tone Inc
AT&T
AT&T Local Services (TCG)
Brooks Worldcom
Cable Plus Co LP
Compass Telecommunications Inc
Cox Communications
Electric Lightwave (ELI)
GST Telecom
Intelcom Group (ICG)
Local Telecom Service
MCI
MFS Intelnet (see Worldcom)
Mountain Telecommunications Inc.
One Point Comm's.
Preferred Carrier Svcs
Sterling International (dba Reconex)
Tel West Communications
Teleport Communications Group (see AT&T)
Telstar Telcom LLC
Transamerican Telephone
U S Dialtone
United States Telecommunications Inc
West Tel Communications
Winstar
Worldcom/MFS Intelnet

c) What entities have chosen not to utilize inclusion of their customers in U S WEST's white pages listings?

Response:
Knight Communications has directed U S WEST to exclude their listings from U S WEST's white page listings.

9) Until the date by which telecommunications numbering administration guidelines, plan, or rules are established, nondiscriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers. After that date, compliance with such guidelines, plan, or rules.

a) Who is the number administrator for Arizona?

Response:

U S WEST is no longer the numbering administrator in Arizona, or for any other state in its region. U S WEST transferred numbering administration functions to a third party administrator, Lockheed Martin IMS, on September 1, 1998.

b) If U S WEST is the number administrator for Arizona, is there a date certain by which it will no longer perform that function?

Response:

See answer to a).

10) Nondiscriminatory access to databases and associated signaling necessary for call routing and completion.

a) What entities have requested to purchase such database and signaling services from U S WEST?

Response:

The following entities are buying signaling services:

1. Mountain Telecom
2. Access Long Distance
3. Apollo Telco
4. AT&T
5. Gila River Telecom
6. GTE INS
7. Illuminet
8. MCI/Worldcom
9. Sprint Long Distance
10. Table Top Telco
11. Tell America
12. Valley Telco
13. West Tel
14. AirTouch
15. Bell Atlantic Mobile
16. U S WEST Wireless

Some carriers obtain access to the signaling network and call-related databases via third party signaling network providers.

b) What entities have purchased such database and signaling services from U S WEST?

Response:

See answer to a).

c) What are the prices and pricing methodology for such database and signaling services?

Response:

U S WEST charges CLECs for signaling according to the Arizona Commission's Order in the Consolidated Cost Docket No. U-3021-96-448, Decision No. 60635, issued January 30, 1998. Those rates are generally consistent with the FCC rules that are being reviewed by the Eighth Circuit.

11) Until the date by which the Commission issues regulations pursuant to section 251 to require number portability, interim telecommunications number portability though remote call forwarding, direct inward dialing trucks, or other comparable arrangements, with as little impairment of functioning, quality, reliability, and convenience as possible. After that date, full compliance with such regulations.

a) Is number portability being provided on an interim or full compliance basis?

Response:

U S WEST completed deployment and made available for commercial use long-term number portability (LNP) in all of the Phoenix Metropolitan Statistical Area (MSA) on August 3, 1998 and in all of the Tucson MSA on November 2, 1998. U S WEST's deployment of LNP in the Phoenix and Tucson MSAs met the dates specified in the FCC's LNP schedule for the 100 largest MSAs. This makes long-term number portability available to approximately 90 percent of U S WEST's access lines in Arizona.

For exchanges outside the top 100 MSAs, in accordance with the FCC's rules, beginning January 1, 1999, LECs are to make LNP available within six months after a bona fide request is received. In March 1999, U S WEST received bona fide requests for 16 additional exchanges in Arizona to be converted to LNP.

U S WEST makes interim number portability (INP) arrangements available for exchanges that have not converted to long-term number portability. The FCC prohibits the use of interim methods after LNP has been deployed in an area. As of February 28, 1999, no orders for interim number portability have been received for exchanges outside the Phoenix and Tucson MSAs.

U S WEST provides interim number portability (INP) through remote call forwarding (RCF); direct inward dialing trunks (DID); and route indexing, both direct routed Directory Number Route Indexing (DNRI) and tandem routed, also called Portability Hub-Route Indexing (PH-RI). In addition, U S WEST provides for NXX migration, also called Local Exchange Routing Guide (LERG) reassignment.

b) If it is on an interim basis, what are the characteristics of the interim system and when will full number portability be implemented?

Response:

See answer to a).

c) Is U S WEST providing carrier, geographic, or service number portability or any combination of the three?

Response:

U S WEST provides service provider ("carrier") number portability in accordance with the Act and the resulting FCC rules. The Act and the FCC define number portability as the ability of customers to retain, at the same location, existing telephone numbers when switching from one service provider to another.

Location ("geographic") number portability and service number portability are not required by the Act, or by the FCC at this time. The industry has not developed guidelines or standards for either location or service number portability.

However, the manner in which U S WEST and the industry has deployed service provider number portability does provide for a limited form of location ("geographic") number portability. Customers are able to retain their existing telephone numbers when they move to a new location within the local calling area.

d) What is the pricing methodology used to determine charges for number portability?

Response:

Interim Number Portability – U S WEST charges CLECs for INP service according to the Arizona Commission's Order in the Consolidated Cost Docket No. U-3021-96-448, Decision No. 60635, issued January 30, 1998.

Long-Term Number Portability – The FCC provided for long-term number portability (LNP) cost recovery through two federally tariffed charges:

1) a monthly end-user surcharge to take effect no earlier than February 1, 1999, and to last no longer than five years; and,
2) an inter-carrier charge for query services provided to other carriers.

U S WEST filed its federal LNP tariffs January 26, 1999, which are in effect but subject to a pending FCC tariff investigation.

12) Nondiscriminatory access to such services or information as are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements for section 251(b)(3).

a) Is U S WEST providing dialing parity for both local and intraLATA toll Service?

Response:

Yes, U S WEST is providing dialing parity for both local and intraLATA toll service in Arizona.

Local Dialing Parity -- The FCC in its Second Interconnection Order established the requirement for local dialing parity that customers within a local calling area are able to dial the same number of digits to make a local telephone call, notwithstanding the identity of the customer's or the called party's service provider. There is no difference in the number of digits U S WEST or CLEC customers must dial to complete a given local call to any other local customer or to access operator services or directory assistance. U S WEST does not impose any requirements or technical constraint that requires CLEC customers to dial an access codes or a greater number of digits than U S WEST customers to complete the same call, or that causes CLEC customers to experience inferior quality with post-dialing delays.

IntraLATA Toll Dialing Parity – Although toll dialing parity is not a Section 271 checklist requirement, U S WEST completed implementation of toll dialing parity (1+ equal access dialing) for intraLATA calls in Arizona as of April 20, 1996. U S WEST's intraLATA toll dialing parity implementation was made pursuant to an implementation plan approved by the Arizona Commission in Docket No. R-0000-95-499, IntraLATA Equal Access Rules, Decision No. 59452, issued December 21, 1995.

b) If not, is U S WEST capable of providing such parity and will it provide it prior to the time when it offers interLATA service or at the time that it offers interLATA service?

Response:

U S WEST is providing both local and intraLATA toll dialing parity. See answer to a).

c) Does U S WEST have any ACC, state court, federal court, FCC, or legislative action pending related to the provision of intraLATA and local dialing parity?

Response:

U S WEST does not have any regulatory or court actions pending related to the provision of intraLATA and local dialing parity in Arizona.

d) To what percentage of its customers will U S WEST provide intraLATA dialing parity, prior to being released from its in-region interLATA restrictions?

Response:

U S WEST already provides intraLATA toll dialing parity to 100 percent of its customers in Arizona.

13) Reciprocal compensation arrangements in accordance with the requirements of section 252(d)(2).

a) What reciprocal compensation arrangements does U S WEST have in Arizona with competing carriers?

Response:
In Arizona U S WEST has Bill and Keep and Reciprocal Compensation arrangements with competing carriers.

b) What reciprocal compensation arrangements does U S WEST have in Arizona with other incumbent carriers?

Response:
In Arizona U S WEST has Bill and Keep arrangements with incumbent carriers.

c) Where interconnection is in place, how does traffic terminated on other networks (competitors and other incumbents) compare with traffic terminated on U S WEST's network? This can be expressed as percentages, number of specific calls, minutes of use, or other measure.

Response:
Please see Confidential Attachment LMU which contains a table detailing the Arizona aggregate Local Minute of Use data.

14) Telecommunications services are available for resale in accordance with the requirements of sections 251(c)(4) and 252(d)(3).

a) Have all of the services offered by U S WEST been made available for resale on the same terms previously offered?

Response:
As stated in the Affidavit of Ms. Lori Simpson, U S WEST provides telecommunications services for resale through the nondiscriminatory terms and conditions of its 57[12] approved interconnection and resale agreements, and through the proposed SGAT. These agreements offer telecommunication services for resale in conformance with the requirements of the Telecom Act.

b) If not, which services have been withdrawn or changed in terms with respect to resale?

Response:
U S WEST removed the single line business restriction for Centrex Prime and made the service available to certified resellers in Arizona. Additionally, the contiguous property definition has been modified for clarification purposes.

c) What are the percentage discounts offered for resold services?

i) The specific tariffed resale rates.

Response:
Pursuant to the Arizona Commissions order in the cost docket, Number U-3021-96-448 et al, and the AT&T Arbitrated Agreement, the discount for Residence Basic Exchange is 12%, and the discount for all other services available for resale and associated product specific non-recurring charges is 18%.

ii) Negotiated rates by specific contract.

Response:
U S WEST has applied the wholesale discounts from Docket Number U-3021-96-448, et al. to all resale activity under

[12] Number of agreements as of 1-5-99.

Commission-approved resale agreements in Arizona. The only exception is a February 19, 1999 arbitrated agreement, Docket 61527, between e.spire and U S WEST. The Commission approved a 17% discount for Frame Relay services.

d) What, if any, limitations does U S WEST impose on the resale of its services?

Response:
The Telecom Act and FCC Orders allow for certain limited restrictions on resale terms and conditions. As provided in Commission-approved interconnection and resale agreements, and in the proposed SGAT, limited restrictions apply to resale by CLECs. Specifically, the SGAT provides as follows:

> 6.2.2 Basic Exchange Telecommunications Service, Basic Exchange Features, and IntraLATA Toll may be resold only for their intended or disclosed use and only to the same class of end user to which U S WEST sells such services (*e.g.,* residence service may not be resold to business end users). Service provided directly to CLEC for its own use and not resold to end users, such as administrative services, must be identified by CLEC, and CLEC must pay the full retail rates and prices for such services.
>
> 6.2.2.1 Promotional offerings of ninety (90) days or less are not available for resale.
>
> 6.2.2.2 Residential services, services that are grandfathered, and Lifeline/Link-up services are available only to the same class of customer eligible to purchase these services from U S WEST.
>
> 6.2.2.3 Non-telecommunications services, such as inside wiring, calling cards and CPE, are not available for resale.
>
> 6.2.2.4 Enhanced services, such as voice messaging, are not available for resale.

Additionally, the Commission ordered that these restrictions apply to resale in its arbitration order related to AT&T's interconnection and resale agreement. The order provides the following direction regarding services to be made available for resale:

> The Commission is authorized to act pursuant to federally delegated jurisdiction regarding non-tariffed and deregulated

> services. The Act mandates the unbundling and resale of "all" telecommunications services, under the supervision of the states.
>
> As stated in the [FCC First Report and] Order, Para. 962, Lifelink and Link-up services should be offered for resale, but to the class of customers which would be eligible for such services from U S WEST. Relay services, in contrast, are best provided by the carrier of last resort. These services are required and federally subsidized. It is appropriate to keep them centralized in U S WEST.
>
> Voice mail is not a telecommunications service, and also is presently available on the open market. Voice mail is not the type of service which the Act was designed to make available to LECs. It is not necessary for U S WEST to offer voice mail to CLECs at a resale discount. In contrast, pay telephone lines and services are telecommunications services, and should be offered for resale at a discount.[13]

Further, the Commission went on to make the following decision resale of promotional offers:

> Promotional offerings of ninety days or less are not subject to a resale discount, pursuant to [FCC First Report and] Order, Para. 950. . .
>
> The Commission declines to extend the time frame of promotional offerings not subject to a resale discount beyond ninety days.[14]

The Commission also addressed cross-class restrictions as follows:

> The Commission interprets the Act's restriction of resale to the same category of customers eligible for the service from the ILEC to include residential service to businesses, business service to residential customers, services such as Lifelink to ineligible subscribers, and the limitation on reselling Centrex services to those customers eligible for the service pursuant to U S WEST's tariff.[15]

---

13 Arizona Corporation Commission, Docket No. U-2428-96-417 et al, In the Matter of the Petition of AT&T Communications of the Mountain States, Inc. for Arbitration of Interconnection Terms, and Conditions with U S WEST Communications, Inc., Pursuant to 47 U.S.C. Sec. 252(b) of the Telecommunications Act of 1996, at pp 14-15.

14 Id. at p. 16.

15 Id. at p. 16.

e) Are there currently any formal disputes related to the pricing of services for resale?

Response:
There are no current formal disputes in Arizona related to the pricing of services for resale.

f) Are there currently any formal disputes related to the services or the definition of services for resale?

Response
There are no current formal disputes in Arizona related to the services or the definition of services for resale. However, at a national level the availability of DSL for resale is currently under review by the FCC.

g) Have any entities requested to purchase services from U S WEST at specific tariffed rates (not including negotiated agreements)?

Response:
In Arizona, entities have requested and currently purchase retail services from the tariffs for the purpose of resale. The most common retail services requested for the purpose of resale are Centrex and trunks to provision Shared Tenant Services. Although these services are retail products and may be purchased by customers for their sole purpose, the services may also be used for the purpose of resale. U S WEST does not always know how customers use the products, therefore all instances of resale are not known.

h) Are any entities currently purchasing services from U S WEST at specific tariffed rates (not including negotiated agreements)?

Response:
Currently, customers, including those with negotiated agreements, are purchasing services from the retail tariffs for purpose of resale.

i) Are any negotiations pending for the purchase of services for resale?

Response:

Currently in Arizona, there are four pending Resale Only contracts between U S WEST and NET-Tel Corporation, Pam Oil, Pre-Paid Phone Limited, Topp Communications, Inc. Additionally, there are four pending Wireline / Resale contracts pending with: CCCAZ Inc., Covad Communication, Harmony International and JATO Communications.

j) Are any entities currently purchasing services from U S WEST pursuant to a negotiated agreement?

Response:
Attachment 1 contains a list of 30 the companies who are purchasing U S WEST resale services pursuant to their agreements:

k) How much revenue does the resale of services generate for U S WEST?

Response:
In 1998 resale services, based on negotiated contracts and tariffed services, generated $8.6 million dollars for U S WEST in 1998.

AFFIDAVIT OF ALLCOTT

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN

TONY WEST
COMMISSIONER

CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**Docket No. T-00000B-97-0238**

AFFIDAVIT OF

Wayne G. Allcott

March 25, 1999

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1 **Identification of Affiant**

2 My name is Wayne G. Allcott. I am the Arizona Vice President for U S WEST.
3 My business address is 3033 North Third Street, Phoenix, Arizona 85012. I
4 graduated from the University of Iowa with a Bachelor of Business Administration
5 Degree in Economics. I began my career with Northwestern Bell Telephone
6 Company in the Marketing Department in 1965. Since then, I have held various
7 assignments in the marketing, customer service, public affairs and public policy
8 organizations throughout the U S WEST territory. I assumed my current position
9 as Arizona Vice President on January 1, 1995. As the Arizona Vice President, I
10 am responsible for public policy in Arizona.

11

12 **Purpose of Affidavit**

13 The purpose of my affidavit is to support U S WEST's Section 271 filing. Section
14 271 of the 1996 Telecommunications Act sets forth the process by which RBOCs
15 like U S WEST become eligible to provide interLATA services. The ultimate
16 question that must be answered in this proceeding is whether U S WEST has
17 opened its local exchange market in the State of Arizona to competition. The
18 presence of several full service competitors, including AT&T/TCG, MCI
19 WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™ who are using all three
20 avenues of entry – resale, unbundled network elements, and facilities based
21 bypass – constitutes powerful evidence that U S WEST's processes and
22 procedures encourage and foster competition. These companies are offering

1 local exchange and long distance services over their own facilities to high profit
2 customers in the Phoenix, Tucson and Yuma business communities and in
3 selected residential markets. I will contrast the competitors' practice of targeted
4 service offerings for selected customers with how U S WEST will make available
5 one stop shopping for all its customers in the state. Every person, not just those
6 targeted by U S WEST's competitors, deserves the opportunity to choose and
7 subscribe to all of their telecommunications services from one single provider.
8 All carriers operating in the state with the exception of U S WEST can currently
9 offer such packages to their customers. However, because U S WEST has met
10 the market opening requirements of the Act, it too deserves the opportunity to
11 compete on a level playing field and to fully participate in all telecommunications
12 markets in Arizona.
13
14 In this affidavit I will first discuss why U S WEST has initiated this proceeding
15 with the Commission. Second, I will describe the Track A requirements and the
16 evidence which establishes that U S WEST satisfies the Track A standards for
17 U S WEST's entry into the in-region interLATA long distance market in Arizona.
18 Third, I will discuss the benefits of competition in all telecommunications markets
19 and why the public interest would be served by U S WEST's entry into the
20 interLATA long distance market in Arizona. Fourth, I will describe how
21 U S WEST's interconnection prices are consistent with the requirements of the
22 Act and long distance entry. And finally, I will introduce the other U S WEST

affiants and will provide a brief summary of the issues that each will address in this proceeding.

Executive Summary

U S WEST has opened its local exchange markets in Arizona to competitors as intended by the Telecommunications Act of 1996. There can be no doubt that this is true given the sheer number of competitors that have chosen to enter the local exchange markets in Arizona and compete directly with U S WEST. This competitive entry means that many customers, primarily those in the Phoenix and Tucson business communities and selected residential communities, enjoy the opportunity to choose their local exchange provider. These customers can choose to get all of their telecommunications services – local, long distance and data services – from a single provider (other than U S WEST), or they can choose to spread their purchases among several providers. Many Arizona customers, however, do not have the ability to choose a packaged provider even though U S WEST has fully opened the local exchange markets to competition. These "no choice" customers are located in geographical areas that AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber, e.spire™, One Point, Arizona Dial Tone, Reconex, Telstar Telcom, and others have, apparently, decided are not attractive to serve at this time. Until U S WEST obtains Section 271 authority, it would appear that these customers will be denied the numerous benefits that flow from one stop shopping.

1 U S WEST is prepared to offer all of its customers in Arizona the opportunity to
2 select a full service provider (local, long distance and data services). The only
3 obstacle remaining before these customers can shed their "no choice" label is for
4 the Commission and ultimately the FCC to approve U S WEST's 271 application
5 to provide interLATA service in Arizona. Such approval is the final step in
6 fulfilling the express purpose of the Act – opening all of the telecommunications
7 markets to all competitors. As Senator Pressler stated when the Act was signed
8 into law: "This bill attempts to get everybody into everybody else's
9 business and let in new entrants." As described below, the FCC also recognizes
10 that this is the ultimate objective of the Act.
11
12 There is no reason to continue to disadvantage many customers in the state
13 simply because competitors find some markets less attractive than others.
14 U S WEST has done its part to foster competition everywhere in the state by
15 opening all local exchange markets, even though AT&T/TCG, MCI WorldCom,
16 ELI, GST, Cox, Brooks Fiber, e.spire™, One Point, Reconex and others have not
17 elected to enter all markets. Once U S WEST is allowed into the interLATA
18 market as contemplated by the Act, all customers in the state will finally have a
19 one stop shopping choice. No longer will some telecommunications consumers
20 be "no choice" customers.
21

Through this application, U S WEST advises the Commission that it plans to file a Track A application with the FCC pursuant to Section 271 of the Telecommunications Act of 1996 sometime on or after July 1, 1999. Section 271 of the Act provides that the FCC must consult with the Commission to verify that U S WEST is satisfying the requirements of that section. To obtain a positive recommendation from this Commission, and ultimately to win the approval of the FCC, U S WEST is required to demonstrate that:

- It has entered into one or more interconnection agreements under which a facilities-based provider has entered a U S WEST market in Arizona;
- It has satisfied the Section 271 fourteen point interconnection checklist;
- It is prepared to offer interLATA service pursuant to Section 272 of the Act; and
- Its entry into the interLATA long distance business in Arizona is in the public interest.

U S WEST will establish that numerous competitors are providing local exchange telephone service to residential and business customers through the use of Commission approved interconnection agreements in Arizona primarily over their own facilities. As other witnesses will explain, U S WEST has fully implemented each aspect of Section 271's "14-point checklist." Again, as other witnesses will explain, U S WEST has created a separate subsidiary, U S WEST Long Distance, which is prepared to offer U S WEST's interLATA service pursuant to Section 272 of the Act. In addition, U S WEST will establish that its entry into the interLATA market in Arizona is in the public interest. Such entry will give all

Arizona consumers the ability to obtain what most people want, simplified one-stop shopping for all of their telecommunications needs. This entry will in all likelihood also prompt others to enter the local exchange markets on a larger scale thereby increasing competition in both the local and long distance markets. Other witnesses will present U S WEST's evidence on Section 272 and the competitive checklist. My affidavit will focus on Track A and public interest considerations.

Before U S WEST can enter the interLATA market, Track A requires it to establish that competitors are serving both business and residential customers predominately over their own facilities. U S WEST will show that existing competition from several CLECs satisfies this requirement. These competitors are using both their own facilities and U S WEST's unbundled loops, or UNEs. The sheer number of successful facilities based competitors is powerful evidence that U S WEST has opened its markets to competition and that competition is thriving in those markets where the competitors choose to offer service. Statistics surrounding this competition are dramatic:

- 85 CLECs have been certified by the Commission to do business in the state;
- The Commission has approved 73 interconnection agreements between U S WEST and its competitors - including 29 with wireline (facilities-based) CLECs; 29 with resellers; and 15 with wireless and paging providers;
- U S WEST has completed 7 additional interconnection agreements which are currently pending Commission approval;

- 11 CLECs are currently interconnected with U S WEST via more than 47,000 interconnection trunks;
- More than 30 carriers are actively reselling U S WEST's services and have resold nearly 20,000 exchange service access lines;
- 20 carriers are reselling U S WEST's services to residential customers and 25 are reselling to business customers;
- U S WEST has completed 127 collocation arrangements and has requests for 85 additional arrangements from its competitors;
- More than 100 central office codes (or NXXs) have been assigned to CLECs so they can provide unique telephone numbers to their existing and prospective customers;
- U S WEST is providing nearly 20,000 white page directory listings in its directories on behalf of competitors in the state;
- More than 43,000 telephone numbers originally provided by U S WEST have been "ported" to competitors so that customers can change providers with out being required to get a new telephone number; and
- U S WEST's competitors have more than 20 switches in service in Arizona; 13 of those switches interconnect with U S WEST to exchange local traffic.

In addition to the substantial measures of competitive activity summarized numerically above, I have included several Exhibits that show graphically the extent of competitors' presence in Arizona by mapping their known fiber networks, their switch locations, and the U S WEST central offices that have been equipped to provide collocation. The exhibits are as follows:

- Exhibit WGA-1 is a Phoenix Metro Area map that shows the location of competitors switches and the U S WEST central offices where collocation arrangements are provided;
- Exhibit WGA-2 is a Tucson Metro Area map that shows the location of competitors switches and the U S WEST central offices where collocation arrangements are provided;

- Exhibit WGA-3 is an Arizona state map that shows that competitors switches and collocation arrangements are concentrated in the Phoenix and Tucson areas;
- Exhibit WGA-4 is a Phoenix Metro Area map that shows the location of each of eight competing fiber networks; and
- Exhibit WGA-5 is a Tucson Metro Area map that shows the location of each of three competing fiber networks.

This stronghold of competitive activity has already resulted in significant losses of both business and residential customers for U S WEST within its service territory. Conservatively, nearly 18,000 residence and more than 17,000 business access lines are currently served by U S WEST's competitors. Dr. Harris describes in more detail why our loss estimates are necessarily conservative. Of the access lines served by competitors, about half are provided over the competitors own facilities, with the remainder provided via resale.

U S WEST has set its prices to encourage and foster competition as required by the Act. According to the Act, U S WEST must resell its basic telecommunications services at price less avoided cost (wholesale rates) and offer interconnection and unbundled network elements (UNEs) at cost based prices, which may include a reasonable profit. This Commission has already set prices reflecting these fundamental concepts in the consolidated cost proceeding (Decision No. 60635), which concluded on January 8, 1998 and has since been updated, where appropriate, in U S WEST's recently filed SGAT. Thus, the

prices that U S WEST charges for interconnection, UNEs and resale of telecommunications services satisfy these requirements.

All of these facts – existing interconnection agreements, substantial network deployment by CLECs, competitive losses to both facilities-based providers and resellers, and pricing in conformance with the Act – demonstrate that U S WEST has satisfied the required prerequisite for entry into the interLATA market in its Arizona territory.

Therefore, at the conclusion of this proceeding, U S WEST requests that the Commission issue an Order that:

- Determines that U S WEST has satisfied the threshold requirement of Track A;
- Determines that U S WEST has satisfied the competitive checklist in Arizona;
- Determines that U S WEST is prepared to offer interLATA services pursuant to Section 272 of the Act;
- Advises the FCC that it would be in the public interest to grant U S WEST authority to enter the interLATA long distance market in this state; and
- Recommends that the FCC grant U S WEST's Section 271 petition to provide interLATA service in its of Arizona service territory.

Arizona Section 271 Proceeding

This filing provides the Commission with an historic opportunity to facilitate and encourage competition at all levels of the market for telecommunications services in Arizona consistent with Congress' charge in the Act. The stated

1 purpose of the Act is to open all levels of the telecommunications market to
2 competition. Incumbent providers of local exchange service like U S WEST are
3 required to undertake market opening actions to ease the entry of competitors
4 into the market for local exchange service, most of which relate, directly or
5 indirectly, to interconnection. In exchange for opening its local exchange
6 markets, the Act promises to open the interLATA long distance market to the
7 RBOCs, including U S WEST. Through this filing, U S WEST establishes that it
8 has satisfied this fundamental criterion.
9
10 Before U S WEST can enter the interLATA long distance market in Arizona, it
11 must secure the approval of the FCC under the procedures established in
12 Section 271. Furthermore, this Commission ordered U S WEST to provide it with
13 at least 90 days notice before filing a Section 271 application with the FCC. This
14 filing fulfills the requirement to provide such notice.[1]
15
16 To secure approval from the FCC, U S WEST must first establish that one of two
17 thresholds in Section 271, referred to as Track A or Track B, has been reached.
18 The Track A threshold, set forth in Section 271(c)(1)(A), requires that U S WEST
19 has entered into at least one interconnection agreement under which a facilities

[1] The Commission released a new Procedural Order in this Docket on March 2, 1999 stating that the 90 days notice period would commence when U S WEST supplements its application with its direct testimony.

1 based CLEC (or CLECS) is providing local exchange service to both residential
2 and business customers. A facilities-based provider is one which uses
3 predominately its own facilities (including U S WEST's unbundled network
4 elements or ancillary services) to provide local exchange service.
5
6 U S WEST makes this Section 271 filing under Track A because several
7 competitors are providing facilities-based local service to both residential and
8 business subscribers. For example, Cox is providing residential local exchange
9 service over its own facilities to selected residential communities where it also
10 provides cable TV service. Business local exchange service subscribers -
11 primarily those located in the Phoenix and Tucson metropolitan areas - can
12 choose from among several facilities-based competitors including AT&T/TCG,
13 MCI WorldCom, ELI, GST, Brooks Fiber and e.spire™.
14
15 It is time that all competing carriers in Arizona - including U S WEST - be allowed
16 to pursue customers in all markets. Even more important, it is time that all
17 customers in the state - including those in areas not targeted by the competitors -
18 be given an opportunity to choose one stop shopping for their local telephone
19 exchange and long distance services. Today, most of U S WEST's customers
20 outside of the Phoenix and Tucson metropolitan areas do not have a realistic
21 one stop shopping choice. Only when U S WEST is allowed to fully participate in
22 the interLATA market will these "no choice" customers finally experience one

1 stop shopping for all their telecommunications needs. Moreover, all customers
2 who make calls between Phoenix and Tucson, the heaviest intrastate long
3 distance route, are prohibited from selecting U S WEST to carry these calls
4 because it is bisected by a LATA boundary. Ironically, that leaves U S WEST,
5 the company that has invested more than any other company in Arizona, as the
6 only telecommunications company that cannot compete for such business.
7 U S WEST should not be barred from providing additional customer choice over
8 this and other in-state and interstate long distance, interLATA routes.
9
10 Arizona is already very active in terms of local service competition in many areas
11 of the state as discussed herein. This is especially true in the more densely
12 populated areas of U S WEST territory, such as the Phoenix and Tucson
13 metropolitan areas, where both facilities-based competition as well as
14 competitive resale activity are thriving. These areas are becoming increasingly
15 competitive as competitors upgrade and enhance their existing networks, and
16 expand their capabilities through mergers and partnerships. Meanwhile,
17 U S WEST is poised to enter the interLATA market and offer one stop shopping
18 to all customers once it receives Section 271 approval from the FCC. This
19 proceeding initiates the actions that will ultimately lead to that approval.
20 Evidence and testimony in this proceeding will allow the Commission to fulfill its
21 role as consultant to the FCC and recommend that U S WEST's Section 271
22 application for interLATA entry in Arizona be approved.

Track A Requirements and Evidence

Section 271 provides two options or "tracks" for meeting the requirements of the Act. Section 271(c)(1)(A), commonly referred to as Track A, is available when, as here, facilities-based competitors have already entered local markets in the state. Section 271(c)(1)(B) - or Track B - would be available if competitors were not seeking to compete with U S WEST in Arizona. There are numerous local service providers in Arizona providing facilities-based local exchange services in competition with U S WEST upon which U S WEST can rely on to meet the requirements of Track A. Therefore, U S WEST files this Section 271 application under Track A.

Track A - Section 271(c)(1)(A) - reads in its entirety:

> PRESENCE OF A FACILITIES-BASED COMPETITOR.--A Bell operating company meets the requirements of this subparagraph if it has entered into one or more binding agreements that have been approved under section 252 specifying the terms and conditions under which the Bell operating company is providing access and interconnection to its network facilities for the network facilities of one or more unaffiliated competing providers of telephone exchange service (as defined in section 3(47)(A), but excluding exchange access) to residential and business subscribers. For the purpose of this subparagraph, such telephone exchange service may be offered by such competing providers either exclusively over their own telephone exchange service facilities or predominantly over their own telephone exchange service facilities in combination with the resale of the telecommunications services of another carrier. For the purpose of this subparagraph, services provided pursuant to subpart K of part 22 of the Commission's regulations (47 C.F.R. 22.901 et seq.) shall not be considered to be telephone exchange services.

In its review of the Ameritech-Michigan's Section 271 application, the FCC disaggregated the Track A requirement into four sub-parts.[2] In this application, which is instructive to review, the FCC found that Ameritech satisfied Track A. The FCC's four-part Track A analysis consisted of the following:

1. Existence of one or more binding agreements that have been approved under Section 252.

2. Provision of access and interconnection to unaffiliated competing providers of telephone exchange service.[3]

3. Provision of telephone exchange service to residential and business subscribers somewhere in the state.

4. Offer by competing providers of telephone exchange service either exclusively or predominately over their own telephone exchange service facilities in combination with resale.

In the following sub-sections I establish that U S WEST satisfies each of these aspects of the Ameritech-Michigan decision.

Binding Interconnection Agreements

U S WEST has entered into numerous binding interconnection agreements, approved by the Commission pursuant to Section 252 of the 96 Act. As of this filing, the Commission has approved 29 wireline agreements, 15 wireless and

---

[2] The FCC released its Memorandum Opinion and Order in CC Docket No. 97-137 (Ameritech-Michigan Order) on August 19, 1997. Although the FCC denied Ameritech's Section 271 Application, it found that Ameritech had fully satisfied the Track A requirement.

[3] It is also significant that the FCC recognized that Congress prohibited it from requiring any specific level of geographic penetration by a competing provider and imposing a geographic scope requirement. In other words, the Act prohibits imposition of a market share loss test.

1 paging agreements and 29 resale agreements.[4] Several additional agreements
2 are pending Commission approval. Attached Exhibit WGA-6 lists the approved
3 interconnection agreements.[5]
4
5 These approved agreements are binding on U S WEST. The FCC concluded in
6 the Ameritech-Michigan Order that agreements approved by a state commission
7 are "binding" and define the obligations of each party.[6] Indeed, U S WEST has
8 implemented the provisions of these agreements. U S WEST has assigned each
9 interconnection agreement to an Account Manager within its Wholesale Markets
10 organization. That Account Manager provides the CLEC with a great deal of
11 information such as the Interconnection and Resale Resource Guide and
12 product and process training class information. The Account Manager also
13 ensures that U S WEST is prepared to accept orders from the CLEC for the
14 various services contained within the interconnection agreement. The affidavit of
15 Mr. Dean Buhler describes this process in greater detail.

---

[4] A "wireline" interconnection agreement generally refers to an agreement that covers facilities-based interconnection, purchase of UNEs and ancillary services, and resale of U S WEST services. A "resale" interconnection agreement generally provides for resale of U S WEST services.

[5] Copies of approved interconnection agreements are publicly available to all interested parties through this Commission. Due to the voluminous nature of these documents, they are not attached hereto; however, U S WEST considers these documents to be a part of this record. For convenience of the parties, U S WEST attaches a summary exhibit (WGA - 6) identifying each such agreement and the docket number where it can be found.

[6] Ameritech-Michigan Order at paragraph 72.

In the Ameritech-Michigan decision, several parties argued that Ameritech's agreements did not satisfy Track A because not every checklist element was contained within each approved agreement. The FCC dismissed this argument and determined that Track A does not contain such a requirement.[7] Moreover, in addition to the 80 interconnection agreements, U S WEST has also submitted an SGAT, a comprehensive document which contains each checklist item. U S WEST relies of all of these documents as the basis for its 271 application.

There are also several additional companies that are planning to provide local exchange service, and therefore are actively negotiating interconnection agreements with U S WEST in Arizona. Currently there are 7 additional agreements pending before the Commission for approval. Three of these agreements are for resale, and four are for wireline services. Exhibit WGA-7 lists the completed agreements that are pending Commission approval.

In summary, U S WEST has entered into numerous binding and approved interconnection agreements pursuant to Section 252 of the Act and more will be completed in the near future.

Unaffiliated Competing Providers

U S WEST provides access and interconnection to unaffiliated competing providers of telephone exchange service. All 80 Commission approved or pending interconnection agreements are with unaffiliated CLECs in Arizona.

The FCC determined that a CLEC qualifies as a "competing provider" so long as it provides service "somewhere in the state."[8] The FCC found that Track A does not impose minimum geographic scope requirements before CLECs are deemed competing providers. No set market share losses are required. The FCC rejected arguments that the majority of customers in the state must have a choice of local service provider.[9]

U S WEST is offering and providing access and interconnection to AT&T/TCG. The combined AT&T/TCG operation is the largest CLEC fiber network in the state and is connected directly to approximately 150 single and multi-tenant buildings - mostly located in Phoenix and Tucson, and serving business customers. U S WEST 's network interconnects with TCG's 11 self-healing SONET rings and 300 route miles of fiber. U S WEST's access and interconnection allows TCG to provide business focused, interconnected

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[7] Ameritech-Michigan Order at paragraph 72.

[8] Ameritech-Michigan Order at paragraph 76.

[9] Ameritech-Michigan Order at paragraphs 77 and 78.

services in the following communities: Downtown Phoenix, Sky Harbor International Airport, Chandler, Mesa, Tempe, Paradise Valley, Scottsdale, Tolleson, and Glendale. AT&T/TCG also purchases resale lines, white page listings, directory assistance, and operator services from U S WEST.

U S WEST is offering and providing access and interconnection to the combined MCI/WorldCom and Brooks Fiber. In Phoenix, WorlcCom's fiber network has been interconnected with U S WEST since 1995. It has expanded significantly over the intervening years and stretches 75 miles in the Phoenix MSA. WorldCom's network currently covers Downtown Phoenix, Camelback Road/Indian School road areas between Central Avenue and 46th Street, Lincoln Road, Sky Harbor International Airport, Van Buren Street, and Tempe. Prior to its merger with WorldCom, MCI built its own fiber network in Phoenix's central business district. MCI WorldCom targets primarily business customers in Phoenix and Tempe. Brooks Fiber first began reselling U S WEST's local service in Tucson in 1996. It enhanced its offerings by installing its switch in 1997 and now provides a mixture of resold and facilities-based services. Brooks' network in Tucson consists of several SONET rings and connects to over 40 buildings. The combined MCI/WorldCom and Brooks Fiber offers a little bit of everything. Although facility-based services make up their predominant offerings

1 in Arizona, they also purchase resale lines, unbundled loops, white page listings,
2 directory assistance, and operator services from U S WEST.
3 U S WEST is offering and providing access and interconnection to Electric
4 Lightwave, Inc. (ELI). ELI focuses on business customers and was one of the
5 first CLECs in Arizona, turning up service in 1994. ELI has expanded its network
6 capabilities significantly since that time. ELI leases dark fiber from the Salt River
7 Project giving it more than 400 route miles that provide facilities-based service to
8 Phoenix, Tempe, Scottsdale, Chandler, Gilbert and other areas. ELI has 30 to
9 45 buildings on its network and claims to have invested $37 million in new
10 facilities in Phoenix alone. ELI is an aggressive competitor whose
11 advertisements encourage business subscribers to switch their local services
12 from U S WEST to ELI.
13
14 U S WEST is offering and providing access and interconnection to GST. GST
15 has approximately 300 route miles of fiber in Arizona, including a long haul link
16 between Tucson and Phoenix. GST is certified to provide both facilities-based
17 and resold services. We estimate that GST has 15 - 25 buildings connected to
18 its network and primarily provides business services.
19
20 U S WEST is offering and providing access and interconnection to Cox
21 Communications. Cox is aggressively providing competitive local exchange
22 services to the residential market and also serves smaller business customers in

1 the extended Phoenix metro area. In 1997, Cox announced its plans to invest
2 $500 million to upgrade its cable network in Phoenix, which has allowed further
3 expansion of its telephony offerings. Cox has gone door to door and sent direct
4 mail pieces to its cable customers encouraging them to become Cox local and
5 long distance telephone service subscribers. Cox provides local telephone
6 service to its cable TV customers for $11.75/month for the first line and
7 $6.50/month for additional lines and expects to have service available to 400,000
8 homes by the end of 1999. Cox has had significant success in reaching
9 agreements with multiple dwelling unit (MDU) owners and, as a result, is the
10 exclusive provider of telecommunications services to thousands of MDU
11 residents in many large complexes. Cox owns its own switch, interconnects with
12 U S WEST, uses white page listings and relies heavily on number portability
13 service so it can switch customers to its local service without requiring the
14 customer to obtain a new telephone number.
15
16 U S WEST is offering and providing access and interconnection to e.spire™,
17 which has been offering local switched services for two years. e.spire™ appears
18 focused on the Tucson area where it offers a product line similar to that of
19 U S WEST. e.spire™ and has nearly 120 route miles of optical fiber, and touts
20 its ability to "do it all," offering customers the simplicity and convenience of a
21 single point of contact and one bill. This is exactly what customers say they want
22 and what U S WEST seeks to provide.

1 In addition to the above facility-based providers, U S WEST is providing service
2 for resale to One Point, Arizona Dial Tone, Reconex, Telstar Telcom and others.
3 One Point serves primarily the residential market and has advertised that it will
4 become facilities-based later this year. Arizona Dial Tone offers resold services
5 to business customers in the Phoenix and Tucson metro areas. Reconex
6 (Sterling International) and Telstar Telcom target residential markets primarily in
7 the Phoenix metro area.
8
9 Despite all of this competition, U S WEST's opponents will argue that it is still not
10 enough. While acknowledging that there is marketplace loss, they will still assert
11 that not enough subscribers in Arizona have competitive choices and that not
12 enough customers have left U S WEST for a CLEC's competing service. These
13 arguments must be summarily rejected for the same reasons the FCC rejected
14 them in its Ameriech-Michigan decision. The FCC found that Track A does not
15 allow it to impose a market share loss test.[10] The FCC noted that the Senate
16 and House each rejected proposed language in the Act that would have allowed
17 the FCC to impose some type of market share loss requirement. According to
18 the FCC:

19 The Senate rejected an amendment that would have required the
20 presence of competing carriers "capable of providing a *substantial*
21 number of business and residential customers with telephone

[10] Ameritech-Michigan Order at paragraph 77.

> exchange or exchange access service" prior to in-region interLATA entry by the BOC.
>
> The House also rejected a scale and scope requirement for local competition ..... in its bill, which became section 271. When it considered the bill, the House adopted an amendment that eliminated the "comparable in price, features, and scope" language.[11]

Competing providers need only be in the market and operational. In other words, they need only be accepting requests for service and providing service for a fee.[12] AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber, and e.spire™ all meet this requirement.

Residential and Business Subscribers

Numerous CLECs are providing telephone exchange service to residential and business subscribers in Arizona. As discussed above, facilities-based carriers, including AT&T/TCG, MCI WorldCom, ELI, GST, Brooks Fiber, e.spire™, and others are currently providing telephone exchange service to a number of small, medium and large business subscribers in Arizona. These CLECs have chosen to offer services in the central business districts of Phoenix and Tucson as well as the surrounding areas. These areas are the most profitable (and least costly) to serve and contain a high concentration of medium to large businesses. Cox is currently offering and providing facilities-based residential telephone service to

[11] Ameritech-Michigan Order, footnote 170.

[12] Ameritech-Michigan at paragraph 78.

many customers located in the densely populated areas where it has cable TV franchises such as Phoenix and Chandler. One Point, Reconex and Telstar are offering resale residential services in many of the same areas. For the most part, U S WEST is left to fulfill its carrier of last resort obligations in the outlying areas, and to provide service to customers who are more expensive to serve. Significantly, none of these competitors offers its services to all of U S WEST's customers in any Arizona exchange.

The competition developing in Arizona is spearheaded by companies that own their own facilities over which they serve local customers. AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber, e.spire™ all have fiber networks, or access to networks that are strategically positioned in the metropolitan markets.

It is important to note that AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™ are all emphasizing packaging or bundling of services, including local service, long distance service, features, data, and internet service. These packages are aggressively priced. For example, as mentioned above, Cox offers its first residential telephone service line for $11.75/month and additional lines for just $6.50/month. Cox also offers "Worldwide Long Distance" and points out in its advertising that U S WEST cannot provide this service. Dr.

1 Harris provides additional details about the status of Arizona competition in his
2 affidavit.
3
4 Our opponents may argue that no single facilities-based carrier is providing
5 service to a substantial number of both business and residence subscribers.
6 This objection, however, has already been rejected by the FCC, which concluded
7 that Track A requirement can be met by one, two, or more carriers if they
8 collectively serve both residential and business customers.

9 We conclude, for the reasons stated below, that this aspect of section
10 271(c)(1)(A) is met if multiple carriers collectively serve residential and
11 business customers.[13]
12

13 Therefore, Cox primary focus on U S WEST's residential customers coupled with
14 the other CLECs primary focus on U S WEST's business customers satisfies
15 Track A. In its Ameritech-Michigan analysis, the FCC noted that requiring a
16 single CLEC to serve both residential and business customers is not necessary
17 to further Congress' objectives.
18

19 **Service Over Their Own Facilities**

20 As explained above, many CLECs are providing local exchange serviced
21 primarily over their own facilities in combination with resale. In the Ameritech-

[13] Ameritech-Michigan Order at paragraph 84.

1 Michigan analysis, the FCC clarified that unbundled network elements (UNEs)
2 purchased from a BOC (U S WEST in Arizona) constitute a CLEC's own
3 telephone exchange service facilities for purposes of Track A.[14]
4
5 According to the FCC, interpreting "own telephone exchange service facilities" to
6 include UNEs will further Congress' objective of opening the local exchange
7 market to competition. Congress sought to ensure that CLECs would be able to
8 take advantage of any, or all three, of the entry strategies established by the 96
9 Act: 1) resale, 2) unbundled network elements, and 3) construction of new
10 facilities, without disadvantaging one approach compared to another.[15] All three
11 methods are currently employed by CLECs in Arizona.
12
13 In Ameritech-Michigan, the FCC determined that one or more CLECs offering
14 service exclusively or predominately over their own facilities satisfied this Track A
15 sub-part requirement. The FCC went on to clarify that it need not determine if
16 other (or all) CLECs also offer service exclusively or predominately over their
17 own facilities. In other words, once the sub-part was met for the first individual or
18 combination of CLECs, the FCC determined there was no need to determine if
19 the requirement held for each and every CLEC.[16]

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[14]Ameritech-Michigan Order at paragraph 94.

[15] Ameritech-Michigan Order at paragraph 99.

[16] Ameritech-Michigan Order at paragraph 104.

1 AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™ all
2 provide telephone exchange service either exclusively or predominately over
3 their own facilities in Arizona. The fact that there are also a number of pure
4 resellers (One Point, Arizona Dial Tone, Reconex, Telstar Telcom and others)
5 operating in the state does not undermine the reality of substantial facilities-
6 based competition.
7
8 In addition to the wireline facilities based competition discussed above, there are
9 several wireless providers also competing with U S WEST for residential and
10 business local exchange service subscribers. AT&T Wireless, Voicestream,
11 AirTouch, Cellular One, Nextel and Sprint PCS are active competitors in the
12 Arizona cellular and PCS wireless market.[17] In its Second Order rejecting
13 BellSouth's Section 271 application for Louisiana, the FCC concluded that some
14 wireless services, specifically PCS services, may be considered for Section 271
15 purposes as Track A facilities-based competition. Based on the FCC's standard,
16 some of these Arizona wireless providers qualify as facilities based competitors
17 to meet the Track A requirement. However, U S WEST is not relying on these
18 providers to make its Track A case, because there are so many qualifying
19 wireline providers as discussed above. The Commission should, therefore,
20 consider this wireless facility-based competition as additional evidence that

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[17] U S WEST also offers a wireless service (U S WEST Advanced PCS) in Arizona.

U S WEST meets the Track A requirements. Clearly, the substantial local exchange competition that exists in many of U S WEST's local markets in Arizona satisfies Track A without considering wireless services. Separate and apart from the Track A issues, though, these wireless providers are an important segment of the competitive landscape in Arizona. Dr. Harris discusses the competitive role of cellular and PCS wireless providers in Arizona and the growing evidence that wireless services are becoming increasingly competitive with traditional wireline services in his affidavit.

CLEC Documentation

Although conservative, U S WEST has substantial evidence available to it about the extent of CLEC operations in Arizona. As stated above, we estimate that CLECs serve more than 35,000 residential and business access lines in Arizona. Of these, nearly half are provided over the CLECs' own facilities, with the remainder provided via resale. These estimates are based on the limited information available to U S WEST regarding competitors business activities in the state. Attached Exhibit WGA - 8 displays U S WEST's most recent estimates of the number of access lines served in aggregate by CLECs in Arizona.

However, as the Commission knows, U S WEST is not privy to detailed customer data, market activities, and market plans, which the CLECs consider proprietary.

The Commission, and ultimately the FCC, need the best and most complete data regarding the extent to which all CLECs have acquired customers and access lines in order to make an informed assessment of competition in the state as well as U S WEST's compliance with Track A. The FCC has made it clear that it prefers data provided by the CLECs, rather than limited estimates provided by the RBOCs. In the Ameritech-Michigan Order the FCC stated:

> We encourage competing LECs, in future section 271 proceedings, to provide to the Commission information about their operations in the relevant state, including the number of access lines served.[18]

The Commission should require all CLECs in Arizona to provide actual numbers of business and residence customers and access lines being served, where they are being served, and their plans for serving additional markets. Only by requesting this data from the CLECs will the Commission be able to obtain a complete and accurate picture of the extent to which U S WEST's competitors have penetrated the local exchange telecommunications service markets. This evidence will verify that U S WEST has satisfied the requirements of Track A, will show how CLECs are competing, what they actually need to in order to compete, as well as the number of customers that CLECs could serve, but choose not to for financial reasons.

[18] Ameritech-Michigan Order, footnote 143

Public Interest

The public interest will be served by allowing U S WEST to offer a full range of services, including intrastate and interstate long distance, to all its customers in Arizona. The CLECs operating in Arizona have responded to the fact that U S WEST's local exchange markets are fully open for competition by offering their own local exchange and long distance services to high profit customers in the Phoenix and Tucson business communities and selected residential markets. Contrary to the CLECs' practice of targeting service offerings for selected customers, U S WEST will make one-stop shopping available to all of its customers in the state. All customers in the state, not just those targeted by U S WEST's competitors, deserve the option of choosing to subscribe to local and long distance service from a single provider.

U S WEST has opened its local exchange markets to competitors as required by the Telecommunications Act of 1996. We know this because AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™ have all chosen to enter a number of local exchange markets and compete with U S WEST for new and existing customers. In the process, U S WEST's competitors have been successful in capturing tens of thousands of customers, and hundreds more are

1 switching to the competitors every day.[19] Many customers, primarily those in the
2 Phoenix and Tucson business communities, are enjoying the opportunity to
3 choose from among several competing providers of local exchange and long
4 distance services. These customers can choose to get all of their
5 telecommunications services – local, long distance, and data services - from a
6 single provider (excluding U S WEST), or they can choose to spread their
7 purchases among several providers.
8
9 There is another side to the competitors' entry strategies, however, that is not
10 serving the public interest very well. Many Arizona customers do not have the
11 ability to choose a single provider in spite of the fact that the local exchange
12 markets are fully open to competitors. These "no choice" customers are located
13 in geographical areas that AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks
14 Fiber and e.spire™ have all apparently decided are not attractive to serve at this
15 time. And since the interLATA market is not yet fully competitive, U S WEST is
16 excluded from offering these customers the flexibility of one stop shopping, even
17 though no other carrier appears to be willing to do so.
18

[19] During the latest three month period, (December, 1998 thru February, 1999) number portability was used to transfer more than 27,000 telephone numbers from U S WEST to its competitors. Margaret Bumgarner discusses number portability details in her affidavit.

1 U S WEST is prepared to give all of its customers the opportunity to select a full
2 service provider (local and long distance) and enjoy one stop shopping if the
3 customer so chooses. This additional level of service and choice is clearly in the
4 public interest. The Commission should support and indeed, encourage,
5 U S WEST's interLATA entry to assure that all Arizona customers share in the
6 benefits of competition. There is no reason to continue to disadvantage certain
7 customers in the state simply because competitors find some markets less
8 attractive than others. U S WEST has done its part to encourage competition in
9 the state by opening all local exchange markets, even though AT&T/TCG, MCI
10 WorldCom, ELI, GST, Cox, Brooks Fiber, e.spire™ and others have not chosen
11 to enter all markets. Once U S WEST is allowed to enter the interLATA markets
12 as contemplated by the Act, the public interest will be served and all customers
13 in the state will have a one stop shopping choice. No longer will some
14 telecommunications consumers be "no choice" customers.
15
16 If U S WEST is not afforded an opportunity to be a viable full service competitor,
17 there is a risk of creating a second-rate network and service options for
18 customers that only U S WEST serves in the less competitive areas of Arizona;
19 the higher cost customers - those customers who are not attractive to CLECs.
20 Local exchange carriers that want to be healthy, viable companies, need to offer
21 what customers want - attractive packaging of local service, intraLATA long
22 distance, and interLATA long distance, calling features, data services, Internet

1 connectivity and other choices. U S WEST's competitors can do that today and
2 have chosen to do so in some markets. All U S WEST seeks is an opportunity to
3 compete in the same way. The public interest is not served if U S WEST
4 continues to be prevented from 1) entering the interLATA long distance markets,
5 2) packaging services to meet customer needs, and 3) being allowed to fully
6 compete for its own high margin customers wherever they are located.
7
8 Competition in the local exchange market does not mean that, in fact, all
9 customers will be offered a choice of facilities based providers of local exchange
10 service. Competing providers of local exchange service are only going to offer
11 their services to those customers that they find most lucrative. Those customers
12 will be determined by their location and by their demand for telecommunications
13 services. The small customer, the customer who is expensive to serve, or the
14 high risk customer will not be offered a competing local exchange service, other
15 than perhaps the resale of U S WEST's services.
16
17 The entry by AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and
18 e.spire™ into U S WEST's local exchanges provides a clear view of the future.
19 U S WEST's competitors are targeting customers who are most profitable to
20 serve, and will gladly let U S WEST continue to provide exchange services to the
21 low (or negative) margin customer who is expensive to serve. If U S WEST is
22 prevented from competing in the interLATA markets, its customer base will

1 quickly become the high cost, low revenue exchange service customers which
2 no one else wants to serve.
3
4 LATA restrictions which apply only to U S WEST are a constant and significant
5 barrier to it efficiently meeting customer needs. Unfortunately, this often
6 adversely affects the most desirable sectors of the market, or any other customer
7 who needs to connect multiple locations throughout the state. U S WEST faces
8 these barriers every day. Many customers do not understand why these LATA
9 problems exist, and they usually result in higher customer cost.
10
11 As Dr. Harris will explain in great detail, the entry of U S WEST into the
12 interLATA market will serve the public interest by encouraging competition not
13 only in the interLATA market, but the intraLATA market and the local exchange
14 markets as well. The market dynamics are similar for everyone. If U S WEST is
15 allowed to aggressively compete in all market segments, it will be much harder
16 for AT&T, MCI, Sprint, and the other interexchange carriers (IXCs) to remain
17 aloof from the residential local exchange market, or to maintain artificially high
18 margins in their traditional interLATA market segments.
19
20 It is essential that both the deliberations of this Commission and the FCC reflect
21 the realities of Arizona, not a competitive model developed with the densely
22 populated eastern seaboard in mind. Many parts of Arizona are rural, with a low

population density. These areas are expensive to serve for any local telephone provider and U S WEST should not be denied the interLATA markets simply because these areas do not yet have competitive alternatives for local exchange service. Aggressive competition from AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™ is already occurring in the Phoenix and Tucson metropolitan areas and the customers in these areas represent a significant portion of U S WEST's Arizona operations and revenues. The U S WEST application to enter the interLATA business in Arizona must be considered in light of these realities. The very vitality of the process is at stake, as noted in a statement by FCC Commissioner Powell:

> Cookie-cutter solutions that ignore the economic, regulatory and technical context in which each applicant operates may unduly burden BOCs or deprive new entrants of a fighting chance to compete for local exchange customers, and I seriously question whether such national solutions would be consistent with the state-by-state application process contemplated by section 271. I am also concerned that if we do not tailor checklist solutions to particular States or regions, we may overlook small and mid-sized competitors, whose competitive activities and successes all too often are drowned out by the chorus of larger companies that constantly serenade those of us within the Beltway.[20]

It is not in the public interest to continue to keep U S WEST out of the interLATA markets in Arizona. U S WEST 's competitors are taking advantage of this restriction at a time when the Arizona telecommunications market is expanding.

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[20] (FCC Press office called an "Essay" released by Powell on January 15, 1998, titled: WAKE UP CALL: FCC COMMISSIONER MICHAEL POWELL CALLS FOR NEW "COLLABORATIVE APPROACH" TO SECTION 271 APPLICATIONS)

Unless the interLATA restriction is lifted, many Arizona customers will not have the choices promised them when Congress passed the Act in 1996. The Commission should find that the public interest will be served if U S WEST is allowed to compete on equal footing with other full service providers such as AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™.

Interconnection and Wholesale Prices

The Commission has already conducted an extensive consolidated cost investigation to establish permanent interconnection and UNE prices as well as avoided cost discounts. That docket consolidated and resolved pricing issues from the separate arbitration petitions of MCImetro, Brooks Fiber, Sprint Communications, GST, Cox Telecom, ACSI, AT&T, MFS and TCG. The Commission decision dated January 8, 1998 in Docket No. U-3021-96-448 et. al. was the conclusion of the process. As stated in its Order, the primary focus of the consolidated cost proceeding was:

(1) to establish permanent prices for the unbundled loop and network elements, and

(2) to establish a permanent discount rate for the resale of any telecommunications service.

The Commission concluded that its resolution of the pricing issues was "just and reasonable, consistent with the Act, the FCC Order and Rules, the Commission's Rules, and all applicable law, and is in the public interest."

The Act states that prices for interconnection, UNEs, and resold services must be established in accordance with Section 252 of the 96 Act.[21] Except where specific pricing provisions are referenced, many checklist items do not contain explicit pricing standards. Pursuant to Section 252 of the Act, rates for interconnection and items determined to be network elements under Section 251(c)(3) must be based on cost and may include a reasonable profit. The rates for resold services must be based on U S WEST's retail rates excluding cost of marketing, billing, collection and other costs avoided when selling resale rather than retail. The relevant language from Section 252 is as follows:

> INTERCONNECTION AND NETWORK ELEMENT CHARGES. - Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section -
> (A) shall be –
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and
> (ii) nondiscriminatory, and
> (B) may include a reasonable profit.
>
> and,
>
> WHOLESALE PRICES FOR TELECOMMUNICATIONS SERVICES - For purposes of section 251 (c) (4), a State commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the

[21] The U.S. Supreme Court's decision on the FCC's Common Carrier Docket 96-98 Order "carrier interconnection" will force the FCC to revisit its list of UNEs and will require the Eight Circuit to address long standing issues surrounding TELRIC pricing rules. The outcome of these proceedings will likely impact future costing and pricing decisions for interconnection and wholesale prices.

portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by the local exchange carrier.

The interconnection and wholesale prices available to U S WEST's competitors in Arizona in approved interconnection agreements and in the recently filed SGAT are generally consistent with the Commission's Order and the Act as currently refined by the recent United States Supreme Court decision. Issues regarding pricing of specific checklist elements are addressed in other affidavits and in the SGAT. The Commission should find that U S WEST has satisfied the requirements for interconnection, UNEs and wholesale prices and should so advise the FCC when U S WEST files its Section 271 Application for Arizona.

Other U S WEST Affidavits and SGAT

U S WEST is making or will make available all the required checklist elements. The fourteen point checklist is as follows:

i. Interconnection in accordance with Sections 251 and 252;
ii. Non-discriminatory access to network elements;
iii. Non-discriminatory access to poles, ducts, conduits and rights of way;
iv. Unbundled local loops;
v. Unbundled local transport;
vi. Unbundled local switching;
vii. Non-discriminatory access to 911, directory service and operator services;
viii. White pages directory listings;
ix. Non-discriminatory access to telephone numbers;
x. Non-discriminatory access to databases and signaling;
xi. Number portability;
xii. Local dialing parity;
xiii. Reciprocal compensation;
xiv. Resale of telecommunications services in accordance with Sections 251 and 252.

1 Affidavits are being filed on behalf of U S WEST as part of this proceeding that
2 address the full range of interconnection checklist and other Section 271
3 requirements. The list below identifies each U S WEST affiant and the subject
4 areas that he or she will address:
5
6 **Affiant: Robert G. Harris**
7 Subject Area: Public Policy objectives and an economic assessment of three
8 areas associated with U S WEST's entry into long distance: competition, public
9 interest and regulatory safeguards. Dr. Harris recommends that the Commission
10 support U S WEST's request to enter the interexchange market. This is based on
11 Dr. Harris' findings that the local markets in Arizona are open to competition,
12 U S WEST will inject valuable added competition into the interLATA market, and
13 there is no substantial possibility that U S WEST's entry into the interLATA market
14 would harm interLATA competition.
15
16 **Affiant: Michael J. Wiedenbach**
17 Subject Areas: Mr. Wiedenbach discusses and concludes that U S WEST has met
18 the following specific checklist items:
19 • **Competitive checklist item (i)** – Interconnection and collocation;
20 • **Competitive checklist item (iii)** – Access to poles, ducts, conduits and rights
21 of way;
22 • **Competitive checklist item (xiii)** - Reciprocal Compensation.

Affiant: Karen Stewart

Subject Areas: Ms. Stewart discusses and concludes that U S WEST has met the following specific checklist items:

- **Competitive checklist item (ii)** - Access to unbundled network elements;
- **Competitive checklist item (iv)** - Access to unbundled loops;
- **Competitive checklist item (v)** – Access to local transport;
- **Competitive checklist item (vi)** – Access to local switching.

Affiant: Lori Simpson

Subject Area: Ms. Simpson discusses and concludes that U S WEST has met the following specific checklist items:

- **Competitive checklist item (vii)(II)** - Directory assistance;
- **Competitive check list item (vii)(III)** - Operator call completion services;
- **Competitive checklist item (viii)** - Directory listings;
- **Competitive checklist item (xiv)** - Resale.

Affiant: Margaret Bumgarner

Subject Areas: Ms. Bumgarner discusses and concludes that U S WEST has met the following specific checklist items:

- **Competitive checklist item (vii)(I)** - Access to 911 and E911 services;
- **Competitive checklist item (ix)** - Number administration;
- **Competitive checklist item (x)** – Access to signaling and databases;

- **Competitive checklist item (xi)** - Interim number portability;
- **Competitive checklist item (xii)** - Dialing parity.

Affiant: Teresa Million

Subject Area: Ms. Million demonstrates through her testimony that U S WEST Communications is meeting the separate subsidiary requirements of Section 272 of the Act.

Affiant: Judith Brunsting

Subject Area: Ms. Brunsting demonstrates through her testimony that U S WEST Long Distance is meeting the separate subsidiary requirements of section 272 of the Act.

Affiant: Dean Buhler

Subject Area: Mr. Buhler demonstrates that U S WEST provides nondiscriminatory access to Operational Support Systems (OSS) functions.

Affiant: Mike Williams

Subject Area: Mr. Williams demonstrates through his affidavit that, for those checklist items to which service performance indicators apply, U S WEST has the requisite performance data. Further, U S WEST has in place, or under near term development, service performance indicators that can verify compliance.

SGAT (Statement of Generally Available Terms and Conditions)

On February 5, 1999, U S WEST filed a Statement of Generally Available Terms and Conditions (SGAT), which is the focus of a separate docket before the Commission. As contemplated in the Act, U S WEST requested that the Commission approve the SGAT within 60 days of the filing. Exhibit WGA - 9, is a copy of the filed SGAT. Specific issues regarding the SGAT are addressed in the affidavits of the checklist witnesses.

Conclusion

U S WEST has opened its local exchange markets to competition. The presence of more than 70 established interconnection and resale agreements that satisfy the Track A is evidence of this. These agreements have allowed CLECs to enter the local market in Arizona either on a resale basis or as a facilities-based provider through interconnection and/or the purchase of unbundled network elements. The many CLECs, including AT&T/TCG, MCI WorldCom, ELI, GST, Cox, Brooks Fiber and e.spire™, who are operating pursuant to Commission approved agreements with U S WEST are providing service to substantial numbers of residential and business customers in the greater Phoenix and Tucson metropolitan areas. The agreements provide for cost-based pricing of access, interconnection and unbundled network elements and for wholesale discounts to reflect avoided costs.

1 I believe that the next step in completing Arizona's competitive landscape and
2 enhancing the public interest is to fully open the interLATA market by allowing
3 U S WEST to provide interLATA services. The Commission can assist this
4 process by advising the FCC that U S WEST satisfies the competitive checklist
5 in Arizona and by recommending that the FCC approve U S WEST's Section 271
6 application when filed. Furthermore, the Commission should advise the FCC
7 that it is in the public interest for U S WEST to enter the interLATA market in
8 Arizona.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN

TONY WEST
COMMISSIONER

CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**Docket No. T-00000B-97-0238**

EXHIBITS OF

Wayne G. Allcott

March 25, 1999

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DESCRIPTION	EXHIBIT
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List of Pending Interconnection Agreements	WGA - 7
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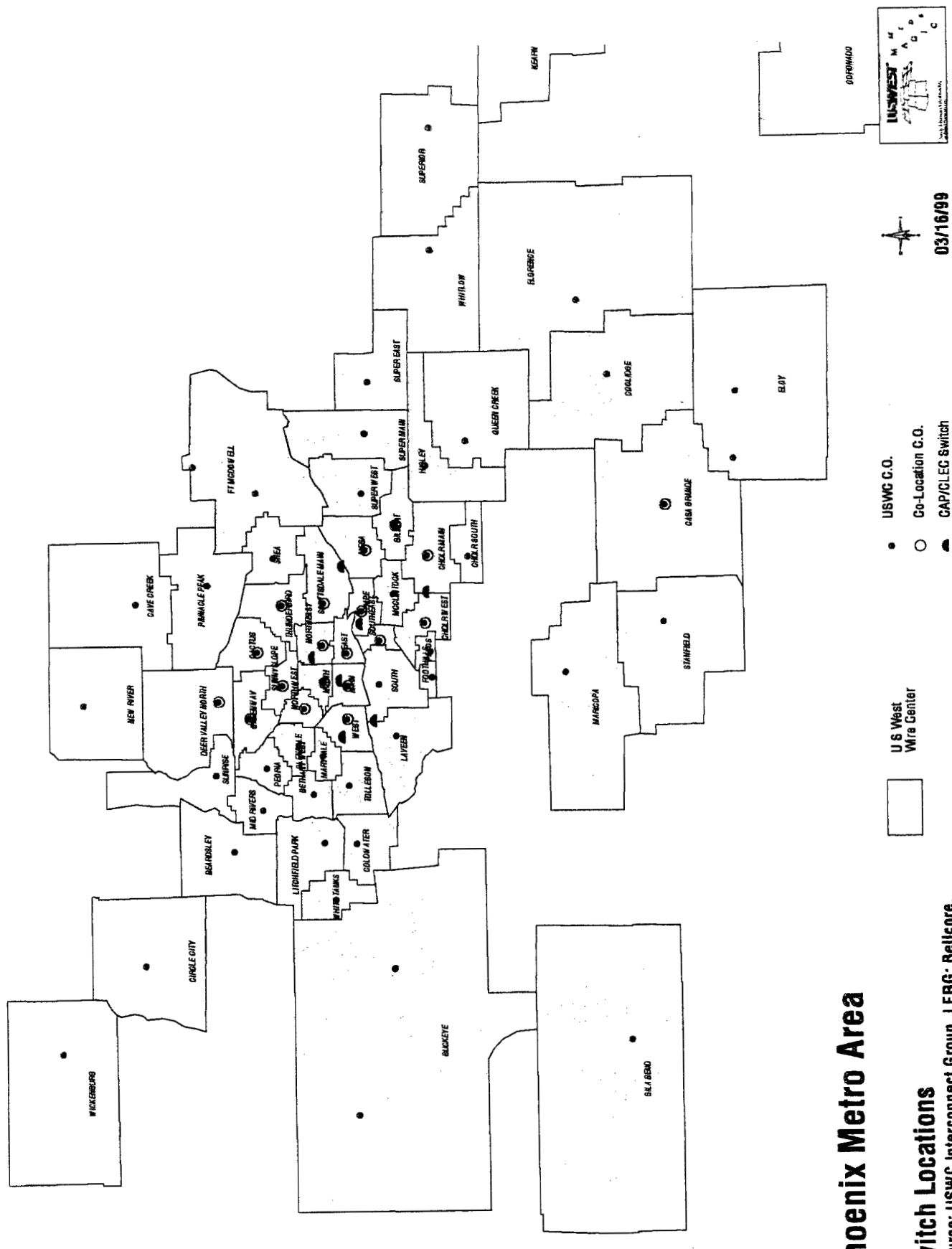
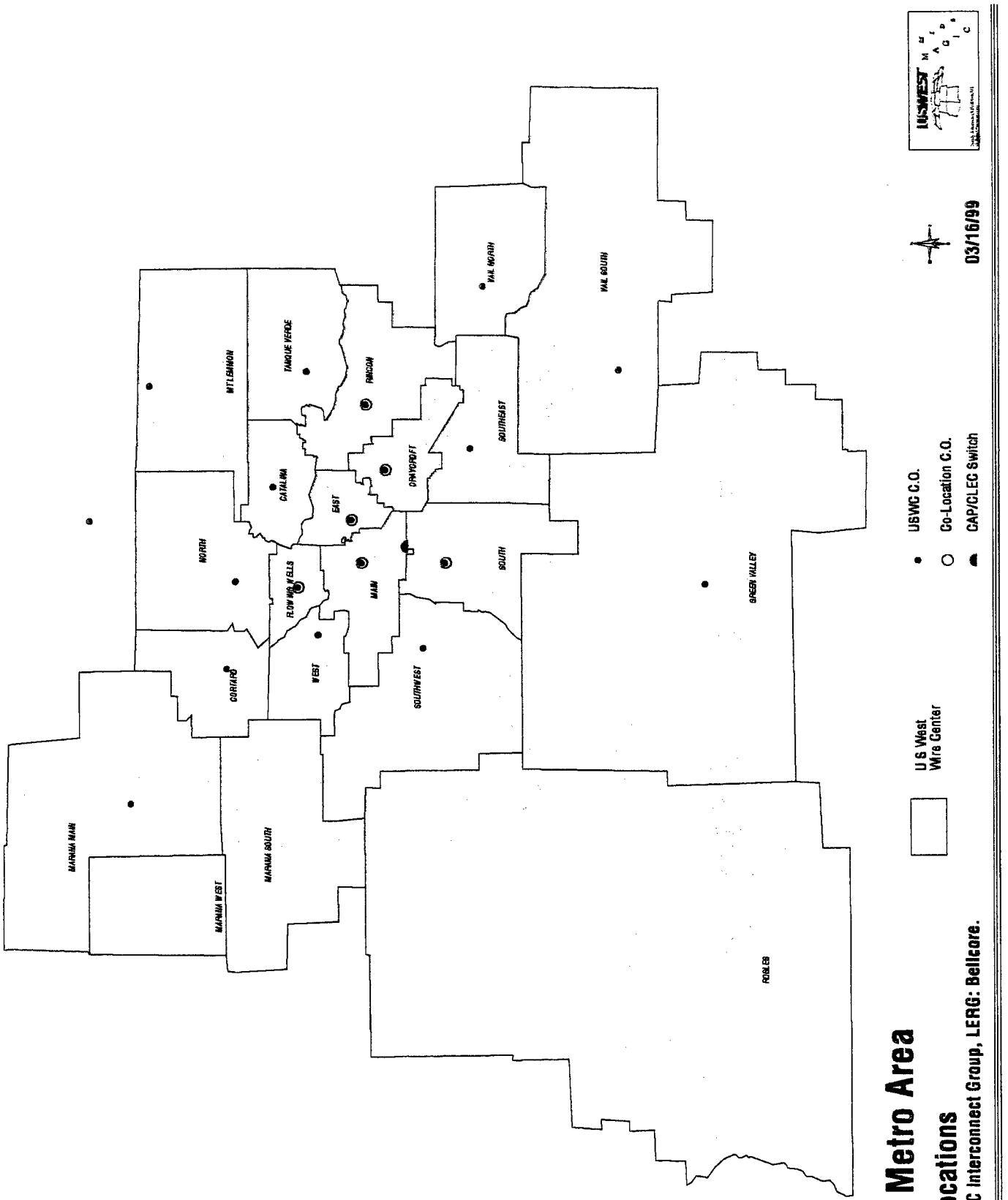

Phoenix Metro Area
Switch Locations
*Source: USWC Interconnect Group, LERG: Bellcore.
U S West Wire Center
USWC C.O.
Co-Location C.O.
CAP/CLEC Switch
03/16/99
WICKENBURG
CIRCLE CITY
BUCKEYE
GILA BEND
BEARDSLEY
LITCHFIELD PARK
WHITE TANKS
GOLDWATER
MID RIVERS
SUNRISE
DEER VALLEY NORTH
NEW RIVER
CAVE CREEK
PINNACLE PEAK
FT MCDOWELL
TULLEBOM
LAYER
MARICOPA
STANFIELD
CASA GRANDE
ELOY
DOUGLAS
QUEEN CREEK
HOLEY
WHITLOW
FLORENCE
SUPERIOR
KEARNY
DORMADO
USWEST


MARANA MAIN
MARANA WEST
MARANA SOUTH
CORTARO
NORTH
MILLSMOON
TANQUE VERDE
CATALINA
FLOW WATELLS
WEST
EAST
RINCON
ORMWORFT
MAIN
SOUTHWEST
SOUTHEAST
SOUTH
VAIL NORTH
VAIL SOUTH
GREEN VALLEY
ROSLES
U S West Wire Center
USWC C.O.
Co-Location C.O.
CAP/CLEC Switch
03/16/99
Tucson Metro Area
Switch Locations
*Source: USWC Interconnect Group, LERG: Bellcore.

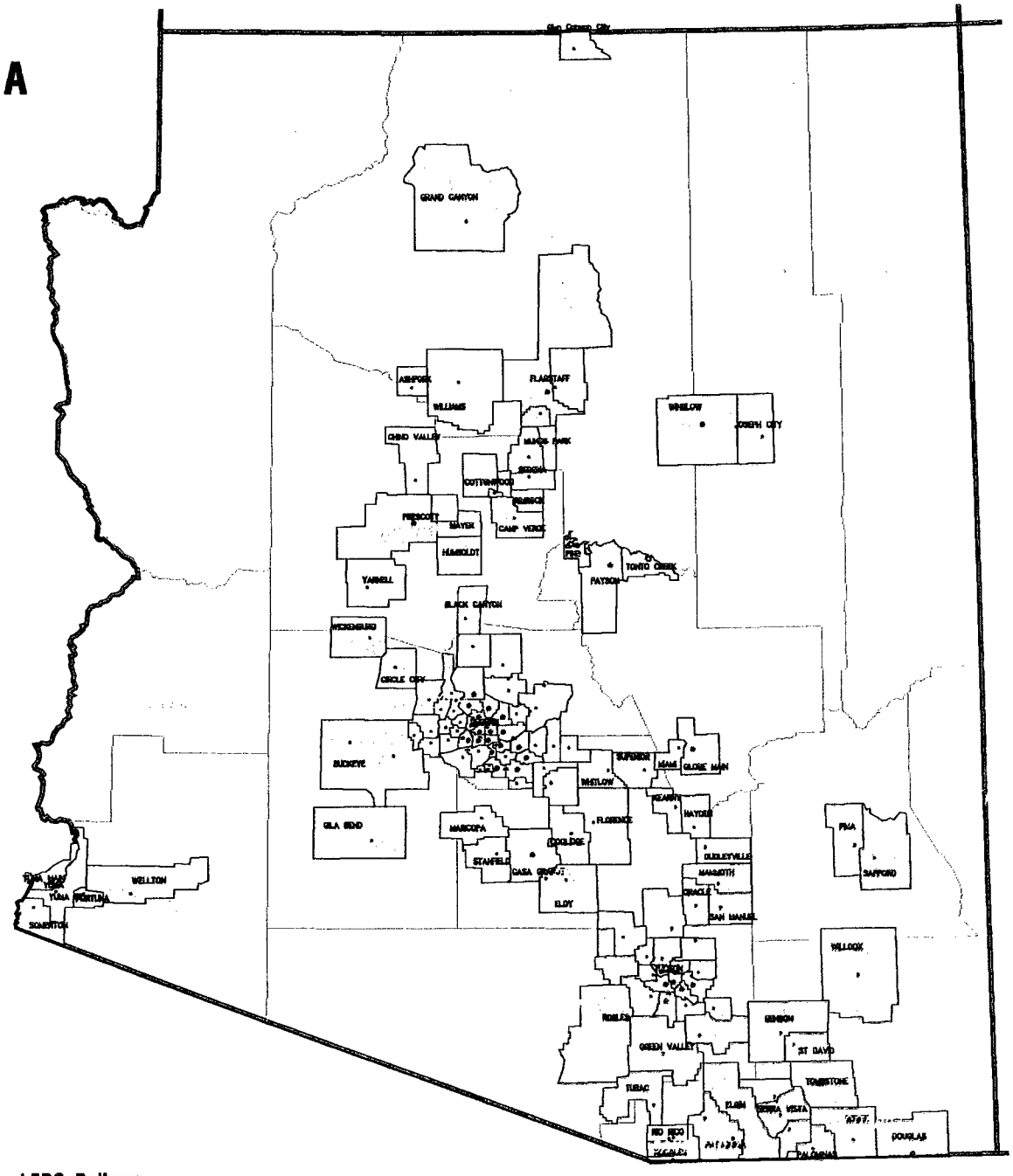
State of ARIZONA

Switch Locations

U S West Wire Center

County

- USWC C.O.
- Co-Location C.O.
- CAP/CLEC Switch

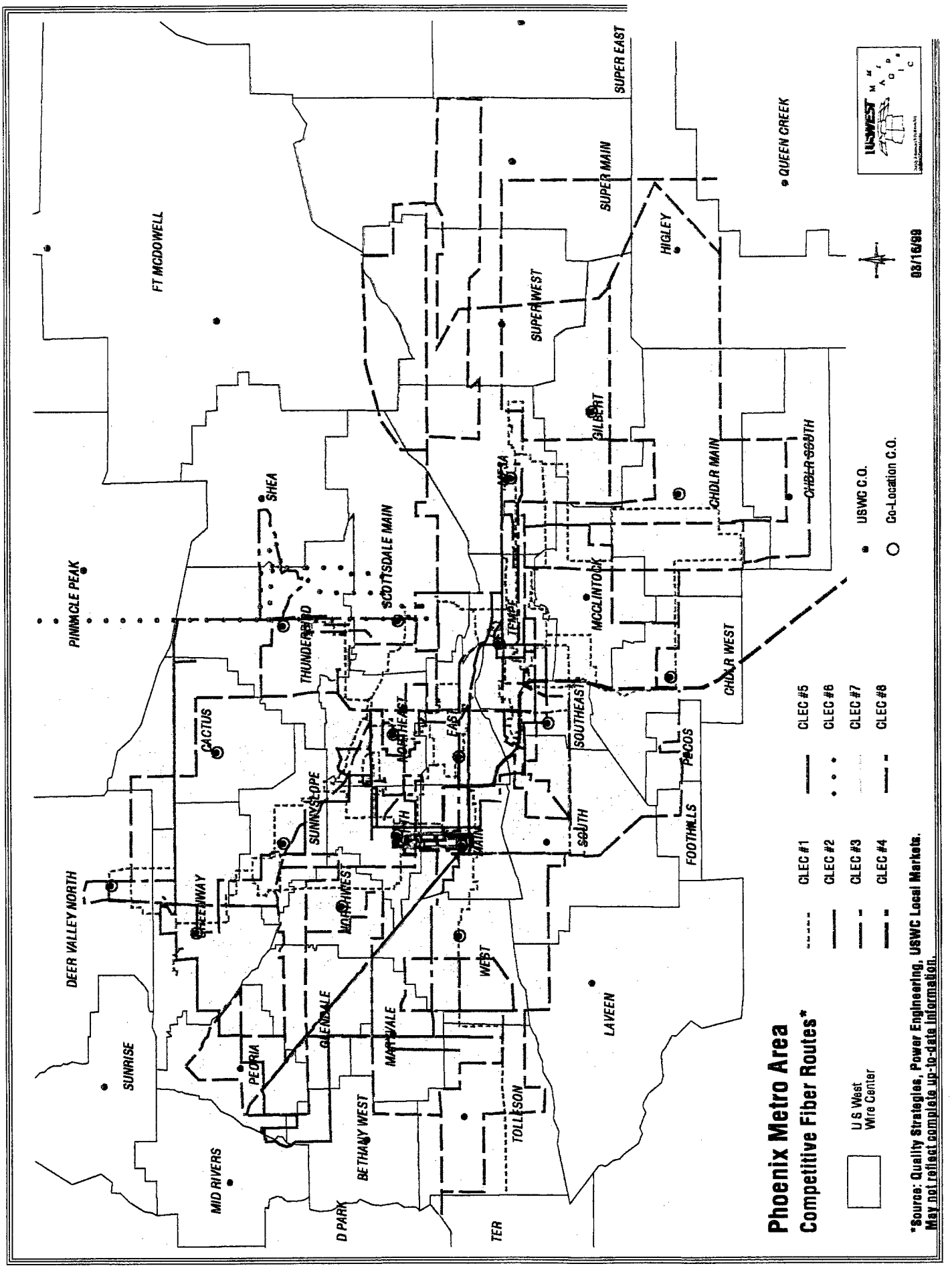


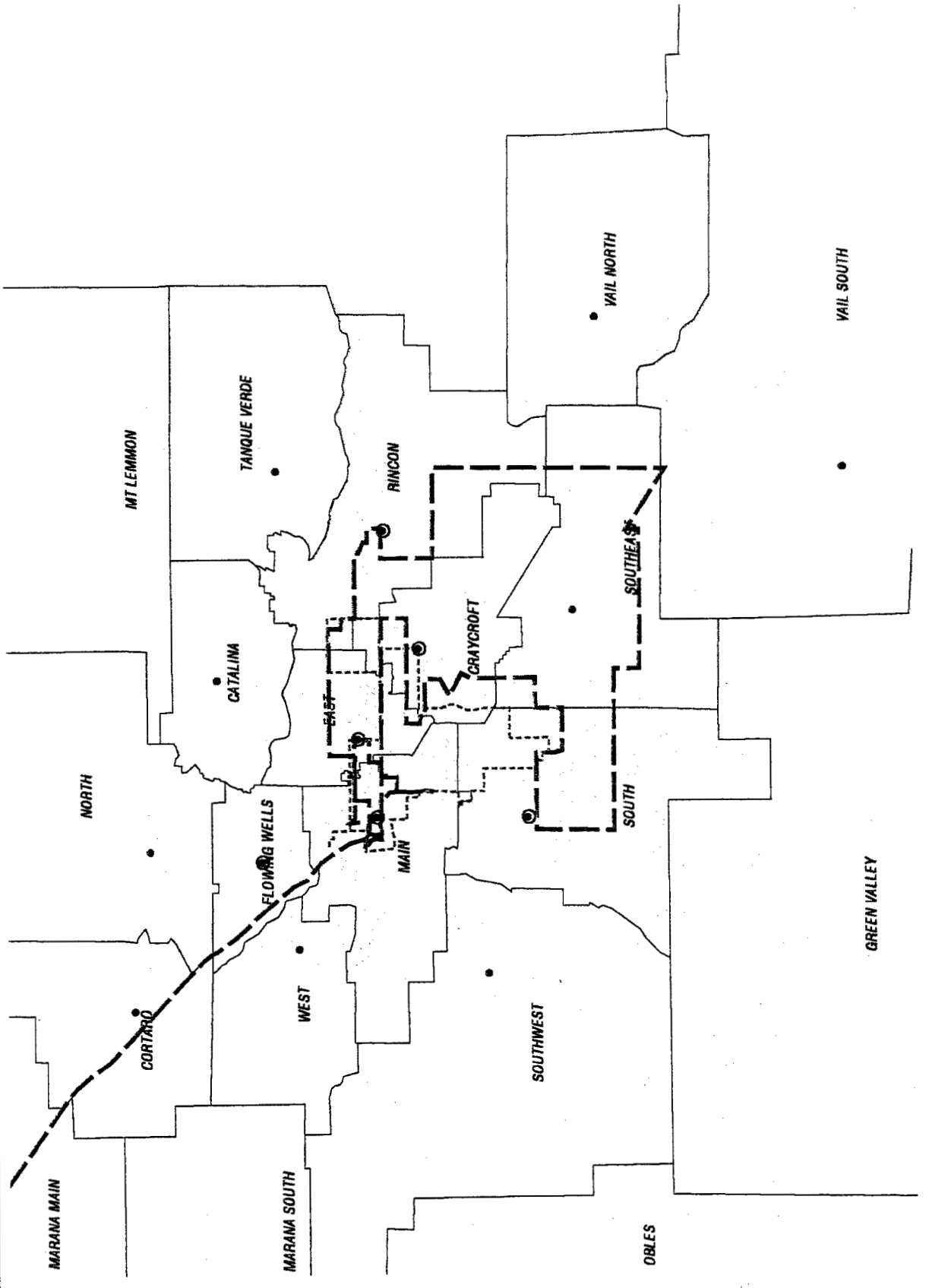
03/16/99

USWEST

*Source: USWC Interconnect Group, LERG: Bellcore.

Arizona Corporation Commission
U S WEST Communications - WGA-3
Exhibits of Wayne G. Allcott
Page 1, March 25, 1999


Phoenix Metro Area
Competitive Fiber Routes*
U S West Wire Center
CLEC #1
CLEC #2
CLEC #3
CLEC #4
CLEC #5
CLEC #6
CLEC #7
CLEC #8
USWC C.O.
Co-Location C.O.
*Source: Quality Strategies, Power Engineering, USWC Local Markets.
May not reflect complete up-to-date information.
03/16/99
FT MCDOWELL
PINNACLE PEAK
DEER VALLEY NORTH
SUNRISE
MID RIVERS
D PARK
TER
SHEA
CACTUS
THUNDERBIRD
SCOTTSDALE MAIN
SUNNYSLOPE
GREENWAY
PEORIA
GLENDALE
MARYVALE
BETHANY WEST
TOLLESON
WEST
LAVEEN
SUPER EAST
SUPER MAIN
SUPER WEST
HIGLEY
QUEEN CREEK
GILBERT
CHDLR MAIN
CHDLR SOUTH
CHDLR WEST
MCCLINTOCK
SOUTHEAST
PECOS
FOOTHILLS
SOUTH
EAST
TEMPE
MESA



Tucson Metro Area
Competitive Fiber Routes*

*Source: Quality Strategies, Power Engineering, USWC Local Markets.
May not reflect complete up-to-date information.

Approved Interconnection Agreements

Effective Date	CLEC	Type	Docket Reference
10/21/1997	Access Network Services Inc.	Resale	T-01051B-97-0389
10/21/1997	Advanced Telecommmunications Inc. (ATI)	Resale	T-01051B-97-0495
02/27/1998	Alternate Communications, Inc.	Resale	T-01051B-97-0730
09/16/1998	Arizona Dialtone Inc.	Resale	T-01051B-98-0365
01/05/1999	BG Enterprises, Inc.	Resale	T-01051B-98-0549
06/19/1998	Buy-Tel Communications	Resale	T-01051B-98-0235
04/08/1998	Choctaw Communications dba Smoke Signals	Resale	T-01051B-98-0038
11/03/1998	Comm South Companies Inc.	Resale	T-01051B-98-0115
08/26/1998	DMJ Communications Inc.	Resale	T-01051B-98-0338
12/16/1998	Easy Phone Inc.	Resale	T-01051B-98-0565
04/08/1998	EZ Talk Communications LLC	Resale	T-01051B-98-0048
04/08/1998	Knight Communications Inc.	Resale	T-01051B-98-0039
02/13/1999	Local Telcom Services	Resale	T-01051B-98-0671
06/19/1998	Max-Tel Communications Inc.	Resale	T-01051B-98-0151
12/21/1997	**Metro Connection d/b/a TransAmerica Telephone Inc.	Resale	T-01051B-97-0510
04/30/1998	Momentum Telcom Inc.	Resale	T-01051B-98-0174
05/27/1998	OnePoint Communications-Colorado LLC	Resale	T-01051B-98-0116
NA*	Preferred Carrier Services	Resale	NA*
07/02/1997	QTEL Inc.	Resale	T-01051B-97-0223
07/16/1998	Quick-Tel Communications Inc.	Resale	T-01051B-98-0236
01/29/1999	Regal Telephone Company	Resale	T-01051B-98-0711
11/23/1997	**Sterling International Funding dba "Reconex"	Resale	T-01051B-97-0455
12/18/1997	Telephone Restorations dba TelNet	Resale	T-01051B-97-0588
09/16/1998	Telstar Communications LLC	Resale	T-01051B-98-0320
04/08/1998	Tin Can Communications Company	Resale	T-01051B-98-0047
04/08/1998	U S Dial Tone Inc.	Resale	T-01051B-98-0040
10/21/1997	US TELCO, Inc.	Resale	T-01051B-97-0370
07/16/1998	United States Telecommunications Inc.	Resale	T-01051B-98-0237
09/16/1998	WEST TEL Communications, LLC	Resale	T-01051B-98-0408
04/30/1998	Interstate Wireless Inc. d.b.a. Handy Page	Type2Page	T-01051B-98-0026
04/30/1998	Pager Promotions Inc.	Type2Page	T-01051B-98-0027
04/08/1998	Touch Tone Interactive, Inc. d.b.a. Banana Communication	Type2Page	T-01051B-98-0020
08/29/1997	AT&T Wireless Services, Inc.	Wireless#2	T-01051B-97-0122
01/01/1997	Century Yuma Cellular Corporation dba Centennial	Wireless#2	T-01051B-97-0227
01/01/1997	CommNet Cellular, Inc	Wireless#2	T-01051B-97-0550
04/30/1998	Nextel West Corp.	Wireless#2	T-01051B-98-0145

*U S WEST had been led to believe that the interconnection agreement between U S WEST and PCS was previously filed with the Commission and allowed to go into effect. On March 23, 1999, U S WEST became aware that the agreement had not been filed by PCS. A commitment has been made to file it expeditiously.

Approved Interconnection Agreements

Effective Date	CLEC	Type	Docket Reference
01/01/1997	New Vector Grp / AirTouch	Wireless#2	T-01051B-97-0293
07/16/1998	PCS Plus Inc. d.b.a. Magnacom Wireless L.L.C.	Wireless#2	T-01051B-98-0291
07/15/1998	Smith Bagley Inc. dba Cellular One of N.E. Arizona	Wireless#2	T-01051B-98-0330
01/01/1997	Southwestco Wireless dba Cellular One	Wireless#2	T-01051B-97-0053
08/29/1997	Sprint Spectrum L.P.	Wireless#2	T-01051B-97-0182
08/29/1997	Triad Utah L.P.	Wireless#2	T-01051B-97-0184
02/09/1998	U S WEST Wireless L.L.C. (Access2)	Wireless#2	T-01051B-97-0675
04/08/1998	Western Wireless Corporation	Wireless#2	T-01051B-98-0121
02/20/1999	ACI Corp.	Wireline	T-01051B-98-0693
09/16/1998	Ameritech Communications International Inc.	Wireline	T-01051B-98-0343
07/31/1997	AT&T	Wireline	T-01051B-96-0478
02/06/1997	Brooks Fiber Communications of Tucson Inc.	Wireline	T-01051B-96-0478
04/30/1998	Cable Plus Company, L.P.	Wireline	T-01051B-98-0012
11/03/1998	Compass Telecommunications Inc.	Wireline	T-01051B-98-0464
07/02/1997	Cox Arizona Telcom Inc	Wireline	T-01051B-97-0017
12/14/1998	Dakota Services LTD	Wireline	T-01051B-98-0550
02/25/1999	DPI Teleconnect Inc	Wireline	T-01051B-98-0690
07/02/1997	Electric Lightwave, Inc. (ELI)	Wireline	T-01051B-97-0207
01/29/1999	Ernest Communications Inc.	Wireline	T-01051B-98-0730
01/15/1997	e.spire Communications Inc (formerly known as ACSI)	Wireline	T-01051B-96-0448
02/27/1998	Frontier Local Services Inc.	Wireline	T-01051B-97-0725
02/27/1998	Great West Services Ltd. dba Simcom Communications	Wireline	T-01051B-97-0697
04/24/1997	GST Telecom, Inc.	Wireline	T-01051B-96-0527
01/29/1999	Intermedia Communications Inc.	Wireline	T-01051B-98-0729
02/20/1999	Level 3 Communications	Wireline	T-01051B-98-0692
07/31/1997	MCImetro Access Transmission Services Inc	Wireline	T-01051B-96-0479
01/07/1997	MFS Intelenet, Inc.	Wireline	T-01051B-96-0362
12/18/1997	Mountain Telecommunications Inc. (MTI)	Wireline	T-01051B-97-0587
11/25/1998	NextLink Arizona Inc.	Wireline	T-01051B-98-0566
11/02/1997	North County Communications	Wireline	T-01051B-97-0444
01/07/1998	NorthPoint Communications Inc.	Wireline	T-01051B-98-0613
07/30/1998	Optel Telecom Inc	Wireline	T-01051B-98-0263
12/14/1998	RCN Telcom Services of AZ	Wireline	T-01051B-98-0548
06/15/1997	Sprint Communications Company L.P	Wireline	T-01051B-96-0505
04/24/1997	TCG-Phoenix	Wireline	T-01051B-96-0402
10/07/1998	Teligent Inc.	Wireline	T-01051B-98-0536
08/29/1997	Winstar Wireless of Arizona, Inc.	Wireline	T-01051B-97-0289

Pending Interconnection Agreements

	CLEC	Type	Docket Reference
Pending	NET-tel Corporation	Resale	T-01051B-99-0130
Pending	Pre-Paid Phones Ltd.	Resale	T-01051B-99-0131
Pending	Topp Comm Inc	Resale	T-01051B-99-0010
Pending	CCCAZ Inc. dba Connect!	Wireline	T-01051B-99-0141
Pending	Covad Communications Company	Wireline	T-01051B-99-0142
Pending	Harmony International	Wireline	T-01051B-99-0011
Pending	JATO Communications Corp	Wireline	T-01051B-99-0012

Estimate Of Access Lines Served By CLECs (March, 1999)

	Facility-Based Bypass	Resale	Total
Residence	7,258	10,642	17,900
Business	8,426	9,092	17,518
Total	15,684*	19,734	35,418

*Includes 1,546 unbundled loops

FEE

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

A.C.C. • DOCKET CONTROL
RECEIVED
n 5 1999
DOCUMENTS ARE SUBJECT TO REVIEW BEFORE ACCEPTANCE AS A DOCKETED ITEM.

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS	DOCKET NO. T-01051B-99 _____ U S WEST COMMUNICATIONS, INC'S FILING OF ITS STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS

U S WEST Communications, Inc. ("U S WEST") hereby submits to the Arizona Corporation Commission (the "Commission") the attached Exhibit A as its Statement of Generally Available Terms and Conditions ("SGAT" or "Statement"), dated February 5, 1999.

Pursuant to Section 252(f) of the Telecommunications Act of 1996 (the "Act"), U S WEST makes the Statement available for purposes of fulfilling its obligations under Sections 251, 252, and 271 of the Act and the rules and regulations promulgated thereunder.

The Statement sets forth the terms, conditions and pricing under which U S WEST will offer and provide to any requesting Competitive Local Exchange Carrier ("CLEC") network interconnection, access to unbundled network elements, ancillary services, and telecommunications services available for resale within the U S WEST service area within each LATA within the state of Arizona.

The Statement will not affect any current Commission-approved interconnection agreements in Arizona, nor will it affect U S WEST's obligation or willingness to negotiate agreements with CLECs under Section 252 of the Act. The Statement provides CLECs an alternative to negotiating an individual interconnection agreement with U S WEST or adopting

an existing approved interconnection agreement between U S WEST and another CLEC pursuant to Section 252(i) of the Act.

Section 252(f) of the Act sets forth the Schedule for Review of the Statement. Pursuant to that Schedule for Review, U S WEST requests that the Commission approve the Statement within 60 days. If the Commission does not act upon this filing within the 60 day period, the SGAT becomes effective by operation of law.

DATED the 5th day of February, 1999.

Respectfully submitted,

U S WEST Communications, Inc.

By _____

Vincent C. DeGarlais
Andrew D. Crain
Charles W. Steese
U S WEST Law Department
1801 California Street
Suite 5100
Denver, CO 80202
(303) 672-2842

Attorneys for U S WEST
Communications, Inc.

ORIGINAL and 10 copies of the foregoing hand-delivered for filing this 5th day of February, 1999, to:

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington
Phoenix, AZ 85007

COPY of the foregoing hand-delivered this 5th day of February, 1999 to:

Christopher Kempley
ARIZONA CORPORATION COMMISSION
Legal Division
1200 West Washington
Phoenix, AZ 85007

Ray Williamson, Acting Director
ARIZONA CORPORATION COMMISSION
Utilities Division
1200 West Washington
Phoenix, AZ 85007

STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS FOR INTERCONNECTION, UNBUNDLED NETWORK ELEMENTS, ANCILLARY SERVICES, AND RESALE OF TELECOMMUNICATION SERVICES PROVIDED BY U S WEST COMMUNICATIONS, INC. IN THE STATE OF ARIZONA

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Section 1.0 - GENERAL TERMS

1.1 This Statement of Generally Available Terms and Conditions ("SGAT" or "Statement") for Interconnection, unbundled network elements, Ancillary Services, and Resale of Telecommunications Services is filed by U S WEST Communications, Inc. ("U S WEST"), a Colorado Corporation with offices at 1801 California Street, Denver, Colorado 80202, pursuant to Section 252(f) of the Telecommunications Act of 1996, for purposes of fulfilling U S WEST's obligations under Sections 251, 252, and 271 of the Act and the rules and regulations promulgated thereunder.

1.2 This Statement sets forth the terms, conditions and pricing under which U S WEST will offer and provide to any requesting Competitive Local Exchange Carrier ("CLEC") network Interconnection, access to unbundled network elements, Ancillary services, and Telecommunications Services available for resale within the U S WEST service area within each LATA within the State of Arizona. This Statement is available for the term set forth herein. Individual CLECs may adopt this Statement, in lieu of entering into an individual interconnection agreement, by signing the Signature Page in Section 22 of this SGAT and by delivering a signed copy of this SGAT to U S WEST, pursuant to the notification provision of this SGAT contained in Section 5.21.

1.3 This Statement, once it is approved or permitted to go into effect by the Commission, offers CLECs an alternative to negotiating an individual interconnection agreement with U S WEST or adopting an existing approved interconnection agreement between U S WEST and another CLEC pursuant to Section 252(i) of the Act. In this respect, neither the submission nor approval of this Statement nor any provision herein shall affect U S WEST's willingness to negotiate an individual agreement with any requesting carrier pursuant to Section 252 of the Telecommunications Act of 1996.

1.4 U S WEST may modify this Statement prior to the date it is approved or permitted to go into effect. If U S WEST files a modification, the section modified shall be considered withdrawn, and the section as modified will be approved or permitted to go into effect pursuant to the Schedule for Review set forth in 252(f) of the Act. For the purposes of the Schedule for Review set forth in section 252(f) of the Act, the sixty-day timeframe for this Statement to take effect shall commence from the filing of this Statement and shall not be affected by the filing of any modification.

1.5 Following the date this Statement is approved or allowed to take effect, U S WEST may file amendments to this Statement, which shall be approved or permitted to take effect pursuant to the Schedule for Review set forth in Section 252(f) of the Act. At the time any amendment is filed, the section amended shall be considered withdrawn, and no CLEC may adopt the section amended following the filing of any amendment, even if such amendment has not yet been approved or allowed to take effect.

Section 2.0 - INTERPRETATION AND CONSTRUCTION

2.1 This Statement of Generally Available Terms and Conditions includes this Statement and all Exhibits appended hereto, each of which is hereby incorporated by reference in this Statement and made a part hereof. All references to Sections and Exhibits shall be deemed to be references to Sections of, and Exhibits to, this Statement unless the context shall otherwise require. The headings used in this Statement are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning of this Statement. Unless the context shall otherwise require, any reference to any agreement, other instrument (including U S WEST or other third party offerings, guides or practices), statute, regulation, rule or tariff is to such agreement, instrument, statute, regulation, rule or tariff as amended and supplemented from time to time (and, in the case of a statute, regulation, rule or tariff, to any successor provision).

2.2 The provisions in this SGAT are based, in large part, on the existing state of the law, rules, regulations and interpretations thereof, as of the date hereof (the "Existing Rules"). Among the Existing Rules are the results of arbitrated decisions by the Commission which are currently being challenged by U S WEST. Among the Existing Rules are certain FCC rules and orders that are the subject of, or affected by, the opinion issued by the Supreme Court of the United States in *AT&T Corp., et al. v. Iowa Utilities Board, et al.* on January 25, 1999. That opinion is not yet of legally-binding effect, and many of the Existing Rules, including rules concerning which Network Elements are subject to unbundling requirements, may be changed or modified during legal proceedings that follow the Supreme Court opinion. Among the Existing Rules are the FCC's orders regarding BOCs' applications under Section 271 of the Act. U S WEST is basing the offerings in this SGAT on the Existing Rules, including the FCC's orders on BOC 271 applications. Nothing in this SGAT shall be deemed an admission by U S WEST concerning the interpretation or effect of the Existing Rules or an admission by U S WEST that the Existing Rules should not be vacated, dismissed, stayed or modified. Nothing in this SGAT shall preclude or estop U S WEST from taking any position in any forum concerning the proper interpretation or effect of the Existing Rules or concerning whether the Existing Rules should be changed, dismissed, stayed or modified. To the extent that the Existing Rules are changed, vacated, dismissed, stayed or modified, then this SGAT and all contracts adopting all or part of this SGAT shall be amended to reflect such modification or change of the Existing Rules. Where the Parties fail to agree upon such an amendment, it shall be resolved in accordance with the Dispute Resolution provision of this SGAT. It is expressly understood that this SGAT will be corrected to reflect the outcome of generic proceedings by the Commission for pricing, service standards, or other matters covered by this SGAT. This Section 2.2 shall be considered part of the rates, terms and conditions of each interconnection service and network element arrangement contained in this SGAT, and this Section 2.2 shall be considered legitimately related to the purchase of each interconnection service and network element arrangement contained in this SGAT.

Section 3.0 - IMPLEMENTATION SCHEDULE

3.1 Except as otherwise required by law, U S WEST will not provide or establish Interconnection, unbundled network elements, ancillary services and/or resale of Telecommunications Services in accordance with the terms and conditions of this Statement prior to CLEC's execution of this SGAT. The date on which CLEC signs and delivers an executed copy of this SGAT, in accordance with Section 1, shall hereafter be referred to as the "Effective Date" of the SGAT between U S WEST and CLEC. Thereupon, the Parties shall meet to complete U S WEST's "CLEC Questionnaire," and to negotiate an interconnection implementation schedule as it applies to CLEC's obtaining of Interconnection, unbundled network elements, ancillary services, and/or resale of Telecommunications Services hereunder.

3.2 Prior to placing any orders for services under this SGAT, the Parties will jointly complete U S WEST's "CLEC Questionnaire." This questionnaire will then be used to:

Determine geographical requirements
Identify CLEC Identification Codes
Determine U S WEST system requirements to support CLEC's specific activity
Collect credit information
Obtain billing information
Create summary bills
Establish input and output requirements
Create and distribute U S WEST and CLEC contact lists
Identify CLEC hours and holidays

3.3 Prior to placing any orders for services under this SGAT, the Parties will meet to finalize an interconnection implementation schedule. Subject to the terms and conditions of this Statement, each Party shall exercise reasonable efforts to adhere to the interconnection implementation schedule.

3.4 CLEC will provide an initial two year forecast prior to placing any orders for service under this SGAT. During the first year of the term of this SGAT, the forecast shall be updated and provided to U S WEST on a quarterly basis. During the remaining term of this SGAT, CLEC will provide updated forecasts from time to time, as requested by U S WEST. The information provided pursuant to this paragraph shall be considered Proprietary Information under the Nondisclosure Section 5.16 of this SGAT. The initial forecast will minimally provide:

3.4.1 The date service will be offered (by city and/or state);

3.4.2 The type and quantity of service(s) which will be offered;

3.4.3 CLEC's anticipated order volumes; and

3.4.4 CLEC's key contact personnel.

Section 4.0 - DEFINITIONS

4.1 "Access Service Request" or "ASR" means the industry standard forms and supporting documentation used for ordering Access Services.

4.2 "Access Services" refers to the interstate and intrastate switched access and private line transport services offered for the origination and/or termination of interexchange traffic.

4.3 "Act" means the Communications Act of 1934 (47 U.S.C. 151 et. seq.), as amended by the Telecommunications Act of 1996, and as from time to time interpreted in the duly authorized rules and regulations of the FCC or the Arizona Corporation Commission.

4.4 "Application Date" or "APP" means the date the customer provides U S WEST a firm commitment and sufficient information to provide service.

4.5 "Automatic Number Identification" or "ANI" means a Feature Group D signaling parameter which refers to the number transmitted through a network identifying the billing number of the calling party.

4.6 "Basic Exchange Features" are optional end user switched services that include, but are not necessarily limited to: Automatic Call Back; Call Trace; Caller ID and Related Blocking Features; Distinctive Ringing/Call Waiting; Selective Call Forward; and Selective Call Rejection.

4.7 "Basic Exchange Telecommunications Service" means a service offered to end users which provides the end user with a telephonic connection to, and a unique local telephone number address on, the public switched telecommunications network, and which enables such end user to generally place calls to, or receive calls from, other stations on the public switched telecommunications network. Basic residence and business line services are Basic Exchange Telecommunications Services. As used solely in the context of this statement and unless otherwise agreed, Basic Exchange Telecommunications Service includes access to ancillary services such as 911, directory assistance and operator services.

4.8 "Bona Fide Request" or "BFR" means a request for a new interconnection or unbundled element not already available in this SGAT for the provision of local telecommunications services.

4.9 "Busy Line Verify/Busy Line Interrupt" or "BLV/BLI Traffic" means an operator service call in which the caller inquires as to the busy status of or requests an interruption of a call on another end user's Basic Exchange Telecommunications Service line.

4.10 "Calling Party Number" or "CPN" is a Common Channel Signaling ("CCS") parameter which refers to the number transmitted through a network identifying the calling party. Reference Technical Pub. 77342.

4.11 "Central Office Switch" means a switch used to provide Telecommunications Services, including, but not limited to:

4.11.1 "End Office Switches" which are used to terminate end user station loops for the purpose of interconnecting to each other and to trunks; and

4.11.2 "Tandem Office Switches" which are used to connect and switch trunk circuits between and among other Central Office Switches. Access tandems provide connections for exchange access and toll traffic, while local tandems provide connections for EAS/Local traffic.

4.12 "Collocation" is an arrangement where space is provided in a U S WEST Wire Center for the placement of a CLEC's transmission equipment or cross connection equipment to be used for the purpose of Interconnection or access to U S WEST unbundled network elements. U S WEST offers four Collocation arrangements: Virtual Collocation, Caged Physical Collocation, Cageless Physical Collocation and InterConnection Distribution Frame Collocation.

4.13 "Commission" means the Arizona Corporation Commission.

4.14 "Common Channel Signaling" or "CCS" means a method of digitally transmitting call set-up and network control data over a special signaling network fully separate from the public voice switched network elements that carry the actual call.

4.15 "CLEC" refers to a party that has submitted a request, pursuant to Sections 1 and 3 of this SGAT, to obtain Interconnection, access to unbundled network elements, ancillary services, or resale of Telecommunications Services pursuant to the terms of this SGAT. A CLEC is an entity authorized to provide Local Exchange Service that does not otherwise qualify as an Incumbent Local Exchange Carrier ("ILEC").

4.16 "Designed, Verified and Assigned Date" or DVA means the date on which implementation groups are to report that all documents and materials have been received and are complete.

4.17 "Digital Signal Level 0" or "DS0" is the 64 Kbps worldwide standard speed for digitizing one voice conversation using pulse code modulation. There are 24 DS0 channels in a DS1.

4.18 "Digital Signal Level 1" or "DS1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS1 is the initial level of multiplexing. There are 28 DS1s in a DS3.

4.19 "Digital Signal Level 3" or "DS3" means the 44.736 Mbps third-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS3 is defined as the third level of multiplexing.

4.20 "Enhanced Service Provider" refers to those providers that provide enhanced services as defined in 47 C.F.R. paragraph 64.702(a) which defines enhanced services as: "services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information." Internet Service Providers (ISPs) are considered Enhanced Service Providers.

4.21 "Exchange Message Record" or "EMR" is the standard used for exchange of telecommunications message information between telecommunications providers for billable, non-billable, sample, settlement and study data. EMR format is contained in BR-010-200-010 CRIS Exchange Message Record, a Bellcore document that defines industry standards for exchange message records.

4.22 "Extended Area Service (EAS)/Local Traffic" means traffic that is originated and terminated within the local calling area as defined by U S WEST's then current EAS/local serving areas, as determined by the Commission.

4.23 "Facility Complete Date" or "FCD" means the date all pre-service tests are performed, including stress tests.

4.24 "Firm Order Confirmation Date" or "FOC" means the notice U S WEST provides to CLEC to confirm that the CLEC Local Service Order (LSR) has been received and has been successfully processed. The FOC confirms the schedule of dates committed to by U S WEST for the provisioning of the service requested.

4.25 "Hub" denotes a U S WEST-designated Wire Center at which multiplexing is performed.

4.26 "Integrated Digital Loop Carrier" means a subscriber loop carrier system, which integrates within the switch on a DS1 level signal.

4.27 "Interconnect & Resale Resource Guide" is a U S WEST document that provides information needed to request services available under this SGAT. It is available on U S WEST's Web site: http//www.uswest.com/com/customers/carrier/interconnect/index.html.

4.28 "Interconnection" is as described in the Act and refers to the connection between networks for the purpose of transmission and routing of telephone exchange service traffic and exchange access traffic.

4.29 "Interexchange Carrier" (IXC) means a carrier that provides interLATA or IntraLATA Toll services.

4.30 "IntraLATA Toll" is defined in accordance with U S WEST's current intraLATA toll serving areas, as determined by U S WEST's state and interstate tariffs.

4.31 "Local Exchange Carrier" (LEC) means any person that is engaged in the provision of telephone exchange service or exchange access. Such term does not include a person insofar as such person is engaged in the provision of a commercial mobile service under Section 332(c) of the Act, except to the extent that the FCC finds that such service should be included in the definition of such term.

4.32 "Local Interconnection Service (LIS) Entrance Facility" is a DS1 or DS3 that extends from CLEC's switch location to the U S WEST Serving Wire Center. An Entrance Facility may not extend beyond the area served by the U S WEST Serving Wire Center.

4.33 "Local Interconnection Service (LIS) Trunking" is a terminating, trunk-side service provided between the Point of Interconnection (POI) of CLEC's network and U S WEST's network for the purpose of completing calls from CLEC's end user customers to U S WEST's end user customers. Local calls begin and end within a Local Calling Area or Extended Area Service (EAS) area which has been defined by the Commission. Trunking connections for these local calls may exist between CLEC and U S WEST's End Offices or Local Tandem. IntraLATA toll or jointly provided switched access calls are completed with trunking connections to the access tandem.

4.34 "Local Loop Transmission" or "Loop" means the entire transmission path which extends from the network interface device or demarcation point at an end user's premises to the Main Distribution Frame or other designated frame or panel in a Party's Wire Center which serves the end user.

4.35 "Local Service Request" or "LSR" means the industry standard forms and supporting documentation used for ordering local services.

4.36 "Main Distribution Frame" or "MDF" means a U S WEST distribution frame (*e.g.*, COSMIC frame) used to connect U S WEST cable pairs and line and trunk equipment terminals on a U S WEST switching system.

4.37 "MECAB" refers to the Multiple Exchange Carrier Access Billing (MECAB) document prepared by the Billing Committee of the Ordering and Billing Forum (OBF), that functions under the auspices of the Carrier Liaison Committee of the Alliance for Telecommunications Industry Solutions. The MECAB document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of an Access Service.

4.38 "MECOD" refers to the Multiple Exchange Carriers Ordering and Design (MECOD) Guidelines for Access Services - Industry Support Interface, a document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum (OBF), that functions under the auspices of the Carrier Liaison Committee of the Alliance for Telecommunications Industry Solutions. The MECOD document, published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for Access Service. It is published by Bellcore as SRBDS 00983.

4.39 "Meet-Point Billing" or "MPB" refers to an arrangement whereby two LECs (including a LEC and CLEC) jointly provide Switched Access Service to an Interexchange Carrier, with each LEC (or CLEC) receiving an appropriate share of the revenues as defined by their effective access Tariffs.

4.40 "Mid-Span Meet" is a Point of Interconnection between two networks, designated by two Telecommunications Carriers, at which one carrier's responsibility for service begins and the other carrier's responsibility ends.

4.41 "North American Numbering Plan" or "NANP" means the numbering plan used in the United States that also serves Canada, Bermuda, Puerto Rico, Guam, the Commonwealth of the Marianna Islands and certain Caribbean Islands. The NANP format is a 10-digit number that consists of a 3-digit NPA code (commonly referred to as the area code), followed by a 3-digit NXX code and 4-digit line number.

4.42 "NXX" means the fourth, fifth and sixth digits of a ten-digit telephone number.

4.43 "Party" means either U S WEST or CLEC and "Parties" means U S WEST and CLEC.

4.44 "Plant Test Date" or PTD means the date acceptance testing is performed with the customer.

4.45 "Point of Interface", "Point of Interconnection," or "POI" is a demarcation between the networks of two LECs (including a LEC and CLEC).

4.46 "Port" means a line or trunk connection point on a central office switch but does not include switch features.

4.47 "Proof of Authorization" ("POA"). POA shall consist of documentation of the end user's selection of its local service provider. Section 5.3 of this SGAT lists acceptable forms of documentation.

4.48 "Rate Center" means the specific geographic point (associated with one or more specific NPA-NXX codes and various wire centers), being used for billing and measuring Telecommunications Service. For example, a Rate Center will normally include several Wire Centers within its geographic area, with each Wire Center having one or more NPA-NXXs.

4.49 "Rate Center Area" is the geographic area within which basic exchange services are provided for NPA-NXX designations associated with a particular Rate Center.

4.50 "Records Issue Date" or "RID" means the date that all design and assignment information is sent to the necessary service implementation groups.

4.51 "Reseller" is a category of local exchange service provider that obtains dial tone and associated Telecommunications Services from another provider through the purchase of finished services for resale to its end users.

4.52 "Scheduled Issued Date" or "SID" means the date the order is entered into U S WEST's order distribution system.

4.53 "Service Control Point" or "SCP" means a signaling end point that acts as a database to provide information to another signaling end point (*i.e.*, Service Switching Point or another SCP) for processing or routing certain types of network calls. A query/response mechanism is typically used in communicating with an SCP.

4.54 "Service Date" or "SD" means the date service is made available to the customer. This also is referred to as the "Due Date."

4.55 "Signaling Transfer Point" or "STP" means a signaling point that performs message routing functions and provides information for the routing of messages between signaling end points. An STP transmits, receives and processes Common Channel Signaling ("CCS") messages.

4.56 "Switched Access Service" means the offering of transmission and switching services to Interexchange Carriers for the purpose of the origination or termination of telephone toll service. Switched Access Services include: Feature Group A, Feature Group B, Feature Group D, Phone to Phone IP Telephony, 8XX access, and 900 access and their successors or similar Switched Access services. Switched Access traffic, as specifically defined in U S WEST's state and interstate Switched Access Tariffs, is traffic that originates at one of the Party's end users and terminates at an IXC point of presence, or originates at an IXC point of presence and terminates at one of the Party's end users, whether or not the traffic transits the other Party's network.

4.57 "Tariff" as used throughout this SGAT refers to U S WEST interstate Tariffs and state Tariffs, price lists, price schedules and catalogs.

4.58 "Telecommunications Carrier" means any provider of Telecommunications Services, except that such term does not include aggregators of Telecommunications Services (as defined in Section 226 of the Act). A Telecommunications Carrier shall be treated as a common carrier under the Act only to the extent that it is engaged in providing Telecommunications Services, except that the Federal Communications Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.

4.59 "Telecommunications Services" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

4.60 "Wire Center" denotes a building or space within a building that serves as an aggregation point on a given carrier's network, where transmission facilities are connected or switched. Wire Center can also denote a building where one or more Central Offices, used for the provision of Basic Exchange Telecommunications Services and Access Services, are located. However, for purposes of Collocation service, Wire Center shall mean those points eligible for such connections as specified in the FCC Docket No. 91-141,and rules adopted pursuant thereto.

4.61 "Wired and Office Tested Date" or "WOT" means the date by which all intraoffice wiring is completed, all plug-ins optioned and aligned, frame continuity established, and the interoffice facilities, if applicable, are tested. This includes the date that switching equipment, including translation loading, is installed and tested.

4.62 Terms not otherwise defined here but defined in the Act shall have the meaning defined there.

Section 5.0 - TERMS AND CONDITIONS

5.1 General Provisions

5.1.1 Each Party shall use its best efforts to comply with the Implementation Schedule provisions that will be mutually agreed upon by the Parties.

5.1.2 The Parties are each solely responsible for participation in and compliance with national network plans, including the National Network Security Plan and the Emergency Preparedness Plan.

5.1.3 Neither Party shall use any service related to or use any of the services provided in this SGAT in any manner that interferes with other persons in the use of their service, prevents other persons from using their service, or otherwise impairs the quality of service to other carriers or to either Party's end users. Each Party may discontinue or refuse service if the other Party violates this provision. Upon such violation, either Party shall provide the other Party notice of such violation at the earliest practicable time.

5.1.4 Each Party is solely responsible for the services it provides to its end users and to other Telecommunications Carriers.

5.1.5 The Parties shall work cooperatively to minimize fraud associated with third-number billed calls, calling card calls, and any other services related to this SGAT.

5.1.6 Nothing in this SGAT shall prevent either Party from seeking to recover the costs and expenses, if any, it may incur in (a) complying with and implementing its obligations under this SGAT, the Act, and the rules, regulations and orders of the FCC and the Commission, and the development, modification, technical installation and maintenance of any systems or other infrastructure which it requires to comply with and to continue complying with its responsibilities and obligations under this SGAT.

5.2 Term of SGAT

5.2.1 This SGAT shall become effective upon Commission approval, pursuant to Sections 251 and 252 of the Act. The date on which CLEC submits a written request, pursuant to Section 3.1 of this SGAT, to obtain services pursuant to this SGAT shall hereafter be referred to as the "Effective Date" of this SGAT between CLEC and U S WEST. This SGAT shall be binding upon the Parties upon the Effective Date and for a term of two years, notwithstanding Section 252(i) of the Act.

5.2.2 Subsequent to the termination of this SGAT, CLEC may continue Interconnection, access to unbundled network elements, ancillary services, and/or resale of Telecommunications Services under one of the following options:

> 5.2.2.1 Prior to the conclusion of the two year term specified in Section 5.2.1 above, CLEC, consistent with Section 252(i) of the Act, may adopt a then-existing, approved interconnection agreement to become effective at the conclusion of the two-year term. The two-year term of this SGAT shall be continued for the brief period of time needed to secure the Commission's approval of the newly adopted agreement.

5.2.2.2 Prior to the conclusion of the two year term specified in Section 5.2.1 above, CLEC, consistent with Section 252(i) of the Act, may enter into negotiations for a new individual interconnection agreement. If the Parties' negotiations are successful and they agree upon a new interconnection agreement, it shall become effective at the conclusion of the two year term contained in Section 5.2.1. The two-year term of this SGAT shall be continued for the brief period of time needed to secure the Commission's approval of the negotiated agreement.

5.2.2.3 If the Parties' negotiations are not successful and they have not agreed upon a new interconnection agreement, the Parties agree that the window of opportunity to file for arbitration to resolve outstanding contractual issues in accordance with the Act will end at the end of the two year term specified above.

a) If CLEC files an arbitration petition before the end of the two-year term specified above, then this SGAT shall continue for the brief period necessary for the Commission to act and resolve the disputed issues so that the Parties will have an effective interconnection agreement.

b) If such a petition has not been filed, then this SGAT shall terminate at the end of the two year term specified.

5.2.2.4 Prior to the conclusion of the two year term specified in Section 5.2.1 above, CLEC may obtain interconnection services under the terms and conditions of a then-existing SGAT to become effective at the conclusion of the two-year term.

5.3 Proof of Authorization

5.3.1 Where so indicated in specific sections of this SGAT, each Party shall be responsible for obtaining and having in its possession Proof of Authorization ("POA"). POA shall consist of documentation of the end user's selection of its local service provider. Such selection may be obtained in the following ways:

5.3.1.1 The end user's written Letter of Authorization.

5.3.1.2 The end user's electronic authorization by use of an 8XX number.

5.3.1.3 The end user's oral authorization verified by an independent third party (with third party verification as POA).

5.3.1.4 A prepaid returnable postcard supplied by the new local service provider which has been signed and returned by end user. The new local service provider will wait fourteen (14) calendar days after mailing the postcard before placing an order to change.

5.3.2 The Parties shall make POAs available to each other upon request. A charge of $100.00 ("slamming charge") will be assessed if the POA cannot be provided supporting the change in service provider. If there is a conflict between the end user designation and the other Party's written evidence of its authority, the Parties shall honor the designation of the end user and change the end user back to the previous service provider.

5.4 Payment

5.4.1 Amounts payable under this SGAT are due and payable within thirty (30) calendar days after the date of invoice.

5.4.2 Should CLEC or U S WEST dispute, in good faith, any portion of the monthly billing under this SGAT, the parties will notify each other in writing within thirty (30) calendar days of the receipt of such billing, identifying the amount, reason and rationale of such dispute. CLEC and U S WEST shall pay all amounts due. Both CLEC and U S WEST agree to expedite the investigation of any disputed amounts in an effort to resolve and settle the dispute prior to initiating any other rights or remedies. If the resolved amount did not appear as a credit on the next invoice after resolution of the dispute, the resolved amount plus interest from the date of payment will be applied. The amount of interest will be calculated using the late payment factor that would have applied to such amount had it not been paid on time. Similarly, in the event a party withholds payment for a disputed charge, and upon resolution of the matter it is determined that such payments should have been made, the billing party is entitled to collect interest on the withheld amount, subject to the above provisions.

5.4.3 U S WEST will determine CLEC's credit status based on previous payment history with U S WEST or credit reports such as Dun and Bradstreet. If CLEC has not established satisfactory credit with U S WEST or if CLEC is repeatedly delinquent in making its payments, U S WEST may require a deposit to be held as security for the payment of charges. "Repeatedly delinquent" means being thirty (30) calendar days or more delinquent for three (3) consecutive months. The deposit may not exceed the estimated total monthly charges for a two (2) month period. The deposit may be a surety bond, a letter of credit with terms and conditions acceptable to U S WEST, or some other form of mutually acceptable security such as a cash deposit. Required deposits are due and payable within ten (10) calendar days after demand in accordance with Commission requirements.

5.4.4 Interest will be paid on cash deposits at the rate applying to deposits under applicable Commission rules, regulations, or Tariffs. Cash deposits and accrued interest will be credited to CLEC's account or refunded, as appropriate, upon the earlier of the two year term or the establishment of satisfactory credit with U S WEST, which will generally be one full year of timely payments in full by CLEC. The fact that a deposit has been made does not relieve CLEC from any requirements of this SGAT.

5.4.5 U S WEST may review CLEC's credit standing and modify the amount of deposit required.

5.4.6 The late payment charge for amounts that are billed under this SGAT shall be in accordance with Commission requirements.

5.5 Taxes

5.5.1 Each Party purchasing services hereunder shall pay or otherwise be responsible for all federal, state, or local sales, use, excise, gross receipts, transaction or similar taxes, fees or surcharges levied against or upon such purchasing Party (or the providing Party when such providing Party is permitted to pass along to the purchasing Party such taxes, fees or

surcharges), except for any tax on either Party's corporate existence, status or income. Whenever possible, these amounts shall be billed as a separate item on the invoice. To the extent a sale is claimed to be for resale tax exemption, the purchasing Party shall furnish the providing Party a proper resale tax exemption certificate as authorized or required by statute or regulation by the jurisdiction providing said resale tax exemption. Until such time as a resale tax exemption certificate is provided, no exemptions will be applied.

5.6 Insurance

5.6.1 CLEC shall at all times during the term of this SGAT, at its own cost and expense, carry and maintain the insurance coverage listed below with insurers having a "Best's" rating of B+XIII.

5.6.1.1 Workers' Compensation with statutory limits as required in the state of operation and Employers' Liability insurance with limits of not less than $100,000 each accident.

5.6.1.2 Commercial General Liability insurance covering claims for bodily injury, death, personal injury or property damage occurring or arising out of the use or occupancy of the premises, including coverage for independent contractor's protection (required if any work will be subcontracted), premises-operations, products and/or completed operations and contractual liability with respect to the liability assumed by CLEC hereunder. The limits of insurance shall not be less than $1,000,000 each occurrence and $2,000,000 general aggregate limit.

5.6.1.3 Comprehensive automobile liability insurance covering the ownership, operation and maintenance of all owned, non-owned and hired motor vehicles with limits of not less than $1,000,000 per occurrence for bodily injury and property damage.

5.6.1.4 Umbrella/Excess Liability insurance in an amount of $10,000,000 excess of Commercial General Liability insurance specified above. These limits may be obtained through any combination of primary and excess or umbrella liability insurance so long as the total limit is $11,000,000.

5.6.1.5 "All Risk" Property coverage on a full replacement cost basis insuring all of CLEC personal property situated on or within the premises. CLEC may elect to purchase business interruption and contingent business interruption insurance. U S WEST has no liability for loss of profit or revenues should an interruption of service occur.

5.6.2 CLEC and U S WEST each waive any and all rights of recovery against the other, or against the officers, employees, agents, representatives of the other, or other tenants for loss or damage to such waiving Party arising from any cause covered by any property insurance required to be carried by such Party. Each Party shall give notice to insurance carrier(s) that the mutual waiver of subrogation is contained in this SGAT.

5.6.3 CLEC shall provide certificate(s) of insurance evidencing coverage, and annually thereafter within ten (10) calendar days of renewal of any coverage maintained pursuant to this Section. Such certificates shall (1) name U S WEST as an additional insured under commercial general liability coverage as respects U S WEST's interests; (2) provide U S WEST thirty (30)

calendar days prior written notice of cancellation of, material change or exclusions in the policy(s) to which certificate(s) relate; (3) indicate that coverage is primary and not excess of, or contributory with, any other valid and collectible insurance purchased by U S WEST; and (4) provide severability of interest/cross liability coverage.

5.7 Force Majeure

5.7.1 Neither Party shall be liable for any delay or failure in performance of any part of this SGAT from any cause beyond its control and without its fault or negligence including, without limitation, acts of nature, acts of civil or military authority, government regulations, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, work stoppages, equipment failure, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities or acts or omissions of transportation carriers (collectively, a "Force Majeure Event"). The Party affected by a Force Majeure Event shall give prompt notice to the other Party, shall be excused from performance of its obligations hereunder on a day to day basis to the extent those obligations are prevented by the Force Majeure Event, and shall use reasonable efforts to remove or mitigate the Force Majeure Event. In the event of a labor dispute or strike the Parties agree to provide service to each other at a level equivalent to the level they provide themselves.

5.8 Limitation of Liability

5.8.1 Except for indemnity obligations, each Party's liability to the other Party for any loss relating to or arising out of any act or omission in its performance of this SGAT, whether in contract or in tort, shall be limited to the total amount that is or would have been charged to the other Party by such breaching Party for the service(s) or function(s) not performed or improperly performed.

5.8.2 For any other claim, each Party shall be liable to the other only for direct damages for any loss, defect or equipment failure resulting from the causing Party's conduct or the conduct of its agents or contractors in performing the obligations contained in this SGAT.

5.8.3 Neither Party shall be liable to the other for indirect, incidental, consequential, or special damages, including (without limitation) damages for lost profits, lost revenues, lost savings suffered by the other Party regardless of the form of action, whether in contract, warranty, strict liability, tort, including (without limitation) negligence of any kind and regardless of whether the Parties know the possibility that such damages could result.

5.8.4 CLEC is liable for all fraud associated with service to its end-users and accounts. U S WEST takes no responsibility, will not investigate, and will make no adjustments to CLEC's account in cases of fraud unless such fraud is the result of any intentional act or gross negligence of U S WEST. Notwithstanding the above, if U S WEST becomes aware of potential fraud with respect to CLEC's accounts, U S WEST will promptly inform CLEC and, at the direction of CLEC, take reasonable action to mitigate the fraud where such action is possible.

5.8.5 Nothing contained in this Section shall limit either Party's liability to the other for willful misconduct.

5.8.6 Nothing contained in this Section shall limit either Party's obligations of indemnification as specified in the Indemnity Section of this SGAT.

5.8.7 Neither Party shall be liable to the other under any theory, including indemnity, on account of such Party's failure or neglect to have or maintain a system or systems that are Year 2000 compliant. As the Parties approach the Year 2000, date information associated with any interfaces between the Parties is expected to remain as it is. Any changes in the interface format associated with date information will be negotiated and agreed to by the Parties prior to any changes.

5.9 Indemnity

5.9.1 With respect to third party claims, the Parties agree to indemnify each other as follows:

5.9.1.1 Except for claims made by end users of one Party against the other Party, which claims are based on defective or faulty services provided by the other Party to the one Party, each of the Parties agrees to release, indemnify, defend and hold harmless the other Party and each of its officers, directors, employees and agents (each an "Indemnitee") from and against and in respect of any loss, debt, liability, damage, obligation, claim, demand, judgment or settlement of any nature or kind, known or unknown, liquidated or unliquidated including, but not limited to, costs and attorneys' fees, whether suffered, made, instituted, or asserted by any other party or person, for invasion of privacy, personal injury to or death of any person or persons, or for loss, damage to, or destruction of property, whether or not owned by others, resulting from the indemnifying Party's performance, breach of applicable law, or status of its employees, agents and subcontractors; or for failure to perform under this SGAT, regardless of the form of action.

5.9.1.2 Where the third party claim is made by (or through) an end user of one Party against the other Party, which claim is based on defective or faulty services provided by the other Party to the one Party, then there shall be no obligation of indemnity unless the act or omission giving rise to the defective or faulty services is shown to be intentional and malicious misconduct of the other Party.

5.9.1.3 If the claim is made by (or through) an end user and where a claim is in the nature of a claim for invasion of privacy, libel, slander, or other claim based on the content of a transmission, and it is made against a Party who is not the immediate provider of the Telecommunications Service to the end user (the indemnified provider), then in the absence of fault or neglect on the part of the indemnified provider, the Party who is the immediate seller of such Telecommunications Service shall indemnify, defend and hold harmless the indemnified provider from such claim.

5.9.2 The indemnification provided herein shall be conditioned upon:

5.9.2.1 The indemnified Party shall promptly notify the indemnifying Party of any action taken against the indemnified Party relating to the indemnification. Failure to so notify the indemnifying Party shall not relieve the indemnifying Party of any liability that

the indemnifying Party might have, except to the extent that such failure prejudices the indemnifying Party's ability to defend such claim.

5.9.2.2 The indemnifying Party shall have sole authority to defend any such action, including the selection of legal counsel, and the indemnified Party may engage separate legal counsel only at its sole cost and expense.

5.9.2.3 In no event shall the indemnifying Party settle or consent to any judgment pertaining to any such action without the prior written consent of the indemnified Party.

5.10 Intellectual Property

5.10.1 Each Party hereby grants to the other Party the limited, personal and nonexclusive right and license to use its patents, copyrights and trade secrets but only to the extent necessary to implement this SGAT or specifically required by the then-applicable federal and state rules and regulations relating to Interconnection and access to telecommunications facilities and services, and for no other purposes. Nothing in this SGAT shall be construed as the grant to the other Party of any rights or licenses to trademarks.

5.10.2 The rights and licenses above are granted "AS IS," and the other Party's exercise of any such right and license shall be at the sole and exclusive risk of the other Party. Neither Party shall have any obligation to defend, indemnify or hold harmless, or acquire any license or right for the benefit of, or owe any other obligation or have any liability to, the other based on or arising from any claim, demand, or proceeding (hereinafter "claim") by any third party alleging or asserting that the use of any circuit, apparatus, or system, or the use of any software, or the performance of any service or method, or the provision of any facilities by either Party under this SGAT constitutes infringement, or misuse or misappropriation of any patent, copyright, trade secret, or any other proprietary or intellectual property right of any third party.

5.10.3 As a condition to the access or use of patents, copyrights, trade secrets and other intellectual property (including software) owned or controlled by a third party to the extent necessary to implement this SGAT or specifically required by the then-applicable federal and state rules and regulations relating to Interconnection and access to telecommunications facilities and services, the Party providing access may require the other, upon written notice, from time to time, to obtain a license or permission for such access or use, make all payments in connection with obtaining such license, and provide evidence of such license.

5.10.4 Except as expressly provided in this Intellectual Property Section, nothing in this SGAT shall be construed as the grant of a license, either express or implied, with respect to any patent, copyright, logo, trademark, tradename, trade secret or any other intellectual property right now or hereafter owned, controlled or licensable by either Party. Neither Party may use any patent, copyright, logo, trademark, tradename, trade secret or other intellectual property rights of the other Party or its affiliates without execution of a separate agreement between the Parties.

5.10.5 Neither Party shall without the express written permission of the other Party, state or imply that: 1) it is connected, or in any way affiliated with the other or its affiliates; 2) it is part of a joint business association or any similar arrangement with the other or its affiliates; 3) the other Party and its affiliates are in any way sponsoring, endorsing or certifying it and its goods and services; or 4) with respect to its advertising or promotional activities or materials,

the resold goods and services are in any way associated with or originated from the other or any of its affiliates. Nothing in this paragraph shall prevent either Party from truthfully describing the network elements it uses to provide service to its end users, provided it does not represent the network elements as originating from the other Party or its affiliates.

5.10.6 For purposes of resale only and notwithstanding the above, unless otherwise prohibited by U S WEST pursuant to an applicable provision herein, CLEC may use the phrase "CLEC is a Reseller of U S WEST Communications services" (the "Authorized Phrase") in CLEC's printed materials provided:

5.10.6.1 The Authorized Phrase is not used in connection with any goods or services other than U S WEST services resold by CLEC.

5.10.6.2 CLEC's use of the Authorized Phrase does not cause end users to believe that CLEC is U S WEST.

5.10.6.3 The Authorized Phrase, when displayed, appears only in text form (CLEC may not use the U S WEST logo) with all letters being the same font and point size. The point size of the Authorized Phrase shall be no greater than one fourth the point size of the smallest use of CLEC's name and in no event shall exceed 8 point size.

5.10.6.4 CLEC shall provide all printed materials using the Authorized Phrase to U S WEST for its prior written approval.

5.10.6.5 If U S WEST determines that CLEC's use of the Authorized Phrase causes end user confusion, U S WEST may immediately terminate CLEC's right to use the Authorized Phrase.

5.10.6.6 Upon termination of CLEC's right to use the Authorized Phrase or termination of this SGAT, all permission or right to use the Authorized Phrase shall immediately cease to exist and CLEC shall immediately cease any and all such use of the Authorized Phrase. CLEC shall either promptly return to U S WEST or destroy all materials in its possession or control displaying the Authorized Phrase.

5.10.7 CLEC acknowledges the value of the marks "U S WEST" and "U S WEST Communications" (the "Marks") and the goodwill associated therewith and acknowledges that such goodwill is a property right belonging to U S WEST, Inc. and U S WEST respectively (the "Owners"). CLEC recognizes that nothing contained in this SGAT is intended as an assignment or grant to CLEC of any right, title or interest in or to the Marks and that this SGAT does not confer any right or license to grant sublicenses or permission to third parties to use the Marks and is not assignable. CLEC will do nothing inconsistent with the Owner's ownership of the Marks, and all rights, if any, that may be acquired by use of the Marks shall inure to the benefit of the Owners. CLEC will not adopt, use (other than as authorized herein), register or seek to register any mark anywhere in the world which is identical or confusingly similar to the Marks or which is so similar thereto as to constitute a deceptive colorable imitation thereof or to suggest or imply some association, sponsorship, or endorsement by the Owners. The Owners make no warranties regarding ownership of any rights in or the validity of the Marks.

5.11 Warranties

5.11.1 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE PARTIES AGREE THAT NEITHER PARTY HAS MADE, AND THAT THERE DOES NOT EXIST, ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

5.12 Assignment

5.12.1 Neither Party may assign or transfer (whether by operation of law or otherwise) this SGAT (or any rights or obligations hereunder) to a third party without the prior written consent of the other Party. Notwithstanding the foregoing, either Party may assign or transfer this SGAT to a corporate affiliate or an entity under its common control; however, if CLEC's assignee or transferee has an Interconnection agreement with U S WEST, no assignment or transfer of this SGAT shall be effective without the prior written consent of U S WEST. Such consent shall include appropriate resolutions of conflicts and discrepancies between the assignee's or transferee's interconnection agreement and this SGAT. Any attempted assignment or transfer that is not permitted is void ab initio. Without limiting the generality of the foregoing, this SGAT shall be binding upon and shall inure to the benefit of the Parties' respective successors and assigns.

5.12.2 Without limiting the generality of the foregoing subsection, any merger, dissolution, consolidation or other reorganization of CLEC, or any sale, transfer, pledge or other disposition by CLEC of securities representing more than 50% of the securities entitled to vote in an election of CLEC's board of directors or other similar governing body, or any sale, transfer, pledge or other disposition by CLEC of substantially all of its assets, shall be deemed a transfer of control. If any entity, other than CLEC, involved in such merger, dissolution, consolidation, reorganization, sale, transfer, pledge or other disposition of CLEC has an interconnection agreement with U S WEST, the Parties agree that only one agreement, either this SGAT or the interconnection agreement of the other entity, will remain valid. All other interconnection agreements will be terminated. The Parties agree to work together to determine which interconnection agreement should remain valid and which should terminate. In the event the Parties cannot reach agreement on this issue, the issue shall be resolved through the Dispute Resolution process contained in this SGAT.

5.12.3 U S WEST makes no representations or warranties regarding the configuration, identity, or number of telephone exchanges covered by this SGAT. Nothing in this SGAT, therefore, shall be deemed to limit or restrict the right of U S WEST to sell, lease, transfer, assign, or hypothecate any of its assets, rights, title or interests in or to any of its property or rights, including but not limited to the telephone exchange(s) in which it conducts its business. Likewise nothing in this SGAT shall be deemed to limit or restrict the right of U S WEST to acquire, buy, procure, lease, or mortgage any assets, rights, title, or interest in or to any property or rights, including but not limited to the telephone exchange(s) in which it conducts its business. If U S WEST should sell or otherwise transfer and assign to an unaffiliated third party all or substantially all of its assets and rights with respect to a telephone exchange(s) which is covered by this SGAT, then as to such exchange(s) this SGAT shall terminate upon the effective date of such sale or other transfer. U S WEST shall provide CLEC with as much advance notice of such sale or transfer as is reasonably possible.

5.13 Default

5.13.1 If either Party defaults in the payment of any amount due hereunder, or if either Party violates any other material provision of this SGAT, and such default or violation shall continue for thirty (30) calendar days after written notice thereof, the other Party may seek relief in accordance with the Dispute Resolution provision of this SGAT. The failure of either Party to enforce any of the provisions of this SGAT or the waiver thereof in any instance shall not be construed as a general waiver or relinquishment on its part of any such provision, but the same shall, nevertheless, be and remain in full force and effect.

5.14 Disclaimer of Agency

5.14.1 Except for provisions herein expressly authorizing a Party to act for another, nothing in this SGAT shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this SGAT, no Party undertakes to perform any obligation of the other Party whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

5.15 Severability

5.15.1 If one or more of the provisions contained herein are modified because of changes in Existing Rules or other action by the Commission, such modifications in the SGAT shall be incorporated herein. In all other respects, the provisions of this SGAT are not severable.

5.16 Nondisclosure

5.16.1 All information, including but not limited to specifications, microfilm, photocopies, magnetic disks, magnetic tapes, drawings, sketches, models, samples, tools, technical information, data, employee records, maps, financial reports, and market data, (i) furnished by one Party to the other Party dealing with end user specific, facility specific, or usage specific information, other than end user information communicated for the purpose of providing directory assistance or publication of directory database, or (ii) in written, graphic, electromagnetic, or other tangible form and marked at the time of delivery as "Confidential" or "Proprietary", or (iii) communicated and declared to the receiving Party at the time of delivery, or by written notice given to the receiving Party within ten (10) calendar days after delivery, to be "Confidential" or "Proprietary" (collectively referred to as "Proprietary Information"), shall remain the property of the disclosing Party. A Party who receives Proprietary Information via an oral communication may request written confirmation that the material is Proprietary Information. A Party who delivers Proprietary Information via an oral communication may request written confirmation that the Party receiving the information understands that the material is Proprietary Information.

5.16.2 Upon request by the disclosing Party, the receiving Party shall return all tangible copies of Proprietary Information, whether written, graphic or otherwise, except that the receiving Party may retain one copy for archival purposes.

5.16.3 Each Party shall keep all of the other Party's Proprietary Information confidential and shall use the other Party's Proprietary Information only in connection with this SGAT. Neither Party shall use the other Party's Proprietary Information for any other purpose except upon such terms and conditions as may be agreed upon between the Parties in writing.

5.16.4 Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this SGAT do not apply to such Proprietary Information as:

a) was at the time of receipt already known to the receiving Party free of any obligation to keep it confidential evidenced by written records prepared prior to delivery by the disclosing Party; or

b) is or becomes publicly known through no wrongful act of the receiving Party; or

c) is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the disclosing Party with respect to such information; or

d) is independently developed by an employee, agent, or contractor of the receiving Party which individual is not involved in any manner with the provision of services pursuant to the SGAT and does not have any direct or indirect access to the Proprietary Information; or

e) is disclosed to a third person by the disclosing Party without similar restrictions on such third person's rights; or

f) is approved for release by written authorization of the disclosing Party; or

g) is required to be made public by the receiving Party pursuant to applicable law or regulation provided that the receiving Party shall give sufficient notice of the requirement to the disclosing Party to enable the disclosing Party to seek protective orders.

5.16.5 Nothing herein is intended to prohibit a Party from supplying factual information about its network and Telecommunications Services on or connected to its network to regulatory agencies including the Federal Communications Commission and the Commission so long as any confidential obligation is protected.

5.16.6 Effective Date Of This Section. Notwithstanding any other provision of this SGAT, the Proprietary Information provisions of this SGAT shall apply to all information furnished by either Party to the other in furtherance of the purpose of this SGAT, even if furnished before the Effective Date.

5.17 Survival

5.17.1 Any liabilities or obligations of a Party for acts or omissions prior to the completion of the two year term, and any obligation of a Party under the provisions regarding indemnification, Confidential or Proprietary Information, limitations of liability, and any other

provisions of this SGAT which, by their terms, are contemplated to survive (or to be performed after) termination of this SGAT, shall survive cancellation or termination hereof.

5.18 Dispute Resolution

5.18.1 If any claim, controversy or dispute between the Parties, their agents, employees, officers, directors or affiliated agents should arise, and the Parties do not resolve it in the ordinary course of their dealings (the "Dispute"), then it shall be resolved in accordance with the dispute resolution process set forth in this Section. Each notice of default, unless cured within the applicable cure period, shall be resolved in accordance herewith.

5.18.2 At the written request of either Party, and prior to any other formal dispute resolution proceedings, each Party shall designate a vice-presidential level employee to review, meet, and negotiate, in good faith, to resolve the Dispute. The Parties intend that these negotiations be conducted by non-lawyer, business representatives, and the locations, format, frequency, duration, and conclusions of these discussions shall be at the discretion of the representatives. By mutual agreement, the representatives may use other procedures, such as mediation, to assist in these negotiations. The discussions and correspondence among the representatives for the purposes of these negotiations shall be treated as Confidential Information developed for purposes of settlement, and shall be exempt from discovery and production, and shall not be admissible in any subsequent arbitration or other proceedings without the concurrence of both of the Parties.

5.18.3 If the vice-presidential level representatives have not reached a resolution of the Dispute within thirty (30) calendar days after the matter is referred to them, then either Party may demand that the Dispute be settled by arbitration. Such an arbitration proceeding shall be conducted by a single arbitrator, knowledgeable about the telecommunications industry. The arbitration proceedings shall be conducted under the then-current rules of the American Arbitration Association ("AAA"). The Federal Arbitration Act, 9 U.S.C. Sections 1-16, not state law, shall govern the arbitrability of the Dispute. The arbitrator shall not have authority to award punitive damages. All expedited procedures prescribed by the AAA rules shall apply. The arbitrator's award shall be final and binding and may be entered in any court having jurisdiction thereof. Each Party shall bear its own costs and attorneys' fees, and shall share equally in the fees and expenses of the arbitrator. The arbitration proceedings shall occur in the Phoenix, Arizona metropolitan area. It is acknowledged that the Parties, by mutual, written agreement, may change any of these arbitration practices for a particular, some, or all Dispute(s).

5.18.4 Should it become necessary to resort to court proceedings to enforce a Party's compliance with the dispute resolution process set forth herein, and the court directs or otherwise requires compliance herewith, then all of the costs and expenses, including its reasonable attorney fees, incurred by the Party requesting such enforcement shall be reimbursed by the non-complying Party to the requesting Party.

5.18.5 Nothing in this Section is intended to divest or limit the jurisdiction and authority of the Commission or the Federal Communications Commission as provided by state or federal law.

5.18.6 No Dispute, regardless of the form of action, arising out of this SGAT, may be brought by either Party more than two (2) years after the cause of action accrues.

5.19 Controlling Law

5.19.1 This SGAT is offered by U S WEST and accepted by CLEC in accordance with the terms of the Act and the State law of Arizona. It shall be interpreted solely in accordance with the terms of the Act and the state law of Arizona.

5.20 Responsibility for Environmental Contamination

5.20.1 Neither Party shall be liable to the other for any costs whatsoever resulting from the presence or release of any environmental hazard that either Party did not introduce to the affected work location. Both Parties shall defend and hold harmless the other, its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) that arise out of or result from (i) any environmental hazard that the indemnifying Party, its contractors or agents introduce to the work locations or (ii) the presence or release of any environmental hazard for which the indemnifying Party is responsible under applicable law.

5.21 Notices

5.21.1 Any notices required by or concerning this SGAT shall be sent to U S WEST at the addresses shown below:

U S WEST
Director Interconnection Compliance
1801 California, Room 2410
Denver, CO 80202

With copy to:
U S WEST Law Department
Attention: General Counsel, Interconnection
1801 California Street, 51st Floor
Denver, CO 80202

5.21.2 Any notices required by or concerning this SGAT shall be sent by U S WEST to CLEC's address, as specified on the Signature Page in Section 22 of this SGAT.

5.22 Responsibility of Each Party

5.22.1 Each Party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this SGAT and retains full control over the employment, direction, compensation and discharge of all employees assisting in the performance of such obligations. Each Party will be solely responsible for all matters relating to payment of such employees, including compliance with social security taxes, withholding taxes and all other regulations governing such matters. Each Party will be solely responsible for proper handling, storage, transport and disposal at its own expense of all (i) substances or materials that it or its contractors or agents bring to, create or assume control over at work locations, and (ii) waste resulting therefrom or otherwise generated in connection with its or its contractors' or agents' activities at the work locations. Subject to the

limitations on liability and except as otherwise provided in this SGAT, each Party shall be responsible for (i) its own acts and performance of all obligations imposed by applicable law in connection with its activities, legal status and property, real or personal, and (ii) the acts of its own affiliates, employees, agents and contractors during the performance of that Party's obligations hereunder.

5.23 No Third Party Beneficiaries

5.23.1 This SGAT does not provide and shall not be construed to provide third parties with any remedy, claim, liability, reimbursement, cause of action, or other privilege.

5.24 Referenced Documents

5.24.1 All references to Sections shall be deemed to be references to Sections of this SGAT unless the context shall otherwise require. Whenever any provision of this SGAT refers to a technical reference, technical publication, U S WEST practice, any publication of telecommunications industry administrative or technical standards, or any other document specifically incorporated into this SGAT, it will be deemed to be a reference to the most recent version or edition (including any amendments, supplements, addenda, or successors) of such document that is in effect, and will include the most recent version or edition (including any amendments, supplements, addenda, or successors) of each document incorporated by reference in such a technical reference, technical publication, U S WEST practice, or publication of industry standards. The existing configuration of either Party's network may not be in immediate compliance with the latest release of applicable referenced documents.

5.25 Publicity

5.25.1 Neither Party shall publish or use any publicity materials with respect to the execution and delivery or existence of this SGAT without the prior written approval of the other Party.

5.26 Executed in Counterparts

5.26.1 This SGAT may be executed in any number of counterparts, each of which shall be deemed an original; but such counterparts shall together constitute one and the same instrument.

5.27 Compliance

5.27.1 Each Party shall comply with all applicable federal, state, and local laws, rules and regulations applicable to its performance under this SGAT. Without limiting the foregoing, U S WEST and CLEC agree to keep and maintain in full force and effect all permits, licenses, certificates, and other authorities needed to perform their respective obligations hereunder.

5.28 Compliance with the Communications Assistance Law Enforcement Act of 1994 ("CALEA")

5.28.1 Each Party represents and warrants that any equipment, facilities or services provided to the other Party under this SGAT comply with CALEA. Each Party shall indemnify

and hold the other Party harmless from any and all penalties imposed upon the other Party for such noncompliance and shall at the non-compliant Party's sole cost and expense, modify or replace any equipment, facilities or services provided to the other Party under this SGAT to ensure that such equipment, facilities and services fully comply with CALEA.

5.29 Cooperation

5.29.1 The Parties agree that this SGAT involves the provision of U S WEST services in ways such services were not previously available and the introduction of new processes and procedures to provide and bill such services. Accordingly, the Parties agree to work jointly and cooperatively in testing and implementing processes for pre-ordering, ordering, maintenance, provisioning and billing and in reasonably resolving issues which result from such implementation on a timely basis. Electronic processes and procedures are addressed in Section 12 of this SGAT.

5.30 Entire Agreement

5.30.1 This SGAT constitutes the entire agreement between U S WEST and CLEC and supersedes all prior oral or written agreements, representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.

Section 6.0 - RESALE

6.1 Description

6.1.1 U S WEST Basic Exchange Telecommunications Service, Basic Exchange Features, and IntraLATA Toll originating from U S WEST exchanges will be available for resale from U S WEST pursuant to the Act and will include terms and conditions (except prices) in U S WEST Tariffs, where applicable.

6.1.2 This Section addresses the provision of certain U S WEST services to CLEC for resale by CLEC. Should U S WEST wish to obtain similar services from CLEC for resale, the terms and conditions of this SGAT shall apply, and the Parties will negotiate the rates at which U S WEST may purchase such services. Any dispute in such negotiations shall be resolved in accordance with the Dispute Resolution Section of this SGAT.

6.1.3 Certain U S WEST services are not available for resale under this SGAT, as noted in Section 6.2. Private line service used for Special Access is available for resale but not at a discount. The applicable discounts for services available for resale are identified in Exhibit A.

6.2 Terms and Conditions

6.2.1 U S WEST shall offer CLEC training on procedures that CLEC must use to request services from U S WEST, including product information, listing, and access to U S WEST systems.

6.2.2 Basic Exchange Telecommunications Service, Basic Exchange Features, and IntraLATA Toll may be resold only for their intended or disclosed use and only to the same class of end user to which U S WEST sells such services (*e.g.,* residence service may not be resold to business end users). Service provided directly to CLEC for its own use and not resold to end-users, such as administrative services, must be identified by CLEC, and CLEC must pay the full retail rates and prices for such services.

6.2.2.1 Promotional offerings of ninety (90) days or less are not available for resale.

6.2.2.2 Residential services, services that are grandfathered, and Lifeline/Link-up services are available only to the same class of customer eligible to purchase these services from U S WEST.

6.2.2.3 Non-telecommunications services, such as inside wiring, calling cards and CPE, are not available for resale.

6.2.2.4 Enhanced services, such as voice messaging, are not available for resale.

6.2.2.5 U S WEST will offer Contract Service Arrangements (CSA) at the wholesale discount rates specified in Exhibit A for resale. U S WEST will offer CSAs for resale in aggregations of customers where CLEC end-users are similarly situated to the original CSA end user. Nothing in this agreement shall affect any obligation of any end

user with a CSA with U S WEST to terminate the CSA pursuant to the terms of the CSA, including payment of any cancellation fees, before transferring service to CLEC.

6.2.3 U S WEST shall provide to CLEC Telecommunications Services for resale that are at least equal in quality and in substantially the same time and manner that U S WEST provides these services to others, including other Resellers and end users, and in accordance with any applicable Commission service quality standards.

6.2.4 In the event that there are existing agreements between CLEC and U S WEST for resale under U S WEST retail Tariff discounts, CLEC may elect to continue to obtain services for resale under the existing agreements and retail Tariff discounts, or CLEC may elect to terminate such existing agreements and obtain such services under this SGAT with the associated wholesale discount specified in Exhibit A of this SGAT.

6.2.5 CLEC will provide a three year forecast within ninety (90) calendar days of requesting service pursuant to this SGAT. The forecast shall be updated and provided to U S WEST on an annual basis or as requested by U S WEST. Each forecast will provide:

The date service will be offered (by city and/or state);
The type and quantity of service(s) which will be offered;
CLEC's anticipated number of service orders; and
Name of CLEC's key contact personnel.

The information provided pursuant to this paragraph shall be considered Proprietary Information under the Nondisclosure Section of this SGAT.

6.2.6 CLEC may not reserve blocks of U S WEST telephone numbers, except as allowed by Tariffs.

6.2.7 U S WEST will accept at no charge one primary listing for each main telephone number belonging to CLEC's end user based on end user information provided to U S WEST by CLEC. U S WEST will place CLEC's listings in U S WEST's directory listing database for directory assistance purposes. Additional terms and conditions with respect to directory listings are described in Sections 10.4, 10.5, 10.6 and 15 of this SGAT.

6.2.8 U S WEST shall provide to CLEC, for CLEC's end users, E911/911 call routing to the appropriate Public Safety Answering Point ("PSAP"). U S WEST shall not be responsible for any failure of CLEC to provide accurate end-user information for listings in any databases in which U S WEST is required to retain and/or maintain end-user information. U S WEST shall provide and validate CLEC's end user information to the ALI/DMS ("Automatic Location Identification/Database Management System"). U S WEST shall use its standard process to update and maintain, on the same schedule that it uses for its end users, CLEC's end user service information in the ALI/DMS used to support E911/911 services. U S WEST assumes no liability for the accuracy of information provided by CLEC.

6.2.9 If U S WEST provides and CLEC accepts operator services, directory assistance, and intraLATA long distance as a part of the resold line, it will be offered with standard U S WEST branding. CLEC is not permitted to alter the branding of these services in any manner when the services are a part of the resold line without the prior written approval of U S WEST. However, at the request of CLEC and where technically feasible, U S WEST will

rebrand operator services and directory assistance in CLEC's name, in accordance with terms and conditions outlined in Sections 10.5 and 10.7.

6.2.10 CLEC shall designate the Primary Interexchange Carrier (PIC) assignments on behalf of its end users for interLATA and intraLATA services.

6.2.11 When end users switch from U S WEST to CLEC, or to CLEC from any other Reseller and if they do not change their service address to an address served by a different central office, such end users shall be permitted to retain their current telephone numbers if they so desire. U S WEST shall take no action to prevent CLEC end users from retaining their current telephone numbers.

6.2.12 In the event U S WEST terminates the provisioning of any resold services to CLEC for any reason, including CLEC's non-payment of charges, CLEC shall be responsible for providing any and all necessary notice to its end users of the termination. In no case shall U S WEST be responsible for providing such notice to CLEC's end users. U S WEST will provide notice to CLEC of U S WEST's termination of a resold service on a timely basis consistent with Commission rules and notice requirements.

6.2.13 The underlying network provider of a resold service shall be entitled to receive, from the purchaser of Switched Access, the appropriate access charges pursuant to its then effective Switched Access Tariff.

6.3 Rates and Charges

6.3.1 The Telecommunications Services identified in Exhibit A are available for resale at the wholesale discount percentage shown in Exhibit A. This SGAT at Exhibit A incorporates the Wholesale Discount Rate for Arizona as ordered by the Commission in Docket Number U-3021-96-448 et al. If the Commission takes any action to adjust the rates contained herein, U S WEST will make a compliance filing to incorporate the adjusted rates into this SGAT. Upon the compliance filing by U S WEST, the parties will abide by the adjusted rates on a going-forward basis. The Telecommunications Services available for resale but excluded from the wholesale pricing arrangement in this SGAT are available at the retail Tariff rates.

6.3.2 The Customer Transfer Charges (CTC) as specified in Exhibit A apply when transferring services to CLEC.

6.3.3 A Subscriber Line Charge (SLC), or any subsequent federally mandated charge to end users, will continue to be paid by CLEC without discount for each local exchange line resold under this SGAT. All federal and state rules and regulations associated with SLC as found in the applicable Tariffs also apply.

6.3.4 CLEC will pay to U S WEST the PIC change charge without discount for CLEC end user changes of interexchange or intraLATA carriers. Any change in CLEC's end users' interexchange or intraLATA carrier must be requested by CLEC on behalf of its end user.

6.3.5 CLEC agrees to pay U S WEST when its end user activates any services or features that are billed on a per use or per activation basis subject to the applicable discount in Exhibit A as such may be amended pursuant to this Section (*e.g.,* continuous redial, last call return, call back calling, call trace, etc.).

6.3.6 Miscellaneous charges, if applicable, will be consistent with charges for equivalent services ordered by U S WEST end users.

6.3.7 If the Commission orders additional services to be available for resale, U S WEST will revise Exhibit A to incorporate the services added by such order into this SGAT, effective on the date ordered by the Commission. If the Commission indicates those additional services must be available for resale at wholesale discount rates, those additional services will be added to this SGAT at the original SGAT wholesale discount rate. The Commission, through cost proceeding U-3021-96-448 et al., established wholesale discount rates and other resale charges to be made generally available to Resellers.

6.3.8 U S WEST shall have a reasonable time to implement system or other changes necessary to bill the Commission-ordered rates or charges.

6.3.9 If the resold services are purchased pursuant to Tariffs and the Tariff rates change, charges billed to CLEC for such services will be based upon the new Tariff rates less the applicable wholesale discount, if any, as agreed to herein or as established by Commission order and/or resale Tariff. The new rate will be effective upon the Tariff effective date.

6.4 Ordering Process

6.4.1 CLEC, or CLEC's agent, shall act as the single point of contact for its end users' service needs, including without limitation, sales, service design, order taking, provisioning, change orders, training, maintenance, trouble reports, repair, post-sale servicing, billing, collection and inquiry. CLEC shall inform its end users that they are end users of CLEC for resold services. CLEC's end users contacting U S WEST will be instructed to contact CLEC; however, nothing in this SGAT, except as provided below, shall be deemed to prohibit U S WEST from discussing its products and services with CLEC's end users who call U S WEST.

6.4.2 CLEC shall transmit to U S WEST all information necessary for the ordering (billing, listing and other information), installation, repair, maintenance and post-installation servicing according to U S WEST's standard procedures, as described in the U S WEST Interconnect & Resale Resource Guide available on U S WEST's Web site. Information shall be provided using U S WEST's designated Local Service Request (LSR) format which may include the LSR, end user and resale forms.

6.4.3 U S WEST will use the same performance standards and criteria for CLEC service orders as U S WEST provides itself. The process for CLEC service orders, provisioning, maintenance and repair are detailed in the Access to Operational Support Systems, Section 12 of this SGAT, and are applicable whether orders are submitted via OSS or FAX.

6.4.4 CLEC must send U S WEST complete and accurate end user listing information for Directory Assistance, Directory Listings, and 911 Emergency Services.

6.4.5 When U S WEST's end user or the end user's new service provider orders the discontinuance of the end user's existing service in anticipation of moving to another service provider, U S WEST will render its closing bill to the end user effective with the disconnection. If U S WEST is not the local service provider, U S WEST will issue a bill to CLEC for that

portion of the service provided to CLEC should CLEC's end user, a new service provider, or CLEC request service be discontinued to the end user. U S WEST will notify CLEC by FAX, OSS interface, or other agreed upon processes when an end user moves to another service provider. U S WEST will not provide CLEC with the name of the other Reseller or service provider selected by the end user.

6.4.6 CLEC shall provide U S WEST and U S WEST shall provide CLEC with points of contact for order entry, problem resolution and repair of the resold services. These points of contact will be identified for both CLEC and U S WEST in the event special attention is required on service request.

6.4.7 Prior to placing orders on behalf of the end user, CLEC shall be responsible for obtaining and have in its possession Proof of Authorization ("POA"), as set forth in Section 5.3 of this SGAT.

6.4.8 Due date intervals are established when service requests are made through the IMA and EDI interface. Intervals provided to CLEC shall be substantially the same as U S WEST provides itself.

6.5 Billing

6.5.1 U S WEST shall bill CLEC and CLEC shall be responsible for all applicable charges for the resold services as provided herein. CLEC shall also be responsible for all Tariffed charges and charges separately identified in this SGAT associated with services that CLEC resells to an end user under this SGAT.

6.5.2 U S WEST shall provide CLEC, on a monthly basis, within 7-10 calendar days of the last day of the most recent billing period, in an agreed upon standard electronic billing format as detailed in Section 12, billing information including (1) a summary bill, and (2) individual end user sub-account information consistent with the samples available for CLEC review.

6.5.3 U S WEST may discontinue processing orders for the failure by CLEC to make full payment for the resold services provided under this SGAT within thirty (30) calendar days of the due date on CLEC's bill.

6.5.4 U S WEST may disconnect for the failure by CLEC to make full payment for the resold services provided under this SGAT within sixty (60) calendar days of the due date on CLEC's bill. CLEC will pay the Tariff charge required to reconnect each end user line disconnected pursuant to this paragraph.

6.6 Maintenance and Repair

6.6.1 U S WEST will maintain facilities and equipment used to provide CLEC resold services. A CLEC or its end users may not rearrange, move, disconnect or attempt to repair U S WEST facilities or equipment, other than by connection or disconnection to any interface between U S WEST and the end user without the written consent of U S WEST.

6.6.2 Maintenance and repair procedures are detailed in Section 12. Access to telephone numbers and dialing parity are discussed in Sections 13 and 14 respectively.

6.6.3 CLEC and U S WEST will employ the procedures for handling misdirected repair calls as specified in the Maintenance and Repair Section of this SGAT.

Section 7.0 - INTERCONNECTION

7.1 Interconnection Facility Options

7.1.1 This Section describes the Interconnection of U S WEST's network and CLEC's own network for the purpose of exchanging EAS/Local traffic. U S WEST will provide Interconnection at the trunk side of an end office switch and on the trunk connection points of a local or access tandem switch. U S WEST will also provide interconnection at the line-side of a local switch (*i.e.,* local switching), central office cross-connection points, signal transfer points and points of access to unbundled network elements (*see* Section 9 of this SGAT). "Interconnection" is as described in the Act and refers to the connection between networks for the purpose of transmission and routing of telephone exchange service traffic and exchange access traffic. Interconnection is provided for the purpose of connecting end office switches to end office switches or end office switches to local tandem switches for the exchange of EAS/Local traffic; or end office switches to access tandem switches for the exchange of intraLATA toll or jointly provided switched access traffic. Local tandem to local tandem switch connections will be provided where technically feasible. Local tandem to access tandem and access tandem to access tandem switch connections are not provided.

7.1.1.1 U S WEST will provide to CLEC interconnection at least equal in quality to that provided to itself, to any subsidiary, affiliate, or any other party to which it provides interconnection.

7.1.2 Methods of Interconnection

The parties will negotiate the facilities arrangement between their networks. CLEC shall establish a Point of Interconnection in each U S WEST local calling area where it does business. The following alternatives are negotiable: (1) a DS1 or DS3 entrance facility; (2) Collocation; (3) negotiated Mid-Span meet facilities; or (4) Hub location.

7.1.2.1 Entrance Facility. Interconnection may be accomplished through the provision of a DS1 or DS3 entrance facility. An entrance facility extends from the U S WEST Serving Wire Center to CLEC's switch location. Entrance facilities may not extend beyond the area served by the U S WEST Serving Wire Center. The rates for entrance facilities are provided in Exhibit A. U S WEST's Private Line Transport service is available as an alternative to entrance facilities, when CLEC uses such Private Line Transport service for multiple services.

7.1.2.2 Collocation. Interconnection may be accomplished through the Collocation arrangements offered by U S WEST. The terms and conditions under which Collocation will be available are described in Section 8 of this SGAT. When interconnection is provided through the Collocation provisions of Section 8 of this SGAT, the LIS ITP rate elements, as described in Exhibit A, will apply. The rates are defined at a DS1 and DS3 level.

7.1.2.3 Mid-Span Meet POI. A Mid-Span Meet POI is a negotiated Point of Interface, limited to the Interconnection of facilities between one Party's switch and the other Party's switch. The actual physical Point of Interface and facilities used will be subject to negotiations between the Parties. Each Party will be responsible for its

portion of the build to the Mid-Span Meet POI, if the meet point arrangement is used exclusively for the exchange of local traffic.

7.1.2.4 Hub Location. When CLEC locates its switch outside the local calling area, the Hub Location Point of Interface is available to establish CLEC's Point of Interface within the local calling area. The Hub Location Point of Interface, limited to use with Local Interconnection Service, may be established at a U S WEST Central Office at which multiplexing is performed.

7.1.2.5 The physical arrangement of a POI at a Hub location consists of a DS1 or DS3 Private Line Transport Service facility from CLEC's location (in another U S WEST local calling area) to the U S WEST Hub location, leased from U S WEST, and a Private Line Transport Service multiplexer at the Hub location, leased from U S WEST.

7.2 Exchange of Traffic

7.2.1 Description

7.2.1.1 This Section 7.2 addresses the exchange of traffic between CLEC's network and U S WEST's network. Where either Party acts as an IntraLATA Toll provider, each Party shall bill the other symmetrical rates using U S WEST's Tariffed Switched Access rates as a surrogate. Where either Party interconnects and delivers traffic to the other from third parties, each Party shall bill such third parties the appropriate charges pursuant to its respective Tariffs or contractual offerings for such third party terminations The Parties will directly exchange traffic between their respective networks without the use of third party transit providers.

7.2.1.2 The traffic types to be exchanged under this SGAT include:

7.2.1.2.1 EAS/Local traffic as defined in this SGAT.

7.2.1.2.2 IntraLATA Toll traffic as defined in this SGAT.

7.2.1.2.3 Jointly provided Switched Access traffic as defined in Access Tariffs and referenced in this Section.

7.2.1.2.4 Transit traffic is any traffic that originates from one Telecommunications Carrier's network, transits another Telecommunications Carrier's network, and terminates to yet another Telecommunications Carrier's network.

7.2.1.2.5 Transit service is provided by U S WEST, as a local and access tandem provider, to CLEC to enable the completion of calls originated by or terminated to another Telecommunications Carrier (such as another CLEC, an existing LEC, or a wireless carrier), which is connected to U S WEST's local or access tandems. To the extent that CLEC's switch functions as a local or access tandem switch, as defined in this SGAT, CLEC may also provide transit service to U S WEST.

7.2.1.3 Ancillary traffic includes all traffic destined for ancillary services, or that may have special billing requirements, including, but not limited to, the following:

7.2.1.3.1 Directory Assistance;

7.2.1.3.2 911/E911;

7.2.1.3.3 Operator busy line interrupt and verify; and

7.2.1.3.4 Toll free services.

7.2.1.4 Ancillary services are addressed in Section 10 of this SGAT.

7.2.2 Terms and Conditions

7.2.2.1 Transport and Termination of Local Traffic.

7.2.2.1.1 EAS/Local traffic will be terminated as Local Interconnection Service (LIS).

7.2.2.1.2 As negotiated between the Parties, the transport of EAS/Local traffic may occur in several ways:

7.2.2.1.2.1 Two-way trunk groups will be established wherever possible; however, either Party may elect to provision its own one-way trunks for delivery of local traffic to be terminated on the other Party's network.

7.2.2.1.2.2 The Parties may elect to purchase transport services from each other or from a third party that has leased the Private Line Transport Service facility from U S WEST. Such transport delivers the originating Party's local traffic to the terminating Party's end office or local tandem for call termination. Transport may be purchased from U S WEST or CLEC as tandem routed (*i.e.*, tandem switching, tandem transmission and direct trunked transport) or direct routed (*i.e.*, direct trunked transport).

7.2.2.1.3 Based on forecasted or actual traffic at CLEC's busy hour in centum call seconds (CCS), where there is a DS1's worth of traffic (512 CCS) between CLEC's switch and a U S WEST end office, CLEC will order a dedicated (*i.e.*, direct) trunk group from CLEC POI directly to the U S WEST end office. To the extent that CLEC has established a collocation arrangement at a U S WEST end office location, and has available capacity, CLEC shall provide two-way direct trunk facilities, when required, from that end office to CLEC's switch. In all other cases, the direct facility may be provisioned by U S WEST or CLEC or a third party. If both CLEC and U S WEST desire to provision the facility and cannot otherwise agree, the Parties may agree to resolve the dispute through the submission of competitive bids.

7.2.2.1.4 LIS ordered to a local tandem will be provided as Direct Trunked Transport between the serving Wire Center of CLEC's POI and the local tandem.

Tandem transmission rates, as specified in Exhibit A of this SGAT, will apply to the transport provided from the local tandem to U S WEST's end office.

7.2.2.2 IntraLATA Toll Traffic

7.2.2.2.1 IntraLATA toll traffic shall be delivered to U S WEST at the intraLATA access tandem or via separate trunks to U S WEST's end office(s), as designated by CLEC.

7.2.2.3 Transit Traffic

7.2.2.3.1 U S WEST will accept traffic originated by CLEC for termination to another CLEC, existing LEC, IXC, or wireless carrier that is connected to U S WEST's local and/or access tandems. U S WEST will also terminate traffic from these other Telecommunications Carriers to CLEC.

7.2.2.3.2 To the extent technically feasible, the Parties involved in transporting transit traffic will deliver calls to each involved network with CCS/SS7 Protocol and the appropriate ISUP/TCAP messages to facilitate full interoperability and billing functions.

7.2.2.3.3 There are three types of transit traffic:

a) Local transit: The originating company is responsible for payment of appropriate rates to the transit company and to the terminating company.

b) IntraLATA Toll traffic: In the case of IntraLATA toll traffic, the originating toll provider is responsible for payment of appropriate rates to the transit company and to the terminating company. In the case of IntraLATA Toll traffic where U S WEST is the designated IntraLATA Toll provider for existing LECs, U S WEST will be responsible for payment of appropriate usage rates.

c) Jointly Provided Switched Access: The Parties will use industry standards developed to handle the provision and billing of jointly provided switched access (MECAB, MECOD, and the Parties' FCC and state access Tariffs). Each Party will bill the IXC the appropriate portion of its Switched Access rates. U S WEST will also provide the one-time notification to CLEC of the billing name, billing address and carrier identification codes of the IXCs subtending any access tandems to which CLEC directly connects. This type of traffic is discussed separately in this Section.

7.2.2.4 Interface Code Availability. Supervisory signaling specifications, and the applicable network channel interface codes for LIS trunks, are the same as those used for Feature Group D Switched Access Service, as described in U S WEST's Switched Access Tariffs.

7.2.2.5 Switching Options.

7.2.2.5.1 SS7 Out of Band Signaling. SS7 Out of Band Signaling is available for LIS trunks. SS7 Out-of-Band Signaling must be requested on the order for the new LIS trunks. Common Channel Signaling Access Capability Service, as set forth in this SGAT, must be ordered by CLEC when SS7 Out-of-Band Signaling is requested on LIS trunks.

7.2.2.5.2 Clear Channel Capability. Clear Channel Capability (64CCC) permits 24 DS0-64 Kbps services or 1.536 Mbps of information on the 1.544 Mbps/s line rate. 64CCC is available for LIS trunks equipped with SS7 Out-of-Band Signaling. 64CCC must be requested on the order for the new LIS trunks. U S WEST will provide CLEC with a listing of U S WEST local tandems fully capable of routing 64CCC traffic through the U S WEST website: http://www.uswest.com/disclosure.

7.2.2.6 Measurement of terminating local Interconnection minutes begins when the terminating LIS entry switch receives answer supervision from the called end user's end office indicating the called end user has answered. The measurement of terminating call usage over LIS trunks ends when the terminating LIS entry switch receives disconnect supervision from either the called end user's end office, indicating the called end user has disconnected, or CLEC's Point of Interconnection, whichever is recognized first by the entry switch. This is commonly referred to as "conversation time."

7.2.2.7 LIS Forecasting

7.2.2.7.1 Both CLEC and U S WEST shall work in good faith to define a mutually agreed upon forecast of LIS trunking.

7.2.2.7.2 Both Parties shall have the obligation to participate in joint planning meetings at quarterly intervals to establish trunk design and provisioning requirements. The Parties agree to provide mutual trunk forecast information to ensure end user call completion between the Parties' networks. Such forecasts shall be for LIS trunking which impacts the switch capacity and facilities of each Party.

7.2.2.7.3 Switch growth jobs are custom jobs with a minimum six month timeframe from the vendors. To align with the timeframe needed to provide for the requested capacity, including engineering, ordering, installation and make ready activities, the Parties will utilize U S WEST standard forecast timelines, as defined in the standard U S WEST LIS Trunk Forecast Forms.

7.2.2.7.4 Each Party will utilize the Forecast cycle outlined on the U S WEST LIS Trunk Forecast Forms, which stipulates that forecasts be submitted on a quarterly basis. The forecast will identify trunking requirements for a three year period. From the quarterly close date as outlined in the forecast cycle, the receiving Party will have one month to determine network needs and place vendor orders which require a six month minimum to complete the network build. Seven months after submission of the forecast, the forecasting party may

begin to order against the facilities forecast for that quarter, given no vendor or other unavoidable delays. For ordering information see Section 7.2.4.

7.2.2.7.5 Both Parties will follow the forecasting and provisioning requirements of this SGAT for the appropriate sizing of trunks, and use of direct vs. local tandem routing. See Section 7.2.2.1.3.

7.2.2.7.6 In the event of a dispute regarding forecast quantities, the Parties will construct to the lower forecast, while attempting to resolve the matter informally. If the Parties fail to reach resolution, the Dispute Resolution provision of this Agreement shall apply.

7.2.2.7.7 Joint planning meetings will be used to bring clarity to the process. Each Party will provide adequate information associated with the U S WEST LIS Trunk Forecast Forms in addition to its forecasts. During the joint planning meetings, both Parties shall provide information on major network projects anticipated for the following year that may impact the other Party's forecast or Interconnection requirements. No later than two weeks prior to the joint planning meetings, the Parties shall exchange information to facilitate the planning process.

7.2.2.7.8 In addition to the above information, CLEC shall provide:

7.2.2.7.8.1 Completed U S WEST LIS Trunk Forecast Forms.

7.2.2.7.8.2 Any planned use of an alternate local tandem provider.

7.2.2.7.9 In addition to the above information, the following information will be available through the Local Exchange Routing Guide or the Interconnections (ICONN) Database. The LERG is available through Bellcore. ICONN is available through the U S WEST Web site located at http://www.uswest.com/cgi-bin/iconn/iconn.pl.

7.2.2.7.9.1 U S WEST Tandems and U S WEST end offices (LERG);

7.2.2.7.9.2 CLLI codes (LERG);

7.2.2.7.9.3 Business/Residence line counts; (ICONN)

7.2.2.7.9.4 Switch type (LERG or ICONN); and

7.2.2.7.9.5 Current and planned switch generics (ICONN).

7.2.2.7.10 U S WEST Network Disclosure of deployment information for specific technical capabilities (*e.g.,* ISDN deployment, 64 CCC, etc.) shall be provided on U S WEST's web site, http://www.uswest.com/disclosure.

7.2.2.7.11 When appropriate, U S WEST will notify CLEC through the U S WEST Trunk Group Servicing Request (TGSR) process of the need to take action and place orders in accordance with the forecasted trunk requirements.

7.2.2.7.12 The following terms shall apply to the forecasting process:

a) CLEC forecasts shall be provided as detailed in the standard LIS Trunk Forecast Form.

b) Forecasts shall be deemed Confidential Information.

7.2.2.7.13 If a trunk group is consistently under 60% of centum call seconds (CCS) capacity each month of any three month period, CLEC will be provided written notification of the requirement to resize the trunk groups. Such notification shall include information on current utilization levels. If CLEC does not resize the trunk group within 30 days of the written notification, U S WEST may reclaim the facilities and charge CLEC a charge equal to one-half of the DS1/DS3 non-recurring rate described in Exhibit A. When reclamation does occur, the trunk group shall not be left with less than 25% excess capacity.

7.2.2.7.14 Each Party shall provide a specified point of contact for planning, forecasting and trunk servicing purposes.

7.2.2.7.15 Interconnection facilities provided on a route which involves extraordinary circumstances shall be subject to the Construction Charges, as detailed in Section 19 of this SGAT. U S WEST and CLEC may also choose to work in good faith to identify and locate alternative routes which can be used to accommodate CLEC forecasted build. Extraordinary circumstances include, but are not limited to, natural obstructions such as lakes, rivers, or steep terrain, and legal obstructions such as governmental, federal, Native American or private rights of way. Standard U S WEST forecast timeframes will not apply under these circumstances.

7.2.2.8 Trunking Requirements

7.2.2.8.1 The Parties will provide designed Interconnection facilities in accordance with current industry standards.

7.2.2.8.2 Separate trunk groups will be established based on billing, signaling, and network requirements. For example, (1) billing requirements - switched access vs. local traffic, (2) signaling requirements - MF vs. SS7, and (3) network requirements - directory assistance traffic to Operator Services tandems. The following is the current list of traffic types that require separate trunk groups, unless specifically otherwise stated in this SGAT.

a) Combined IntraLATA Toll and Switched Access trunks;

b) EAS/Local trunks;

c) Directory Assistance trunks (where the switch type requires separation from Operator Services trunks);

d) 911/E911 trunks;

e) Operator services trunks (where the switch type requires separation from Directory Assistance trunks);

f) Mass calling trunks, if applicable;

g) Commercial Mobile Radio Service Wireless traffic for which CLEC serves as the transit provider for traffic between the CMRS provider and U S WEST;

h) Transit IntraLATA toll; and

i) Transit local.

7.2.2.8.3 Trunk group connections will be made at a DS1 or multiple DS1 level of exchange of EAS/Local, and IntraLATA Toll/Switched Access traffic. Ancillary service trunk groups may be made below a DS1 level, as negotiated.

7.2.2.8.4 The Parties will provide Common Channel Signaling (CCS) to one another in conjunction with all EAS/Local trunk circuits, except as provided below.

a) The Parties will provision all trunking using SS7/CCS capabilities. Redundant MF signaling networks will not be provided unless specifically called for in this SGAT. Exceptions to this arrangement would be limited to operator services trunking, 911 trunking and any others currently available in the U S WEST network only on MF signaling. When the SS7/CCS option becomes available in the U S WEST network for said trunking, the Parties will provision new trunks using SS7. In addition, the Parties will jointly work to convert existing trunking to SS7, as appropriate. Procedures for establishing CCS connectivity can be found in Section 10.15 of this SGAT.

b) When the Parties interconnect via CCS for jointly provided Switched Access Service, the tandem provider will provide MF/CCS interworking as required for Interconnection with Interexchange Carriers who use MF signaling.

7.2.2.8.5 The Parties shall terminate EAS/Local traffic exclusively on local tandems or end office switches. No EAS/local trunk groups shall be terminated on U S WEST's access tandems. In the complete absence of a local tandem, EAS/Local trunk groups will be established directly between CLEC and U S WEST end office switches.

7.2.2.8.6 The Parties agree to exchange local traffic in the same EAS/Local area as such traffic originated.

7.2.2.8.7 Alternate Traffic Routing. If CLEC has a LIS arrangement which provides two paths to a U S WEST end office (one route via a local tandem and one direct route), CLEC may elect to utilize alternate traffic routing. CLEC traffic will be offered first to the direct trunk group (also referred to as the "primary high"

route) and then overflow to the local tandem group (also referred to as the "alternate final" route) for completion to U S WEST end offices.

7.2.2.9 Testing

7.2.2.9.1 Acceptance Testing. At the time of installation of a LIS trunk group, and at no additional charge, the Parties will cooperatively test the same parameters tested for terminating Feature Group D Switched Access Service. See U S WEST's applicable Switched Access Tariff for the specifications.

7.2.2.9.2 Testing Capabilities

7.2.2.9.2.1 Terminating LIS testing is provided where equipment is available, with the following test lines: seven-digit access to balance (100 type), milliwatt (102 type), nonsynchronous or synchronous, automatic transmission measuring (105 type), data transmission (107 type), loop-around, short circuit, open circuit, and non-inverting digital loopback (108 type).

7.2.2.9.2.2 In addition to LIS acceptance testing, other tests are available (*e.g.*, additional cooperative acceptance testing, automatic scheduled testing, cooperative scheduled testing, manual scheduled testing, and non-scheduled testing) at the applicable U S WEST Tariff rates. Testing fees will be paid by CLEC when requesting the testing.

7.2.2.10 Mileage Measurement. Where required, the mileage measurement for LIS facilities and trunks is determined in the same manner as the mileage measurement for V & H methodology as outlined in NECA Tariff No. 4.

7.3 Reciprocal Compensation

7.3.1 Interconnection Facility Options

The Reciprocal Compensation Provisions of this SGAT shall apply to the exchange of local traffic between CLEC's network and U S WEST's network. Where either Party acts as an IntraLATA Toll provider, each Party shall bill the other symmetrical rates using U S WEST's Tariffed Switched Access rates as a surrogate. Where either Party interconnects and delivers traffic to the other from third parties, each Party shall bill such third parties the appropriate charges pursuant to its respective Tariffs or contractual offerings for such third party terminations. Absent a separately negotiated agreement to the contrary, the Parties will directly exchange traffic between their respective networks without the use of third party transit providers.

7.3.1.1 Entrance Facilities

7.3.1.1.1 Recurring and nonrecurring rates for Entrance Facilities are specified in Exhibit A and will apply for those DS1 or DS3 facilities dedicated to use by LIS.

7.3.1.1.2 If CLEC chooses to use an existing facility purchased as Private Line Transport Service from the state or FCC Access Tariffs, the rates from those Tariffs will apply.

7.3.2 Direct Trunked Transport

7.3.2.1 Either Party may elect to provision one-way trunks to the other Party's end office for the termination of traffic.

7.3.2.2 Either Party may elect to purchase Direct Trunked Transport from the other Party.

7.3.2.2.1 Direct Trunked Transport (DTT) is available between the Serving Wire Center of the POI and the terminating Party's local tandem or end office switches. The applicable rates are described in Exhibit A. DTT facilities are provided as dedicated DS3 or DS1 facilities.

7.3.2.2.2 When DTT is provided to a local tandem for local traffic, or to an access tandem for toll traffic, the applicable DTT rate elements apply between the serving Wire Center and the tandem. Additional rate elements for delivery of traffic to the terminating end office are Tandem Switching and Tandem Transmission. These rates are described below.

7.3.2.2.3 Mileage shall be measured for DTT based on V&H coordinates between the serving Wire Center and the local/access tandem or end office.

7.3.2.2.4 Fixed Charges per DS1 or per DS3 and per mile charges are defined for DTT in Exhibit A of this SGAT.

7.3.2.3 If the Parties elect to establish two-way trunks, the compensation for such jointly used, shared facilities shall be adjusted pursuant to this paragraph. The provider of the DTT will always bill 100% of the charges for the facility to the other Party, who will in turn, bill the provider 50% of the DTT charges. Payments according to this 50/50 allocation of traffic will continue until either Party provides actual minutes of use data to substantiate a change in the allocation.

7.3.2.4 Multiplexing options (DS1/DS3 Mux) are available at rates described in Exhibit A.

7.3.3 Installation nonrecurring charges may be assessed by the provider for each LIS trunk ordered. U S WEST rates are specified in Exhibit A.

7.3.4 Local Traffic

7.3.4.1 End Office Call Termination

7.3.4.1.1 The Parties agree that per minute of use call termination rates as described in Exhibit A of this SGAT will apply reciprocally for the termination of EAS/Local traffic.

7.3.4.1.2 For local traffic terminated at a U S WEST or CLEC end office, the end office call termination rate in Exhibit A shall apply.

7.3.4.1.3 For purposes of call termination, the CLEC switch(es) shall be treated as end office switch(es), unless CLEC's switch(es) meet the definition of tandem switch in this SGAT.

7.3.4.1.4 For purposes of call termination, this SGAT recognizes the unique status of traffic originated by and terminated to enhanced service providers. These parties have historically been subject to an access charge exemption by the FCC which permits the use of Basic Exchange Telecommunications Service as a substitute for Switched Access Service.

7.3.4.1.5 Neither Party shall be responsible to the other for call termination charges associated with third party traffic that transits such Party's network.

7.3.4.2 Tandem Switched Transport

7.3.4.2.1 For traffic delivered through a U S WEST or CLEC local tandem switch (as defined in this SGAT), the tandem switching rate and the tandem transmission rate in Exhibit A shall apply per minute in addition to the end office call termination rate described above.

7.3.4.2.2 Mileage shall be measured for the tandem transmission rate elements based on V&H coordinates between the local tandem and terminating end office. If actual mileage cannot be measured, an assumed one mile will be used.

7.3.4.2.3 When CLEC terminates traffic to a U S WEST remote office, tandem transmission rates will be applied for the mileage between the U S WEST host office and the U S WEST remote office.

7.3.5 Miscellaneous Charges

7.3.5.1 Expedites for LIS trunk orders are allowed only on an exception basis with U S WEST executive approval within the same timeframes as U S WEST provides for other designed services. When expedites are approved, expedite charges will apply to LIS trunk orders based on rates, terms and conditions described in Exhibit A.

7.3.5.2 Construction charges are described in Exhibit A of this SGAT.

7.3.6 IntraLATA Toll Traffic. Applicable U S WEST Switched Access Tariff rates apply to IntraLATA toll traffic routed to an access tandem, or directly to an end office. Relevant rate elements could include Direct Trunk Transport, Tandem Switching, Tandem Transmission, Interconnection Charge, Local Switching, and Carrier Common Line, as appropriate.

7.3.7 Transit Traffic.

The following rates will apply:

7.3.7.1 Local Transit: The applicable LIS tandem switching and tandem transmission rates contained in Exhibit A of this SGAT, apply to the originating CLEC.

7.3.7.2 IntraLATA Toll Transit: The applicable U S WEST Tariffed Switched Access tandem switching and tandem transmission rates apply to the originating CLEC or existing LEC.

7.3.7.3. Jointly Provided Switched Access: The applicable Switched Access rates will be billed by the Parties to the IXC based on MECAB guidelines and their respective FCC and state access Tariffs.

7.3.8 U S WEST and CLEC are required to provide each other the proper signaling information (*e.g.,* originating call party number and destination call party number, etc.) to enable each Party to issue bills in a complete and timely fashion. All CCS signaling parameters will be provided including Calling Party Number (CPN), originating line information (OLI), calling party category, charge number, etc. All privacy indicators will be honored. If either Party fails to provide CPN, and cannot substantiate technical restrictions (*i.e.*, MF signaling) such traffic will be billed as Switched Access when unidentified messages are greater than 5% of total.

7.4 Ordering

7.4.1 When ordering LIS, the ordering Party shall specify on the Access Service Request: 1) the type and number of Interconnection facilities to terminate at the Point of Interconnection in the serving Wire Center; 2) the type of interoffice transport, (*i.e.*, Direct Trunked Transport or Tandem Transmission); 3) the number of trunks to be provisioned at a local exchange office or local tandem; and 4) any optional features. When the ordering Party requests facilities, routing, or optional features different than those determined to be available, the Parties will work cooperatively in determining an acceptable configuration, based on available facilities, equipment and routing plans.

7.4.2 When the ordering Party initially requests a DS3 Interconnection facility to a local tandem or local exchange office, the provider will forward the appropriate DS1 facility record information necessary to identify the circuit facility assignment. On subsequent requests utilizing existing DS3 Direct Trunked Transport facilities, the provider will assign the DS1 facility to the DS3 Direct Trunked Transport facility, as directed by the ordering Party.

7.4.3 A joint planning meeting will precede initial trunking orders. These meetings will result in the transmittal of Access Service Requests (ASRs) to initiate order activity. A Party requesting local tandem Interconnection will provide its best estimate of the traffic distribution to each end office subtending the local tandem.

7.4.4 Trunks will be ordered either to U S WEST's end offices directly or to U S WEST's local tandem for local traffic. Separate trunks will be ordered to U S WEST's access tandem only for intraLATA toll and jointly provided Switched Access traffic.

7.4.5 Service intervals and due dates for the initial establishment of trunking arrangements at each location of Interconnection between the Parties will be determined on an individual case basis.

7.4.6 Service intervals and due dates for the establishment of subsequent trunking arrangements for Interconnection between the Parties, will be in accordance with the guidelines for LIS contained in the Interconnect & Resale Resource Guide, available on U S WEST's Web site.

7.4.7 CLEC may cancel an order for LIS at any time prior to notification by U S WEST that service is available for CLEC's use. If CLEC is unable to accept LIS within 120 calendar days after the original service date, CLEC has the following options:

a) The order for LIS will be canceled, and charges as set forth above will apply; or

b) Billing for the service will commence.

In such instances, the cancellation date or the date billing is to commence, depending on which option is selected by CLEC, will be the 121st calendar day beyond the original service date of the order for LIS.

7.5 Jointly Provided Switched Access Services

7.5.1 Switched Access Service is defined and governed by the FCC and State Access Tariffs, MECAB and MECOD, and is not modified by any provisions of this SGAT. Both Parties agree to comply with such guidelines.

7.5.2 U S WEST will agree to function as the Access Service Coordinator (ASC) as defined in the Multiple Exchange Carrier Ordering and Design Guidelines (MECOD)(Technical Reference SR-TAP-000984). U S WEST will provide the operational, technical and administrative support required in the planning, provisioning and maintenance involved in the joint access provisioning process to the IXCs.

7.5.3 U S WEST and CLEC will each render a separate bill to the IXC, using the multiple bill, multiple tariff option.

Section 8.0 - COLLOCATION

8.1 Description

8.1.1 Collocation allows for the placing of transmission and cross-connection equipment owned by CLEC within U S WEST's Wire Center for the purpose of accessing unbundled network elements (UNEs), ancillary services, and Interconnection or other wholesale or retail services offered by U S WEST. Collocation includes the leasing to CLEC of physical space in a U S WEST Wire Center, as well as the use by CLEC of power; heating, ventilation and air conditioning (HVAC); and cabling in U S WEST's Wire Center. Collocation also allows CLECs to access InterConnection Distribution Frames (ICDF) for the purpose of accessing and combining unbundled network elements and ancillary services. There are four types of Collocation available pursuant to this SGAT – Virtual, Caged Physical, Cageless Physical, and InterConnection Distribution Frame Collocation.

8.1.1.1 **Virtual Collocation** – A Virtual Collocation arrangement requires CLEC to purchase and deliver to U S WEST CLEC's own transmission and cross-connection equipment for U S WEST to install and maintain in U S WEST's Wire Center. CLEC does not have physical access to its equipment in the U S WEST Wire Center.

8.1.1.2 **Caged Physical Collocation** – allows CLEC to lease caged floor space in 100 square foot increments, up to a maximum of 400 square feet, for placement of its transmission or cross-connection equipment within U S WEST's Wire Center. CLEC is responsible for the procurement, installation and on-going maintenance of its equipment as well as the cross connections required within the cage.

8.1.1.3 **Cageless Physical Collocation** – is a non-caged area within a U S WEST Wire Center. Space will be made available in single frame bay increments. The minimum square footage is 9 square feet per bay. Space will be provided utilizing U S WEST standard equipment bay configurations in which CLEC can place and maintain its own equipment. CLEC is responsible for the procurement, installation and on-going maintenance of its equipment as well as the cross connections required within CLEC's leased collocation space.

8.1.1.4 **InterConnection Distribution Frame Collocation (ICDF)** – is offered for the purpose of facilitating CLEC's combining of unbundled network elements and ancillary services. Under ICDF Collocation, a CLEC need not collocate either transmission equipment or cross-connection equipment in the U S WEST Wire Center. With ICDF Collocation, CLEC will have access to the U S WEST Wire Center and an InterConnection Distribution Frame (ICDF) to combine UNEs and ancillary services. The ICDF connects through tie cables to various points within the Wire Center (*e.g.*, MDF, COSMIC or DSX, etc.) providing CLEC with access to UNEs and ancillary services.

8.1.1.4.1 The ICDF is a distribution frame shared by multiple providers. If CLEC desires a dedicated distribution frame for the purpose of facilitating CLEC's combination of UNEs and ancillary services, CLEC may do so through the placement of a CLEC-owned cross connection device collocated in the U S WEST Wire Center through either Caged or Cageless Physical Collocation.

8.2 Terms and Conditions

8.2.1 Terms and Conditions - All Collocation

8.2.1.1 With respect to any technical requirements or performance standards specified in this Section, U S WEST shall provide Collocation on rates, terms and conditions that are just, reasonable and nondiscriminatory.

8.2.1.2 CLEC will only collocate basic transmission or cross-connection equipment. CLEC must identify what transmission and cross connection equipment will be installed and the vendor technical specifications of such equipment so that U S WEST may verify the appropriate power, floor loading, heat release, environmental particulate level, HVAC, and tie cables to CLEC-provided cross-connection device.

8.2.1.3 **Demarcation Points for Unbundled Network Elements (UNEs) and Ancillary Services.** The demarcation point for unbundled network elements and ancillary services is that physical point where U S WEST shall terminate its unbundled network elements and ancillary services for access by CLEC. There are two standard demarcation points where unbundled network elements and ancillary services may be delivered to CLEC. CLEC shall specify its choice of standard demarcation points for its access to UNEs and ancillary services. One standard demarcation point is at a CLEC-provided cross connection equipment in CLEC's Physical or Virtual Collocation space. A second standard demarcation point is at an InterConnection Distribution Frame. Alternatively, the demarcation point may be established at a location jointly agreed to by CLEC and U S WEST. To the extent CLEC selects a demarcation point outside of its collocated space, such as an ICDF, CLEC shall be responsible for the tie cables from CLEC's collocated equipment to the demarcation point.

8.2.1.4 U S WEST will provide a connection between unbundled network elements and ancillary services and a demarcation point. Such connection is an Interconnection Tie Pair (ITP). The demarcation point shall be:

a) at CLEC-provided cross-connection equipment located in the CLEC's Virtual or Physical Collocation Space; or

b) if CLEC elects to use ICDF Collocation, at the InterConnection Distribution Frame (ICDF); or

c) if CLEC elects to use an ICDF in association with Virtual or Physical Collocation, at the ICDF; or

d) at another demarcation point mutually-agreed to by the parties.

8.2.1.5 CLEC may purchase U S WEST's finished Private Line or Switched Access services via applicable Tariff terms and conditions. These services will be terminated at the demarcation point.

8.2.1.6 For Caged and Cageless Physical Collocation and Virtual Collocation, CLEC must lease space for the placement of CLEC's transmission and cross-connection equipment within U S WEST's Central Office. U S WEST will provide the

structure that is necessary in support of Collocation including physical space, a cage (for Caged Physical Collocation), required cabling between equipment and other associated hardware.

8.2.1.7 All equipment placed shall meet NEBS standards and will be installed in accordance with U S WEST Technical Publications 77350, 77351, 77355, 77367, 77386 and 77390. U S WEST shall provide standard central office alarming pursuant to Technical Publication 77390.

8.2.1.8 Collocation is offered on a first-come, first-served basis. Requests for Collocation may be denied due to the lack of sufficient space in a U S WEST Central Office for placement of CLEC's equipment. If U S WEST determines that the amount of space requested by CLEC for Caged Physical Collocation is not available, but a lesser amount of space is available, that lesser amount of space will be offered to CLEC for Caged Physical Collocation. Alternatively, CLEC will be offered Cageless Physical Collocation (bay at a time), or Virtual Collocation as an alternative to Caged Physical Collocation. In the event the original collocation request is not available due to lack of sufficient space, CLEC will be required to submit a new order for the CLEC's preferred alternative collocation arrangement. In the event that U S WEST requires additional Central Office space in order to satisfy its own business needs, additional space will be taken into consideration for Collocation as well.

8.2.1.9 If a request for Collocation is denied due to a lack of space in a U S WEST Central Office, CLEC may request U S WEST to provide a cost quote for the reclamation of space and/or equipment. Quotes will be developed within sixty (60) business days including the estimated time frames for the work that is required in order to satisfy the Collocation request. CLEC has thirty (30) business days to accept the quote. If CLEC accepts the quote, work will begin on receipt of 50% of the quoted charges and proof of insurance, with the balance due on completion.

8.2.1.10 Cancellation of Collocation Request. CLEC may cancel a collocation request prior to the completion of the request by U S WEST by submitting a written request by certified mail to the U S WEST Account Manager. CLEC shall be responsible for payment of all costs incurred by U S WEST.

8.2.1.11 Reclamation may include grooming and space reclamation. Grooming is the moving of circuits from working equipment to other equipment with similar functionality for the purpose of providing space for Interconnection. Space reclamation is the recovery of administrative space that can be reconditioned for the placement of transmission equipment or cross-connection equipment for the purposes of collocation. Requests for reclamation or grooming shall be in accordance with the ordering provisions of Section 8.4.

8.2.1.12 All equipment and installation shall meet earthquake rating requirements.

8.2.1.13 U S WEST will review the security requirements and hours of access with CLEC. This will include issuing keys, ID cards, and explaining the access control processes, including but not limited to the requirement that all CLEC approved personnel are subject to trespass violations if outside of designated and approved areas or if found to be providing access to unauthorized individuals.

8.2.1.14 U S WEST shall provide access to existing eyewash stations, bathrooms, and drinking water within the Central Office on a twenty-four (24) hours per day, seven (7) days per week basis for CLEC personnel and its designated agents.

8.2.1.15 CLEC shall be restricted to corridors, stairways, and elevators that provide direct access to CLEC's space, or to the nearest restroom facility from CLEC's designated space, and such direct access will be outlined during CLEC's orientation meeting. Access shall not be permitted to any other portion of the building.

8.2.1.16 Nothing herein shall be construed to limit CLEC's ability to obtain more than one form of Collocation (*i.e.,* Virtual, Caged and Cageless Physical Collocation, or ICDF Collocation) in a single Central Office, provided space is available.

8.2.1.17 Conversions of the various Collocation arrangements (*e.g.,* virtual to physical) are available upon request and submission of a Quote Preparation Fee (QPF) by CLEC. CLEC must pay all associated conversion charges. Conversions shall be in accordance with U S WEST's standard Collocation provisioning processes. CLEC will submit separate service orders for rolling over CLEC's existing end user circuits to the new Collocation.

8.2.1.18 Termination of Collocation Arrangement. CLEC may terminate a completed collocation arrangement by submitting a written request via certified mail to the U S WEST Account Manager. U S WEST shall provide CLEC a quotation for the costs of removing CLEC's virtually collocated equipment, which will be paid by CLEC within 30 days of the removal of the equipment by U S WEST.

8.2.2 Terms and Conditions - Virtual Collocation

8.2.2.1 U S WEST is responsible for installing and maintaining Virtual Collocated equipment for the purpose of Interconnection or to access unbundled loops, ancillary and finished services.

8.2.2.2 CLEC will not have physical access to the Virtual Collocated equipment in the U S WEST Wire Center. However, CLEC will have physical access to the demarcation point in the U S WEST wire center.

8.2.2.3 CLEC will be responsible for obtaining and providing to U S WEST administrative codes (*e.g.,* common language codes) for all equipment provided by CLEC and installed in Wire Center buildings.

8.2.2.4 CLEC shall ensure that upon receipt of CLEC's Virtual Collocated equipment by U S WEST, all warranties and access to ongoing technical support are passed through to U S WEST at CLEC's expense. CLEC shall advise the manufacturer and seller of the virtually collocated equipment that CLEC's equipment will be possessed, installed and maintained by U S WEST.

8.2.2.5 CLEC's virtual collocated equipment must comply with the Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements TR-NWT-000063, U S WEST Wire Center environmental and transmission standards and

any statutory (local, state or federal) and/or regulatory requirements in effect at the time of equipment installation or that subsequently become effective. CLEC shall provide U S WEST interface specifications (*e.g.*, electrical, functional, physical and software) of CLEC's virtual collocated equipment.

8.2.2.6 CLEC must specify all software options and associated plug-ins for its virtually collocated equipment.

8.2.2.7 CLEC will be responsible for payment of U S WEST Direct Training Charges associated with training U S WEST employees for the maintenance, operation and installation of CLEC's Virtual Collocated equipment when such equipment is different than the standard equipment used by U S WEST in that Central Office. This includes per diem charges (*i.e.*, expenses based upon effective U S WEST labor agreements), travel and lodging incurred by U S WEST employees attending a vendor-provided training course.

8.2.2.8 CLEC will be responsible for payment of charges incurred in the maintenance and/or repair of CLEC's virtual collocated equipment.

8.2.3 Terms and Conditions - Caged and Cageless Physical Collocation

8.2.3.1 U S WEST shall provide Caged and Cageless Physical Collocation to CLEC for access to UNEs and ancillary services and Interconnection, except that U S WEST may provide Virtual Collocation if U S WEST demonstrates to the Commission that Physical Collocation is not practical for technical reasons or because of space limitations, as provided in Section 251(c)(6) of the Act.

8.2.3.2 Physical Collocation is offered in Wire Centers on a space-available, first come, first-served basis.

8.2.3.3 The minimum standard leasable amount of floor space for Caged Physical Collocation is 100 square feet and the maximum is 400 square feet. Requests greater than 400 square feet may be submitted through the Bona Fide Request process. CLEC must efficiently use the leased space; no more than 50% of the floor space may be used for storage cabinets and work surfaces.

8.2.3.4 U S WEST will design the floor space within each Wire Center that will constitute CLEC's leased space. CLEC will, in accordance with the other terms and conditions of this section, have access to its leased space.

8.2.3.5 When U S WEST constructs the Collocated space, U S WEST will ensure that the necessary construction work (*e.g.*, racking, ducting and caging for Caged Physical Collocation) is performed pursuant to Technical Publication 77350, including all construction of CLEC's leased physical space and the riser from the vault to the leased physical space.

8.2.3.6 CLEC owns and is responsible for the installation, maintenance and repair of its transmission equipment located within the physically collocated space leased from U S WEST.

8.2.3.7 CLEC must use leased space promptly and may not warehouse space for later use or sublease to another CLEC.

8.2.3.8 Upon completion of the construction of the Collocation project, U S WEST will work cooperatively with CLEC in matters of joint testing and maintenance.

8.2.3.9 If, during installation, U S WEST determines CLEC activities or equipment do not comply with the NEBS standards listed in this Section or are otherwise unsafe, non-standard or in violation of any applicable laws or regulations, U S WEST has the right to stop all Collocation work until the situation is remedied. If such conditions pose an immediate threat to the safety of U S WEST employees, interfere with the performance of U S WEST's service obligations, or pose an immediate threat to the physical integrity of the conduit system, cable facilities or other equipment in the Central Office, U S WEST may perform such work and/or take action as is necessary to correct the condition at CLEC's expense.

8.2.3.10 All equipment placed will be subject to random audits conducted by U S WEST. These audits will determine whether the equipment meets the standards required by this SGAT. CLEC will be notified of the results of this audit. If, at any time, pursuant to a random audit or otherwise, U S WEST determines that the equipment or the installation does not meet U S WEST technical requirements, CLEC will be responsible for the costs associated with the removal, modification to, or installation of the equipment to bring it into compliance. If CLEC fails to correct any non-compliance within fifteen (15) calendar days of written notice of non-compliance, U S WEST may have the equipment removed or the condition corrected at CLEC's expense.

8.2.3.11 U S WEST shall provide basic telephone service with a connection jack at the request of CLEC for Caged or Cageless Physical Collocated space. Upon CLEC's request, this service shall be available per standard U S WEST business service provisioning processes.

8.2.3.12 For Caged Physical Collocation, CLEC's leased floor space will be separated from other CLECs and U S WEST space through a cage enclosure. U S WEST will construct the cage enclosure or CLEC may choose from U S WEST approved contractors to construct the cage in accordance with the technical publications listed below. All CLEC equipment placed will meet NEBS standards, will be installed in accordance with U S WEST Technical Publications 77390 and 77367, and will comply with any local, state, or federal regulatory requirements in effect at the time of equipment installation or that subsequently become effective. These two Technical Publications must be in the possession of CLEC and its agents at the site during all work activities.

8.2.3.13 For Cageless Physical Collocation, the minimum square footage is 9 square feet per bay. Requests for multiple bay space will be provided in adjacent bays where possible. When contiguous space is not available, bays may be commingled with other CLECs' equipment bays. CLEC may request, through the U S WEST Space Reclamation Policy, a price quote to rearrange U S WEST equipment to provide CLEC with adjacent space.

8.2.4 Transmission Facility Access to Collocation Space

8.2.4.1 CLEC is responsible for providing its own fiber facilities to the Collocation Point of Interconnection (C-POI) outside U S WEST's Central Office. U S WEST will extend the fiber cable from the C-POI to a Fiber Distribution Panel (FDP). Additional fiber, conduit and associated riser structure will then be provided by U S WEST from the FDP to continue the run to CLEC's leased collocation space (Caged or Cageless Physical Collocation) or CLEC's transmission equipment (Virtual Collocation). The U S WEST provided facility from the C-POI to the leased collocation space (Physical Collocation) or CLEC-transmission equipment (Virtual Collocation) shall be considered the Collocation Fiber Entrance Facility.

8.2.4.2 For Virtual or Physical Collocation, CLEC may select from three optional methods for facility access to its collocation space. They include: 1) fiber entrance facilities, 2) purchasing private line or access services, and 3) unbundled network elements.

8.2.4.3 **Collocation Fiber Entrance Facilities.** U S WEST offers three Fiber Collocation Entrance Facility options – Standard Fiber Entrance Facility, Cross-Connect Fiber Entrance Facility, and Express Fiber Entrance Facilities. These options apply to Caged and Cageless Physical Collocation and Virtual Collocation. Fiber Entrance Facilities provide the connectivity between CLEC's collocated equipment within the U S WEST central office and a C-POI outside the central office where CLEC shall terminate its fiber-optic facility.

8.2.4.3.1 **Standard Fiber Entrance Facility** -- The standard fiber entrance facility provides fiber connectivity between CLEC's fiber facilities delivered to the C-POI and CLEC's collocation space in increments of 12 fibers. CLEC's fiber cable is spliced into a U S WEST-provided shared fiber entrance cable that consists of six buffer tubes containing 12 fibers each for a 72 fiber cable. The 72 fiber cable shall be terminated on a Fiber Distribution Panel (FDP). A 12 fiber interconnection cable is placed between CLEC's collocation space and the FDP. The FDP provides U S WEST with test access and a connection point between the transport fiber and CLEC's interconnection cable.

8.2.4.3.2 **Cross-connect Fiber Entrance Facility** -- The cross-connect fiber entrance facility provides fiber connectivity between CLEC's fiber facilities delivered to a C-POI and multiple locations within the U S WEST wire center. CLEC's fiber cable is spliced into a U S WEST provided shared fiber entrance cable in 12 fiber increments. The U S WEST fiber cable consists of six buffer tubes containing12 fibers each for a 72 fiber cable. The 72 fiber cable terminates in a fiber distribution panel. This fiber distribution panel provides test access and flexibility for cross connection to a second fiber distribution panel. Fiber interconnection cables in 4 and 12 fiber options connect the second fiber distribution panel and equipment locations in the wire center. This option has the ability to serve multiple locations or pieces of equipment within the office. This option provides maximum flexibility in distributing fibers within the central office and readily supports Virtual and Cageless Physical Collocation and multiple CLEC locations in the office. This option also supports transitions from one form of collocation to another.

8.2.4.3.3 **Express Fiber Entrance Facility** -- U S WEST will place a CLEC-provided fiber cable from the C-POI directly to CLEC's collocation space. The fiber cable placed in the wire center must meet fire rating requirements. This option will not be available if there is less than one full sized conduit (for emergency restoration) and 2 innerducts (one for emergency restoral and one for a shared entrance cable).

8.2.4.4 U S WEST will designate the location of the C-POI for Virtual, Caged Physical or Cageless Physical Collocation arrangements.

8.2.4.5 The Collocation entrance facility is assumed to be fiber optic cable and meets industry standards (GR. 20 Core). Metallic sheath cable is not considered a standard Collocation entrance facility. Requests for non-standard entrances will be considered on an individual case basis including an evaluation of the feasibility of the request. All costs and provisioning intervals for non-standard entrances will be developed on an individual case basis.

8.2.4.6 Dual entry into a U S WEST Wire Center will be provided only when two entry points pre-exist and duct space is available. U S WEST will not initiate construction of a second, separate Collocation entrance facility solely for Collocation. If U S WEST requires a Collocation entrance facility for its own use, then the needs of CLEC will also be taken into consideration.

8.2.4.7 As an alternative to the Fiber Entrance Facilities described above, CLEC may purchase U S WEST tariffed or cataloged Private Line or Switched Access services between its wire center and its collocation space in a U S WEST wire center.

8.2.4.8 As an alternative to the Fiber Entrance Facilities described above, CLEC may purchase unbundled dedicated interoffice transport between CLEC's wire center and CLEC's collocation space in the U S WEST serving wire center.

8.2.5 Terms and Conditions – ICDF Collocation

8.2.5.1 InterConnection Distribution Frame (ICDF) Collocation is available for CLECs who have not obtained Caged or Cageless Physical Collocation, but who require access to the U S WEST Wire Center for combining unbundled network elements and ancillary services. ICDF Collocation provides CLECs with access to the InterConnection Distribution Frame, where U S WEST will terminate the unbundled network elements and ancillary services ordered by CLEC. CLEC may combine one UNE to another UNE or ancillary service by running a jumper on the ICDF. CLEC access to the ICDF will be on the same terms and conditions described for other types of Collocation in this Section.

8.2.5.2 All U S WEST terminations on the InterConnection Distribution Frame will be given a frame address. U S WEST will establish and maintain frame address records for U S WEST terminations. U S WEST will maintain assignment records for each unbundled network element and ancillary service ordered by CLEC that is terminated on the InterConnection Distribution Frame. U S WEST will provide CLEC

with the frame assignments for each unbundled network element and ancillary service terminated on the ICDF.

8.2.5.3 CLEC will be required to place the jumper connection between frame addresses to connect unbundled loops, ancillary and finished services. CLEC will be required to maintain the records for CLEC-provided jumpers.

8.2.5.4 To the extent that CLEC's requested use of the InterConnection Distribution Frame results in U S WEST incurring building or frame additions other than the ICDF, construction charges will apply.

8.3 Rate Elements

Rate elements for collocation are included in Exhibit A.

8.3.1 Rate Elements - Caged and Cageless Physical and Virtual Collocation

8.3.1.1 U S WEST will recover Collocation costs through both recurring and nonrecurring charges. The charges are determined by the scope of work to be performed based on the information provided by CLEC on the Collocation Order Form. A quote is then developed by U S WEST for the work to be performed.

8.3.1.2 The following elements as specified in Exhibit A of this SGAT are used to develop a price quotation in support of Collocation:

8.3.1.3 Quote Preparation Fee. A non-refundable charge for the work required to verify space and develop a price quote for the total costs to CLEC for its Collocation request.

8.3.1.4 Collocation Entrance Facility Charge. Provides for the fiber optic cable (in increments of 12 fibers) from the C-POI utilizing U S WEST owned, conventional single mode type of fiber optic cable to the collocated equipment (for Virtual Collocation) or to the leased space (for Caged or Cageless Physical Collocation). The Collocation entrance facility includes riser, fiber placement, entrance closure, conduit/innerduct, and core drilling. Charges apply per fiber pair.

8.3.1.5 Cable Splicing Charge. Represents the labor and equipment to perform a subsequent splice to CLEC provided fiber optic cable after the initial installation splice. Includes per-setup and per-fiber-spliced rate elements.

8.3.1.6 -48 Volt DC Power Charge. Provides -48 volt DC power to CLEC collocated equipment. Charged on a per ampere basis.

8.3.1.7 -48 Volt DC Power Cable Charge. Provides for the transmission of -48 volt DC power to the collocated equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack and local power bay to the closest power distribution bay. It also includes the power cable (feeders) A and B from the local power distribution bay to the leased physical space (for Caged or Cageless Physical Collocation) or to the collocated equipment (for Virtual Collocation). It is charged per A and B feeder.

8.3.1.8 Inspector Labor Charge. Provides for U S WEST qualified personnel, acting as an inspector, when CLEC requires access to the C-POI after the initial installation. A call-out of an inspector after business hours is subject to a minimum charge of four hours. The minimum call-out charge shall apply when no other employee is present in the location, and an 'off-shift' U S WEST employee (or contract employee) is required to go 'on-shift' on behalf of CLEC.

8.3.1.9 Channel Regeneration Charge. Required when the distance from the leased physical space (for Caged or Cageless Physical Collocation) or from the collocated equipment (for Virtual Collocation) to the U S WEST network is of sufficient length to require regeneration.

8.3.1.10 Interconnection Tie Pairs (ITP) are described in Section 9, and apply for each unbundled network element, ancillary service or Interconnection service delivered to CLEC. The ITP provides the connection between the unbundled network element, ancillary service or Interconnection service and the demarcation point.

8.3.1.11 Collocation Cable Racking. Applies in the event CLEC selects a demarcation point for unbundled network elements or ancillary services outside of its caged or cageless physical collocation space, such as the InterConnection Distribution Frame. This charge provides for cable racking required for placement of CLEC-provided tie cables from its collocated equipment to the ICDF or another mutually agreed to demarcation point.

8.3.1.12 Collocation Grounding Charge. A charge associated with providing grounding for CLEC's cage enclosure and equipment. Recurring and nonrecurring charges are assessed per foot to CLEC's cage enclosure or common space where required.

8.3.1.13 Heating and Air Conditioning Charge. Environmental temperature control required for proper operation of electronic telecommunications equipment.

8.3.1.14 Security Charge. The keys/card readers and cameras as may be required for CLEC access to the U S WEST Central Office for the purpose of Collocation. Charges are assessed per CLEC employee, per each U S WEST Central Office to which access is required.

8.3.2 Rate Elements - Virtual Collocation

The following rate elements, as specified in Exhibit A, apply uniquely to Virtual Collocation.

8.3.2.1 Maintenance Labor. Provides for the labor necessary for repair of out of service and/or service-affecting conditions and preventative maintenance of CLEC virtually collocated equipment. CLEC is responsible for ordering maintenance spares. U S WEST will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment from CLEC. A call-out of a maintenance technician after business hours is subject to a minimum charge of four hours.

8.3.2.2 Training Labor. Provides for the training of U S WEST personnel on a metropolitan service area basis provided by the vendor of the CLEC's virtually collocated equipment when that equipment is different from U S WEST-provided equipment. U S WEST will require three U S WEST employees to be trained per metropolitan service area in which CLEC's virtually collocated equipment is located. If, by an act of U S WEST, trained employees are relocated, retired, or are no longer available, U S WEST will not require CLEC to provide training for additional U S WEST employees for the same virtually collocated equipment in the same metropolitan area. The amount of training billed to CLEC will be reduced by half, should a second CLEC in the same metropolitan area select the same virtually collocated equipment as CLEC.

8.3.2.3 Equipment Bay. Provides mounting space for CLEC virtually collocated equipment. Each bay includes the 7 foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation, is limited to 78 inches. The monthly rate is applied per shelf.

8.3.2.4 Engineering Labor. Provides the planning and engineering of CLEC virtually collocated equipment at the time of installation, change or removal.

8.3.2.5 Installation Labor. Provides for the installation, change or removal of CLEC virtually collocated equipment.

8.3.2.6 Grounding Charge. Used to connect the Central Office common ground to CLEC's equipment.

8.3.3 Rate Elements - Physical Collocation

8.3.3.1 Cage Enclosure. Applies to Caged Physical Collocation only. The Cage Enclosure element includes the material and labor to construct the enclosure. CLEC may choose from U S WEST approved contractors to construct the cage, in accordance with U S WEST's installation Technical Publication 77350. It includes a nine foot high cage enclosure available in increments of 100, 200, 300 or 400 square feet, air conditioning (to support CLEC loads specified), lighting (not to exceed 2 watts per square foot), and convenience outlets (3 per cage or number required by building code). Pricing for the Cage Enclosure is described in Exhibit A.

8.3.3.2 Floor Space Lease. Provides the monthly lease for the leased physical space, property taxes and base operating cost without -48 volt DC power. Includes convenience 110 AC, 15 amp electrical outlets provided in accordance with local codes and may not be used to power transmission equipment or-48 volt DC power generating equipment. Also includes maintenance for the leased space; provides for the preventative maintenance (climate controls, filters, fire and life systems and alarms, mechanical systems, standard HVAC); biweekly housekeeping services (sweeping, spot cleaning, trash removal) of U S WEST Wire Center areas surrounding the leased physical space and general repair and maintenance. The Floor Space Lease includes required aisle space on each side of the cage enclosure, as applicable.

8.3.3.3 AC Power Charge. Standard AC outlet used by CLEC for the purpose of powering test equipment, tools, etc.

8.3.3.4 Grounding Charge. Used to connect the Central Office common ground to CLEC's equipment.

8.3.4 Rate Elements - ICDF Collocation

8.3.4.1 The charges for ICDF Collocation are the non-recurring and recurring charges associated with the unbundled network elements or ancillary services ordered by CLEC, the cost of extending the unbundled network elements or ancillary services to the demarcation point, which are recovered through the ITP charges described in Section 9, and the Security charge, described in the following paragraph.

8.3.4.2 Security Charge. The keys/card readers and cameras as may be required for CLEC access to the U S WEST Central Office for the purpose of accessing the InterConnection Distribution Frame. Charges are assessed per CLEC employee, per each U S WEST Central Office to which access is required.

8.4 Ordering

8.4.1 Ordering - All Collocation

8.4.1.1 CLEC must complete the requirements in Section 3.1 of this SGAT before submitting a Collocation Order Form and Quote Preparation Fee (QPF) to U S WEST.

8.4.1.2 Any changes, modifications or additional engineering requested by CLEC, subsequent to its initial order, as to the type and quantity of equipment or other aspects of the original Collocation request, must be submitted with a subsequent QPF and Collocation Order Form. Such requests will either be implemented with the original request or worked as a subsequent construction activity, dependent upon the time of submission; *e.g.*, feasibility, quotation, or after down payment.

8.4.2 Ordering - Virtual Collocation

8.4.2.1 Upon receipt of a Collocation Order Form and QPF, U S WEST will perform a feasibility study to determine if adequate space can be found for the placement of CLEC's equipment within the Central Office. The feasibility study will be completed within seven (7) calendar days of receipt of the QPF. If space is available, U S WEST will develop a price quotation within thirty five (35) calendar days of completion of the feasibility study. Subsequent requests to augment an existing Collocation also require receipt of an Order Form and QPF. Adding plug-ins, *e.g.*, DS1 or DS3 cards to existing Virtually Collocated equipment, will be processed within ten business days.

8.4.2.2 Virtual Collocation price quotes will be honored for thirty (30) calendar days from the date the quote is provided. During this period the Collocation entrance facility and space is reserved pending CLEC's approval of the quoted charges. If CLEC agrees to terms as stated in the Collocation Price Quote, CLEC must respond within 30 calendar days with a signed quote, a down payment check for 50% down of the quoted charges and proof of insurance. Under normal conditions, U S WEST will complete the

installation within ninety (90) calendar days from receipt of CLEC's equipment. Any portions that cannot be completed within ninety (90) calendar days will be negotiated with CLEC on an individual case basis. The installation of line cards and other minor modifications shall be performed by U S WEST on shorter intervals and in no instance shall any such interval exceed thirty (30) calendar days. Final Payment is due upon completion.

8.4.3 Ordering - Caged and Cageless Physical Collocation

8.4.3.1 Upon receipt of a Collocation Order Form and QPF, U S WEST will perform a feasibility study to determine if adequate space can be found for the placement of CLEC's equipment within the Central Office. The feasibility study will be provided within twenty-one (21) calendar days from date of receipt of the QPF. If Collocation entrance facilities and office space are found to be available, U S WEST will develop a quote for the supporting structure within thirty-five (35) calendar days of providing the feasibility study. Physical Collocation price quotes will be honored for thirty (30) calendar days from the date the quote is provided. Upon receipt of the signed quote, 50% down and proof of insurance, space will be reserved and construction by U S WEST will begin. The leased space (including the cage for Caged Physical Collocation) will be available to CLEC for placement of its equipment within ninety (90) calendar days of receipt of the 50% down payment. Depending on specific Wire Center conditions, shorter intervals may be available. Final payment is due upon completion of work.

8.4.3.2 Due to variables in equipment availability and scope of the work to be performed, additional time may be required for implementation of the structure required to support the Collocation request. Examples of structure that may not be completed within ninety (90) calendar days may include additional time for placement of a C-POI and DC power upgrades required to meet CLEC's Collocation request.

8.4.3.3 The intervals in Section 8.4.3.1 above apply to a maximum of five (5) collocation orders per CLEC per week. If six (6) or more collocation orders are required by CLEC in a one-week period, intervals shall be individually negotiated.

8.4.4 Ordering - InterConnection Distribution Frame Collocation

8.4.4.1 CLEC shall submit an ICDF Collocation Order Form to U S WEST. The ICDF Collocation Order Form shall include a CLEC-provided eighteen (18) month forecast of demand, by DS0, DS1 and DS3 capacities, that will be terminated on the InterConnection Distribution Frame by U S WEST on behalf of CLEC. Such forecasts shall be used by U S WEST to determine the sizing of required tie cables and the terminations on each InterConnection Distribution Frame as well as the various other frames within the U S WEST Central Office.

8.4.4.2 Upon receipt of an ICDF Collocation Order Form, U S WEST will verify if ICDF Collocation capacity is available within a requested Central Office. Verification of ICDF capacity will be completed within seven (7) calendar days. In those Central Offices where ICDFs have not been previously placed, U S WEST will make ICDFs available within ninety (90) calendar days of verification.

8.4.4.3 When ordering UNEs or ancillary services to be terminated on the Interconnection Distribution Frame, each UNE or ancillary service is ordered separately, using the existing ordering forms and intervals for the specific UNE or ancillary service.

8.5 Billing

8.5.1 Billing - All Collocation

8.5.1.1 Upon completion of the Collocation construction activities and payment of the remaining nonrecurring balance, U S WEST will provide CLEC a completion package that will initiate the recurring Collocation charges. Once this completion package has been signed by CLEC and U S WEST, CLEC may begin submitting service order requests for U S WEST transport services and/or UNEs or ancillary services.

8.5.1.2 In the event U S WEST has completed all associated construction activities and CLEC has not completed its associated activities (*e.g.*, delivering fiber to the C-POI, providing tie cables for connecting to the InterConnection Distribution Frame), CLEC will provide written confirmation of its anticipated completion dates. Upon receipt of this notification, U S WEST will double the implementation interval for CLEC to complete its remaining activities. At the end of such extended interval, U S WEST will begin billing for all monthly collocation charges. When CLEC is ready to complete its activities, final test and turn-up will be performed under the maintenance and repair process contained herein.

8.5.2 Billing - Virtual Collocation

8.5.2.1 Virtual Collocation will be considered complete when the C-POI has been constructed, the shared fiber Collocation entrance facility has been provisioned, and the collocated equipment has been installed. Cooperative testing between CLEC and U S WEST may be negotiated and performed to ensure continuity and acceptable transmission parameters in the facility and equipment.

8.5.3 Billing - Caged and Cageless Physical Collocation

8.5.3.1 Upon completion of the construction activities and payment of the remaining nonrecurring charge, U S WEST will turn over access to the space and provide security access to the Wire Center. CLEC will sign off on the completion of the physical space via the Caged or Cageless Physical Collocation completion package, which shall activate the monthly billing for leased space. CLEC may then proceed with the installation of its equipment in the Collocation space. Once CLEC's equipment has been installed and tie cables have been terminated on CLEC-provided cross connection equipment, U S WEST will complete all remaining work activities. A second completion package will be provided for CLEC's approval of the project. This completion package will initiate the recurring collocation charges associated with the remaining recurring charges (*e.g.*, Collocation Entrance Facility, DC Power, etc.)

8.6 Maintenance and Repair

8.6.1 Virtual Collocation

8.6.1.1 Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00pm (local time) and after business hours are after 5:00pm and before 8:00 am (local time), Monday through Friday, all day Saturday, Sunday and holidays.

8.6.1.2 Installation and maintenance of CLEC's virtually collocated equipment will be performed by U S WEST or a U S WEST authorized vendor.

8.6.1.3 Upon failure of CLEC's virtually collocated equipment, CLEC is responsible for transportation and delivery of maintenance spares to U S WEST at the Wire Center housing the failed equipment. CLEC is responsible for purchasing and maintaining a supply of spares.

8.6.2 Caged and Cageless Physical Collocation

8.6.2.1 CLEC is responsible for the maintenance and repair of its equipment located within CLEC's leased space.

8.6.3 InterConnection Distribution Frame

8.6.3.1 CLEC is responsible for block and jumper maintenance at the InterConnection Distribution Frame and using correct procedures to dress and terminate jumpers on the ICDF, including using fanning strips, retaining rings, and having jumper wire on hand, as needed. Additionally, CLEC is required to provide its own tools for such operations.

Section 9.0 - UNBUNDLED LOOPS

9.1 General Terms

9.1.1 U S WEST shall provide non-discriminatory access to unbundled network elements on rates, terms and conditions that are nondiscriminatory, just and reasonable. U S WEST shall provide to CLEC on a nondiscriminatory basis unbundled network elements of substantially the same quality as the network facilities that U S WEST uses to provide service to its own customers within a reasonable timeframe and with a minimum of service disruption.

9.1.2 CLEC shall not use unbundled network elements or ancillary services as substitutes for special or switched access services, except to the extent CLEC provides such services to its end users in association with local exchange services.

9.1.3 U S WEST will provide a connection between unbundled network elements and a demarcation point. Such connection is an Interconnection Tie Pair (ITP). The demarcation point shall be:

a) at CLEC-provided cross-connection equipment located in the CLEC's Virtual or Physical Collocation Space; or

b) if CLEC elects to use ICDF Collocation, at the InterConnection Distribution Frame (ICDF); or

c) if CLEC elects to use an ICDF in association with Virtual or Physical Collocation, at the ICDF; or

d) at another demarcation point mutually-agreed to by the parties.

9.1.4 CLEC is responsible for combining U S WEST's UNEs or combining UNEs to its own network.

9.1.5 CLEC may connect UNEs in any technically feasible manner. U S WEST will provide CLEC with the same features, functions and capabilities of a particular element that U S WEST provides to itself, so that CLEC can provide any Telecommunications Services that can be offered by means of the element. U S WEST shall provide such unbundled network elements in a manner that allows CLEC to combine such elements in order to provide Telecommunications Service.

9.1.6 U S WEST provides UNEs on an individual element basis. CLEC is responsible for the end-to-end transmission and circuit functionality. CLEC is responsible to test end-to-end on unbundled loops, ancillary and finished services combinations.

9.1.7 Installation intervals for UNEs are provided in the Interconnect and Resale Resource Guide.

9.1.8 Maintenance and repair is described in Section 12 of this SGAT. The Repair Center contact telephone numbers are provided in the Interconnect & Resale Resource Guide, which is located on the U S WEST Web site.

9.1.9 In order to maintain and modernize the network properly, U S WEST may make necessary modifications and changes to the UNEs in its network on an as needed basis. Such changes may result in minor changes to transmission parameters. U S WEST shall provide advance notice of changes that affect network interoperability pursuant to applicable FCC rules.

9.1.10 Interconnection Tie Pairs (ITP) are required for each unbundled network element, ancillary service or interconnection service delivered to CLEC. The ITP provides the connection between the unbundled network element or interconnection service and the demarcation point. The ITP is ordered in conjunction with a UNE. There is a recurring charge for the ITP. The ITP may be ordered per termination.

9.1.11 Channel Regeneration Charge. This charge is required when the distance from the U S WEST network to the leased physical space (for Physical Collocation), the collocated equipment (for Virtual Collocation), or the ICDF (for ICDF Collocation) is of sufficient length to require regeneration.

9.1.12 Exhibit A of this SGAT contains the rates for unbundled network elements.

9.1.13 Miscellaneous Charges may include Due Date Change Charges, Design Change Charges, Cancellation Charges, Additional Dispatch Charge; Expedite Order Charge, Additional Engineering, Installation Out of Hours, Maintenance of Service, Premises Work Charges, Additional Cooperative Testing, Non-Scheduled Testing, Automatic Scheduled Testing, Cooperative Scheduled Testing, Manual Testing, Manual Scheduled Testing. Rates are contained in the applicable Arizona State Tariff.

9.2 Unbundled Loops

9.2.1 Description

U S WEST offers non-discriminatory access to unbundled local loops. An Unbundled Loop establishes a transmission path between a central office distribution frame (or equivalent) up to, and including, U S WEST's Network Interface Device (NID) and/or demarcation point. For existing Loops, the inside wire connection to the NID and/or demarcation point will remain intact. Unbundled Loops are available in three categories: (i) 2-Wire or 4-Wire Analog, (ii) 2-Wire or 4-Wire Non-Loaded and (iii) Digital Capable - either Basic Rate ISDN or DS1.

9.2.2 Terms and Conditions

9.2.2.1 U S WEST shall provide to CLEC on a nondiscriminatory basis unbundled loops of substantially the same quality as the loop that U S WEST uses to provide service to its own customers within a reasonable timeframe and with a minimum of service disruption.

9.2.2.2 Analog Unbundled Loops are available as a two-wire or four-wire voice grade, point-to-point configuration suitable for local exchange type services within the analog voice frequency range of 300 to 3000 Hz. For the two-wire configuration, CLEC must specify the signaling option. The actual Loop facilities may utilize various technologies or combinations of technologies. If U S WEST uses Integrated Digital Loop Carrier (IDLC) systems to provide the local Loop, to the extent possible,

U S WEST will make alternate arrangements to permit CLEC to order a contiguous unbundled local Loop.

9.2.2.3 When CLEC requests a non-loaded Unbundled Loop and there are none available, U S WEST will contact CLEC to determine if CLEC wishes to have U S WEST unload a Loop. If the response is affirmative, U S WEST will dispatch a technician to "condition" the loop by removing load coils and excess bridge taps (*i.e.*, "unload" the Loop) in order to provide CLEC with a Non-Loaded Loop. CLEC will be charged the cable unloading and bridge tap removal non-recurring charge in addition to the Unbundled Loop installation nonrecurring charge. Placement of repeaters either in the field or in the Central Office are not included as part of the conditioning charge. Repeater placement is included under Extension Technology.

9.2.2.4 When CLEC requests a Basic Rate ISDN capable Loop, U S WEST will dispatch a technician to provide an Extension Technology that may include the placement of repeaters, either Central Office or in the field, or BRITES cards in both the COT and RT in order to make the Loop ISDN Capable. The ISDN Capable Loop may also require conditioning (*e.g.*, removal of loads or bridged tap). CLEC will be charged an Extension Technology recurring charge in addition to the unbundled Loop recurring charge as specified in Exhibit A of this SGAT.

9.2.2.5 When CLEC requests a DS1 Capable Loop, U S WEST will install the electronics at both ends including any intermediate repeaters. The DS1 Capable Loop may also require conditioning (*e.g.*, removal of loads or bridged tap). CLEC will be charged a non-recurring charge as specified in Exhibit A of this SGAT.

9.2.2.6 U S WEST is not obligated to provision BRI and/or DS1 capable loops in areas served by Loop facilities and/or transmission equipment that are not compatible with BRI and/or DS1 service. To avoid spectrum conflict within U S WEST facilities, U S WEST may control the use of certain cables for spectrum management considerations.

9.2.2.7 CLEC has four installation options available when ordering an Unbundled Loop. Depending upon the type of Loop ordered (analog or digital capable), the rates for the installation options will vary. Rates are contained in Exhibit A of this SGAT.

9.2.2.7.1 Basic Installation Option for Existing Service.

The Basic Installation option may be ordered for existing (reuse) service only. For an existing U S WEST or other CLEC end user changing to CLEC, the Basic Installation option has no associated circuit testing. U S WEST disconnects the Loop from its current termination and delivers it via the ITP to the point of demarcation. U S WEST will notify CLEC when the work activity is complete. Basic Installation Rates apply for this option and are contained in Exhibit A of this SGAT.

9.2.2.7.2 Basic Installation with Performance Testing Option for New Service.

The Basic Installation with Performance Testing option is required for new service. For new service that has not previously existed, U S WEST will

complete the circuit wiring per the WORD document and/or the service order. U S WEST will perform the required performance tests to ensure the new circuit meets the required parameter limits. The test results are recorded as benchmarks for future testing purposes. The test results are forwarded to CLEC by U S WEST. Basic Installation with Performance Testing rates apply for this option and are contained in Exhibit A of this SGAT.

9.2.2.7.3 Coordinated Installation With Cooperative Testing Option.

The Coordinated Installation with Cooperative Testing option may be ordered for new or existing service. For an existing U S WEST or other CLEC end user changing to CLEC, the Coordinated Installation option includes cooperative testing. CLEC has the option of designating a specific appointment time when the order is placed. If no appointment time is specified when the order is initiated, CLEC will provide such information to U S WEST at least 48 hours prior to the desired appointment time. At the appointment time, U S WEST will disconnect the Loop from its current termination and deliver it to the point of demarcation in coordination with CLEC. U S WEST will complete the required performance tests and perform other testing as requested by CLEC. Testing requested by CLEC that exceeds testing requirements contained in U S WEST's Technical Publication 77384 will be billed to CLEC. Test results will be recorded as benchmarks for future testing and will be forwarded to CLEC. Coordinated Installation with Cooperative Testing rates apply for this option and are contained in Exhibit A of this SGAT.

9.2.2.7.4 Coordinated Installation Without Testing for Existing Service.

Coordinated Installation without Testing may be ordered for 2-wire analog loop start or ground start Unbundled Loops. For an existing U S WEST or other CLEC end user changing to CLEC, this option remains a procedure in which U S WEST disconnects the loop and delivers it via an ITP to the demarcation point. In addition, this procedure offers CLEC the ability to coordinate the conversion activity, allowing CLEC's end user to pre-plan for minimal service interruption. At CLEC's designated time, U S WEST will contact CLEC with notification that the work activity is beginning. If no appointment time is specified when the order is initiated, CLEC will provide such information to U S WEST at least 48 hours prior to the desired appointment time. At the appointment time, U S WEST disconnects the Loop from its current termination and delivers it via an ITP to the point of demarcation. Once the work has been completed, U S WEST will notify CLEC that the procedure has been completed. Coordinated Installation without Cooperative Testing rates apply for this option and are contained in Exhibit A of this SGAT.

9.2.2.8 Multiplexing of the Unbundled Loop. CLEC may order multiplexing for Unbundled Loops under the same multiplexing provisions and pricing as provided for UDIT, as described in Section 9.2 of this SGAT.

9.2.2.9 Unbundled Loops are provided in accordance with the specifications, interfaces and parameters described in U S WEST's Technical Publication 77384. U S WEST's sole obligation is to provide and maintain Unbundled Loops in accordance with such specifications, interfaces and parameters. U S WEST does not warrant that

Unbundled Loops are compatible with any specific facilities or equipment or can be used for any particular purpose or service. Transmission characteristics may vary depending on the distance between CLEC's end user and U S WEST's end office and may vary due to characteristics inherent in the physical network. U S WEST, in order to properly maintain and modernize the network, may make necessary modifications and changes to the unbundled loops, ancillary and finished services in its network on an as needed basis. Such changes may result in minor changes to transmission parameters. Changes that affect network interoperability require advance notice pursuant to the Notices Section of this SGAT.

9.2.2.10 If there is a conflict between an end user (and/or its respective agent) and CLEC regarding the disconnection or provision of Unbundled Loops, U S WEST will honor the direction of the end user or the latest dated POA designating an agent by the end user or its respective agent. If the end user's service has not been disconnected and Unbundled Loop service is not yet established, CLEC will be responsible to pay the nonrecurring charge as set forth herein. A slamming charge will be billed to CLEC. If the loop has been disconnected, the service will be reconnected to the original local service provider and nonrecurring service charges and a slamming charge will be billed to CLEC.

9.2.2.11 Facilities and lines furnished by U S WEST on the premises of CLEC's end user up to and including the NID or equivalent are the property of U S WEST. U S WEST must have access to all such facilities for network management purposes. U S WEST's employees and agents may enter said premises at any reasonable hour to test and inspect such facilities and lines in connection with such purposes or upon termination or cancellation of the Unbundled Loop service to remove such facilities and lines.

9.2.2.12 Unbundled Loops include the facilities between the U S WEST distribution frame up to and including U S WEST's NID located at CLEC's end user premises.

9.2.2.13 When requested by US WEST, a CLEC must submit a disconnect order to U S WEST on Unbundled Loop services where the loop has been relinquished by an end-user and that loop is required by US WEST or another CLEC to provide service to that end-user location.

9.2.3 Rate Elements

The following Unbundled Loop rate elements are contained in Exhibit A of this SGAT.

9.2.3.1 Analog - 2 and 4 wire voice grade. Unbundled analog Loops are transmission paths capable of carrying analog voice frequency signals from the network interface (NI) on the end user's premises to a U S WEST Central Office Network Interface (CO-NI). Unbundled analog Loops may be provided using a variety of transmission technologies, including but not limited to, metallic wire, metallic wire based digital loop carrier and fiber optic fed digital carrier systems. Such technologies are used singularly or in tandem in providing Loops. Direct Current (DC) continuity is not inherent in this service.

9.2.3.2 Non-Loaded - 2 and 4 wire non-loaded loops. Unbundled Non-Loaded Loops are transmission paths capable of carrying specifically line coded digital signals from the NI on an end user's premises to a U S WEST CO-NI. Unbundled Non-Loaded Loops use only metallic wire facilities. After these Loops are ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Loop meets the technical parameters set forth by the specific digital service. Charges shall apply for unloading cable pairs in the event that non-loaded Loops are not available.

9.2.3.3 Digital Capable Loops - Basic rate ISDN and DS1 capable Loops. These Loops should only be requested when the 2/4 wire non-loaded Loop is either not available or the non-loaded Loop does not meet the technical parameters of CLEC's service(s). Unbundled digital Loops are transmission paths capable of carrying specifically formatted and line coded digital signals from the NI on an end user's premises to a U S WEST CO-NI. Unbundled digital Loops may be provided using a variety of transmission technologies including but not limited to metallic wire, metallic wire based digital loop carrier and fiber optic fed digital carrier systems. U S WEST will determine the specific transmission technology by which the Loop will be provided. Such technologies are used singularly or in tandem in providing service. DC continuity is not inherent in this service. Charges shall apply for conditioning of the digital capable Loops, as requested by CLEC, if necessary.

9.2.3.4 Unbundled Loop recurring monthly rates, including Extension Technology recurring charge, are described in Exhibit A.

9.2.3.5 Unbundled Loop non-recurring charges, described in Exhibit A, include the following:

a) Installation charges;

b) DS1/3 Regeneration charge;

c) Conditioning charge.

9.2.4 Ordering Process

9.2.4.1 All Unbundled Loops are ordered via an LSR. Ordering processes and installation intervals are contained in Section 12 of this SGAT.

9.2.4.2 Prior to placing orders on behalf of the end user, CLEC shall be responsible for obtaining and have in its possession a Proof of Authorization as set forth in Section 5 of this SGAT.

9.2.4.3 The installation intervals for the Analog, Non-Loaded Loops and Digital Capable Loops are defined in the Interconnect & Resale Resource Guide. The interval will start when U S WEST receives a complete and accurate Local Service Request (LSR). This interval may be impacted by order volumes and load control considerations. If more than twenty-five orders are issued at the same address, the request will be handled on an individual case basis.

9.2.4.4 When ordering Unbundled Loops, CLEC is responsible for obtaining or providing facilities and equipment that are compatible with the service.

9.2.5 Maintenance and Repair

9.2.5.1 CLEC is responsible for its own end user base and will have the responsibility for resolution of any service trouble report(s) from its end users. CLEC will perform trouble isolation on the Unbundled Loop and any associated ancillary services prior to reporting trouble to U S WEST. U S WEST will work cooperatively with CLEC to resolve trouble reports when the trouble condition has been isolated and found to be within a portion of U S WEST's network. The Parties will cooperate in developing mutually acceptable test report standards. When the trouble is not in U S WEST's network, CLEC shall be charged maintenance charges in accordance with the applicable time and materials charges in U S WEST's Tariff.

9.2.5.2 U S WEST will perform tests to isolate the service trouble. If no trouble is found, U S WEST will notify CLEC. If the trouble is isolated to the Central Office, or a U S WEST facility, U S WEST will repair, without charge, as long as the trouble is not attributed to CLEC's Collocation equipment, cabling, and/or cross connects. If the trouble is attributed to CLEC's Collocation equipment, cabling or cross connects, U S WEST will notify CLEC and charges will apply. If the trouble is on the end user's side of the NID, the trouble will be referred back to CLEC and charges will apply for trouble isolation.

9.2.5.3 CLEC will have responsibility for testing its equipment, network facilities and the Unbundled Loop facility. If U S WEST performs tests of the Unbundled Loop facility at CLEC's request, and the fault is not in U S WEST's facilities, a trouble isolation charge shall apply. Maintenance and Repair processes are contained in Section 12 of this SGAT.

9.3 Network Interface Device (NID)

9.3.1 Description

The NID provides an interface between U S WEST's loop facility and the end user's inside wire and is considered part of the Unbundled Loop facility. The modular NID is divided into two components; one containing the over-voltage unit (protector), buried service wire and drop terminals; the other containing the end user's inside wire, the inside wire terminals and a modular plug which connects the inside wire to the dial tone source. The non-modular NID is a protector block with the inside wire terminated directly on the dial-tone source. The NID provides a protective ground connection, provides protection against lightning and other high voltage surges and is capable of terminating cables such as twisted pair cable. If CLEC orders Unbundled Loops on a reuse basis, the existing drop and U S WEST's NID will remain in place and continue to carry the signal to the end user's equipment.

9.3.2 Terms and Conditions

9.3.2.1 If CLEC places its own drop, CLEC will install its own NID. However, CLEC can use the existing U S WEST NID to terminate its drop if space permits, otherwise a new NID is required. If CLEC installs its own NID, CLEC may connect its

NID to the U S WEST NID by placing a cross-connect between the two. When provisioning a NID to NID connection, CLEC will isolate the U S WEST facility in the NID by unplugging the modular unit. If CLEC requires that a non-modular unit be replaced with a modular NID, U S WEST will perform the replacement and charges will be assessed for the NID and time associated with the request. If CLEC is a facility based provider up to and including its NID, the U S WEST facility currently in place, including the NID, will remain in place. At no time should either Party remove the other Party's facilities from the other Party's NID.

9.3.2.2 U S WEST will retain sole ownership of the U S WEST NID and its contents on U S WEST's side. U S WEST is not required to conduct NID change-outs, except on an individual basis, or inventory NID locations on behalf of CLEC.

9.3.3 Rate Elements

9.3.3.1 If CLEC requests a non-modular unit to be replaced with a modular NID, U S WEST will do so. Charges will be assessed for the NID and the technician's installation and travel time. Any costs associated with U S WEST's connection of CLEC's NID to U S WEST's NID will be charged to CLEC. This is a nonrecurring charge and is contained in Exhibit A of this SGAT.

9.3.3.2 Recurring rates for the NID are contained in Exhibit A of this SGAT.

9.3.4 Ordering Process

9.3.4.1 When CLEC submits an LSR for an Unbundled Loop, CLEC will indicate in the Loop Service form if a modular NID is required at the end user's location. Standalone NIDs are ordered using the remarks section of the LSR form. Ordering processes and installation intervals are contained in Section 12 of this SGAT.

9.3.5 Maintenance and Repair

9.3.5.1 If U S WEST is dispatched to a location and finds the existing protector in a state of disrepair, the protector will be replaced with a new modular NID at no cost to CLEC. If U S WEST is dispatched to an end user's location on a maintenance issue and finds the modular NID to be defective, U S WEST will replace the defective element or, if beyond repair, the entire device. Maintenance and Repair processes are contained in Section 12 of this SGAT.

9.4 Additional Unbundled Elements

CLEC may request nondiscriminatory access to and, where appropriate, development of, additional UNEs not covered in this SGAT pursuant to the Bona Fide Request Process.

9.5 Construction Charges

U S WEST will conduct an individual financial assessment of any request which requires construction of network capacity, facilities, or space for access to or use of unbundled loops, ancillary and finished services. When U S WEST constructs to fulfill CLEC's request for unbundled loops, ancillary and finished services, U S WEST will bid this construction on a case-

by-case basis. U S WEST will charge for the construction through non-recurring charges and a term agreement for the remaining recurring charge, as described in Section 19.

Section 10.0 - ANCILLARY SERVICES

The provisions of this section in this SGAT are based, in large part, on the existing state of the law, rules, regulations and interpretations thereof, as of the date hereof (the "Existing Rules"). Among the Existing Rules are the results of arbitrated decisions by the Commission which are currently being challenged by U S WEST. Among the Existing Rules are certain FCC rules and orders that are the subject of, or affected by, the opinion issued by the Supreme Court of the United States in *AT&T Corp., et al. v. Iowa Utilities Board, et al.* on January 25, 1999. That opinion is not yet of legally-binding effect, and many of the Existing Rules, including rules concerning which Network Elements are subject to unbundling requirements, may be changed or modified during legal proceedings that follow the Supreme Court opinion. Among the Existing Rules are the FCC's orders regarding BOCs' applications under Section 271 of the Act. U S WEST is basing the offerings in this SGAT on the Existing Rules, including the FCC's orders on BOC 271 applications. Nothing in this SGAT shall be deemed an admission by U S WEST concerning the interpretation or effect of the Existing Rules or an admission by U S WEST that the Existing Rules should not be vacated, dismissed, stayed or modified. Nothing in this SGAT shall preclude or estop U S WEST from taking any position in any forum concerning the proper interpretation or effect of the Existing Rules or concerning whether the Existing Rules should be vacated, dismissed, stayed or modified. To the extent that the Existing Rules are changed, vacated, dismissed, stayed or modified, then this SGAT and all contracts adopting all or part of this SGAT shall be amended to reflect such modification or change of the Existing Rules. Where the Parties fail to agree upon such an amendment, it shall be resolved in accordance with the Dispute Resolution provision of this SGAT. It is expressly understood that this SGAT will be corrected to reflect the outcome of generic proceedings by the Commission for pricing, service standards, or other matters covered by this SGAT. This paragraph shall be considered part of the rates, terms and conditions of each interconnection service and network element arrangement contained in this SGAT, and this paragraph shall be considered legitimately related to the purchase of each interconnection service and network element arrangement contained in this SGAT.

10.1 Interim Number Portability

10.1.1 Description

10.1.1.1 Interim Number Portability ("INP") service is a service arrangement that allows an end user customer to retain its dialed telephone number when switching to another service provider. INP service can be provided by U S WEST to CLEC or by CLEC to U S WEST. For the purposes of this section, the Party porting traffic to the other Party shall be referred to as the "INP Provider" and the Party receiving INP traffic for termination shall be referred to as the "INP Requestor."

10.1.1.2 INP applies to those situations where an end user elects to transfer to a new service provider and such end user also wishes to retain its existing telephone number. INP consists of INP Provider's provision to the INP Requestor the capability to route calls placed to telephone numbers assigned to the INP Provider's switches to the INP Requestor's switches. INP is available only for working telephone numbers assigned to the INP Provider's end users who request to transfer to the INP Requestor's service. Local Interconnect Service (LIS) is required for INP.

10.1.1.3 INP is available as INP-Remote Call Forwarding ("INP-RCF"), Direct Inward Dialing ("DID"), Directory Number Route Index ("DNRI") and NXX Migration. DNRI is available as either direct to an end office or through a tandem, also referred to as DNRI Tandem ("RIPH") or portability hub. NXX Migration, or Local Exchange Routing Guide Reassignment, reassigns the entire central office code (NXX) to the CLEC switch if the code is used solely for one customer.

10.1.1.4 Remote Call Forwarding (RCF)

10.1.1.4.1 RCF permits a call to an INP Provider's assigned telephone number to be translated to the INP Requestor's dialable local number. With the RCF solution, a permanent RCF is established in U S WEST's switch forwarding any incoming call to the number assigned and maintained in the CLEC switch.

10.1.1.4.2 INP via RCF also requires Office Equipment (OE), on a per telephone number basis. The INP Requestor will need to provide a forecast of deployment sites and estimated quantities of ported numbers to assist in an assessment of available porting methods. Each request for INP via RCF will be analyzed by the Infrastructure Availability Center, IAC, to determine if OE is available.

10.1.1.5 Direct Inward Dialing (DID)

DID permits incoming calls to be ported to the INP Requestor's switch via a DID trunk configuration. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between U S WEST's End Office and CLEC's switch. The traffic on these trunks cannot overflow to other trunks. In addition, inter-switch signaling for DID is limited to multi-frequency (MF). This precludes passing the Calling Line ID to the CLEC switch. With DID, there is no SS7 capability causing CLASS feature limitations. For DID, the INP Provider will deliver the dialed telephone number to the INP Requestor's Central Office.

10.1.1.6 Directory Number Route Indexing (DNRI)

DNRI permits incoming calls to be ported to the INP Requestor's switch via a route index. A permanent route index is assigned to the end user's ported number in the INP Provider's switch. The INP Provider will deliver the dialed seven digit telephone number to the INP Requestor's Central Office. INP Requestor may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible. The INP Requestor will need to specify the number of simultaneous calls to be forwarded for each number ported. DNRI tandem routing requires an additional 30 day lead time to establish technical requirements for routing the ported calls.

10.1.1.7 NXX Migration

Where one Party has activated an entire NXX for a single end user, or activated a substantial portion of an NXX for a single end user with the remaining numbers in that NXX either reserved for future use or otherwise unused, if such end user chooses to receive service from the other Party, the first Party shall cooperate with

the second Party to have the entire NXX reassigned to an End Office operated by the second Party through the NANP administrator. In addition, both Parties agree to cooperate in arranging necessary updates and industry notification in the LERG (and associated industry databases, routing tables, etc.). Such transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry lead-times (as identified in the LERG guidelines and the Central Office Code Administration guidelines) for movement of NXXs from one switch to another. Other applications of NXX migration will be discussed by the Parties as circumstances arise.

10.1.2 Terms and Conditions

10.1.2.1 U S WEST and CLEC will provide INP service in a non-discriminatory manner and with as little impairment of functioning, quality, reliability and convenience as possible.

10.1.2.2 U S WEST will coordinate INP with unbundled loop cutovers in a reasonable amount of time and with minimum service disruption.

10.1.2.3 The Parties shall provide Number Portability on a reciprocal basis to each other to the extent technically feasible, and in accordance with rules and regulations as, from time to time, prescribed by the FCC and/or the Commission.

10.1.2.4 Until the long term number portability solution, referred to as Local Number Portability (LNP), is implemented by the industry pursuant to regulations issued by the FCC or the Commission, the Parties agree to provide INP to each other through RCF, DID, DNRI and NXX migration. Local Interconnect Service (LIS) is required for INP.

10.1.2.5 Once Local Number Portability has been implemented within a wire center, INP will no longer be available for ordering within that wire center.

10.1.2.6 Upon LNP implementation, the INP offerings will be withdrawn subject to advance notice to the other Party. Both Parties will conform to the Western Region LNP Technical and Operations team guidelines and agreements for completion of INP to LNP conversion activity.

10.1.2.7 The INP Requestor's designated INP switch must return answer and disconnect supervision to the INP Provider's switch.

10.1.2.8 The INP Requestor will provide to the E911 database provider the network telephone number that the INP Requestor assigned to the INP Provider-assigned, ported telephone number. Updates to and maintenance of the INP information to the E911 database are the responsibility of the INP Requestor. For consistency in administration, the INP Requestor shall enter into a separate agreement with the E911 database provider.

10.1.2.9 U S WEST will update its Line Information Database ("LIDB") listings for retained numbers as directed by CLEC. U S WEST will restrict or cancel calling cards associated with these ported numbers. LIDB updates shall be completed by the Parties on the same business day each INP arrangement is activated.

10.1.2.10. An INP telephone number may be assigned by INP Requestor only to the INP Requestor's end users located within the INP Provider's local calling area and toll rating area that is associated with the NXX of the ported number.

10.1.2.11 INP is applicable only if the INP Requestor is engaged in a reciprocal traffic exchange arrangement with the INP Provider.

10.1.2.12 Only the existing INP Provider assigned end user telephone number may be used as a ported number for INP.

10.1.2.13 An INP telephone number must be active and assigned to an end user to accommodate INP.

10.1.2.14 INP services shall not be re-sold, shared or assigned by either Party to another LEC or CLEC.

10.1.2.15 INP is not offered for NXX Codes 555, 976, 960, and coin telephones, and Service Access Codes (*i.e.,* 500, 700, 8XX, 900). INP is not available for Feature Group A seven-digit numbers, including Foreign Exchange. Furthermore, INP numbers may not be used for mass calling events.

10.1.2.16 The ported telephone number will be returned to the switch which originally had the ported number when the end user disconnects service from the INP Requestor. The INP Requestor shall not retain it and reassign it to another end user. The normal intercept announcement will be provided by the INP Provider for the period of time until the telephone number is reassigned by the INP Provider.

10.1.2.17 Forecasts for INP must be included in the forecasting process detailed in Section 7 of this SGAT.

10.1.3 Ordering

10.1.3.1 Both parties shall comply with ordering standards as developed by the industry. INP service is ordered via a Local Service Request and associated Number Portability forms. Specific details regarding the ordering of INP service is contained in the Interconnect & Resale Resource Guide.

10.1.3.2 CLEC may order INP service either manually or through an electronic interface. The electronic gateway solution for ordering service is described in Section 12 of this SGAT.

10.1.3.3 The service order intervals used when ordering INP service are contained in the Interconnect & Resale Resource Guide.

10.1.3.4 U S WEST will provide FOC's to CLECs within a reasonable time, no later than 48 hours after receipt of complete and accurate orders for Regular POTS or Simple Business customers. The FOC interval for all other complex orders will be within a reasonable time, no later than 8 business days from receipt of complete and accurate orders. The FOC for ICB orders will reflect an ICB FOC date.

10.1.3.5 For purposes of this Section, U S WEST's normal business hours are 7:00 a.m. to 7:00 p.m., local time, Monday through Friday. CLEC may also request a Frame Due Time (FDT) of 5:00 a.m. as a normal business hour, Monday through Friday. Requests for Frame Due Times other than the 5:00 a.m. or 7:00 a.m. to 7:00 p.m. normal business hours shall be considered an out of hours cut.

10.1.3.6 CLEC shall request service within the normal business hours by submitting a Local Service Request (LSR) and designating the requested Frame Due Time. Requests for Frame Due Times within normal business hours will be proactively managed by U S WEST to ensure that the Frame Due Time is met.

10.1.3.7 Out of Hours Cut

10.1.3.7.1 Out of hours cuts permit a CLEC to select either a coordinated or non-coordinated cut for INP service outside of U S WEST's normal business hours. For planning purposes, CLEC shall provide U S WEST with a forecast of out of hours coordinated cuts at least two weeks prior to a CLEC placing an order in a particular state. Forecasts should include the anticipated Frame Due Times and volumes to be ported out of hours.

10.1.3.7.2 CLEC shall request out of hours cuts by submitting a Local Service Request (LSR) and designating the desired FDT outside of the normal business hours. In the Remarks section of the LSR, CLEC must specify an Out of Hours cut and the type of cut (coordinated or non-coordinated).

10.1.3.7.3 The date and time for the coordinated cut may need to be negotiated between U S WEST and CLEC because of system downtime, switch upgrades, switch maintenance, and the possibility of other CLECs requesting the same FDT in the same switch (switch contention). Because of this up-front coordination and FDT negotiation efforts, Firm Order Confirmation (FOC) of the FDT will require additional time. In the event that this situation would occur, U S WEST will negotiate with CLEC to provide the FOC within a reasonable time frame.

10.1.3.7.4 Non-Coordinated Out of Hours Cut

10.1.3.7.4.1 CLEC shall request out of hours non-coordinated cuts by submitting a LSR and designating a 1:00 a.m. FDT (due date) which is outside of the normal business hours. Non-coordinated cuts allow CLEC to request a U S WEST FDT of 1:00 a.m. where the actual cut occurs between the hours of 1:00 a.m. and 7:00 a.m., with the cut completed by 7:30 a.m. of that day (if the requested date is a business day, or by 7:30 a.m. of the next business day).

10.1.3.7.4.2 Conversion desk activities and escalation processes for non-coordinated out of hour cuts are accomplished during the business day prior to the cut.

10.1.3.7.4.3 CLEC will not incur additional charges for non-coordinated out of hours cuts.

10.1.3.7.5 Coordinated Out of Hours Cut

10.1.3.7.5.1 CLECs shall request a coordinated out of hours cut by submitting a LSR and designating the requested FDT.

10.1.3.7.5.2 Out of hours coordinated cuts will be managed by a U S WEST project manager. Coordination of this effort requires an up-front internal planning session. Any changes to the original FDT will be negotiated with CLEC and will occur prior to issuing an FOC.

10.1.3.7.5.3 CLEC will incur additional charges for coordinated out of hours cuts.

10.1.3.8 End User Impacts

10.1.3.8.1 The INP Requestor is responsible for all dealings with and on behalf of its end users, including all end user account activity (*e.g.*, end user inquiries and complaints).

10.1.3.8.2 Each Party is responsible for obtaining a Proof of Authorization from its end users who request a transfer of the end user's telephone number from the other Party.

10.1.3.8.3 The INP Provider will work cooperatively with the INP Requestor to ensure a smooth end user transition and to provide for coordination with other facilities (*e.g.*, Loops).

10.1.3.8.4 If an end user requests transfer of service from the INP Requestor back to the INP Provider, the INP Provider may rely on that end user request to institute cancellation of the INP service. The INP Provider will provide at least 48 hours notice to the INP Requestor of the cancellation of INP service, and will work cooperatively with the INP Requestor to ensure a smooth end user transition and to provide for coordination with other facilities (*e.g.*, Loops).

10.1.3.8.5 The INP Requestor will submit to the INP Provider a disconnect order for each ported number that is relinquished by the INP Requestor's end users. U S WEST will provide an electronic interface for the purpose of ordering INP service. This interface may be accomplished by either a GUI (Graphical User Interface) or EDI (Electronic Data Interchange).

10.1.4 Maintenance and Repair

10.1.4.1 CLEC is responsible for its own end users and will have the responsibility for resolution of any service trouble report(s) from its end users. End user customers of CLEC will be instructed to report all cases of trouble to their Service Provider.

10.1.4.2 CLEC and U S WEST will provide to their respective end user customers the correct telephone numbers to call for access to their respective repair bureaus.

CLEC and U S WEST will provide their repair contact numbers to one another on a reciprocal basis.

10.1.4.3 U S WEST will work cooperatively with CLEC to resolve trouble reports when the trouble condition has been isolated and found to be within a portion of the U S WEST network. U S WEST will perform standard tests to isolate and repair the trouble. For INP trouble reports, U S WEST will not be responsible for testing the unbundled loop leased by CLEC.

10.1.4.4 The trouble ticket will be closed by the functional group that corrected the trouble. This group will also contact CLEC to inform them that the ticket has been closed. Current trouble codes and analysis codes will be entered to the trouble ticket.

10.1.5 Rate Elements

10.1.5.1 INP Rate Elements

The Parties will comply with the FCC rules and Commission decisions on cost recovery for interim number portability. Exhibit A of this SGAT contains Interim Number Portability rates.

10.1.5.1.1 Number Ported – This nonrecurring cost is incurred per number ported, per service order.

10.1.5.1.2 Service Establishment – Per Route, Per Switch. This nonrecurring cost is incurred for each INP Provider's end office switch that is equipped to provide INP to the INP Requestor.

10.1.5.1.3 Service Establishment, additional number ported or changes to existing numbers, per number ported. This nonrecurring cost applies to every INP service order issued.

10.1.5.1.4 Charges for Coordinated Out of Hours Cuts. Charges for coordinated out of hours cuts shall be based upon actual hours worked at U S WEST's overtime rate, time and one-half rates for timeframes outside of U S WEST's normal hours except for Sundays and Holidays. Charges for coordinated out of hours cuts on Sundays and Holidays shall be based upon U S WEST's overtime premium rate, which is double time. Overtime rates will be multiplied by the number of U S WEST personnel actively participating in the cut, multiplied by the number of hours required for the cut. Exhibit A of this SGAT contains overtime rates for coordinated out of hours cuts.

10.1.5.1.4.1 U S WEST will schedule the appropriate number of employees prior to the cut, based upon information provided by CLEC. If such information requires modification during the cut and, as a result, non-scheduled employees are required, CLEC shall be charged a four hour minimum callout.

10.1.5.2 Switched Access Revenues. U S WEST will comply with the FCC and Commission rules regarding the sharing of terminating access revenues. Once the end

office switch is converted to long term number portability (LNP), the switched access compensation will not be passed on to CLEC.

10.1.5.2.1 The Switched Access rate elements are identified in U S WEST's Switched Access Tariff.

10.1.5.5.2 U S WEST will use ARMIS data to determine the average Minutes of Use ("MOU") by jurisdiction. ARMIS data is updated on a yearly basis.

10.1.5.5.3 The number of lines to be used in the formula will be extracted from the U S WEST corporate data warehouse once each month. This database contains billed information for posted orders.

10.1.5.5.4 Internet traffic will be excluded from reciprocal compensation as soon as the processes are in place to identify this traffic. U S WEST will give CLEC ten (10) days written notice prior to excluding this traffic.

10.1.5.5.5 The formula populated with the appropriate data for the preceding month will be provided to CLEC to support the payment. U S WEST will pay the pass through amounts to CLEC within one month. Disputes will be processed as though this credited amount were a billed amount under this SGAT.

10.2 Local Number Portability

10.2.1 U S WEST will provide number portability in a non-discriminatory manner. U S WEST will coordinate number portability with unbundled loop cutovers in a reasonable amount of time and with minimum service disruption.

10.2.2 U S WEST will offer Local Number Portability, also known as long term number portability (LNP), in compliance with the FCC's rules and regulations. Deployment of LNP will be in accordance with the FCC's implementation schedule. The publication of LNP capable switches and the schedule and status for future deployment will be identified in the Local Exchange Routing Guide (LERG), the Western Region LNP Website at http://lnp.gstworld.net/lnp, and the U S WEST Website at www:uswest.com/com/disclosures/netdisclosure414/indexcontent.html in accordance with industry guidelines.

10.2.3 Upon implementation of LNP pursuant to FCC regulations, both Parties agree to conform to and provide such LNP. Both Parties will conform to LNP industry guidelines, as identified in CC Docket No. 95-116, the North American Numbering Council LNP Architecture & Administrative Plan, the LNP Western Region Requirements and Operations Team guidelines, as published in the Western Region LNP website, and state guidelines.

10.2.4 U S WEST shall perform default LNP queries where CLEC is unable to perform its own query. CLEC shall be the default carrier for LNP database queries where U S WEST is unable to perform its own query. U S WEST query services are defined in FCC Tariff #5; End Office and Tandem Default Query Charges are contained in Section 13 (Miscellaneous Service) and Database Query Charges are contained in Section 19 (CCSAC Service Applications).

10.2.5 Both Parties shall comply with ordering standards as developed by the industry. LNP service is ordered via a Local Service Request and associated Number Portability forms. Specific details regarding the order of LNP service is contained in the LNP section of the Interconnect & Resale Resource Guide. CLEC may order long term number portabiity either manually or through an electronic interface. The electronic gateway solution for ordering service is described in Section 12 of this SGAT.

10.2.6 Standard Due Date Intervals. The standard service order intervals used when discontinuing service are found in the Interconnect & Resale Resource Guide. Inward activity due dates are dependent upon the outward activity date.

10.2.7 U S WEST will comply with FCC and Commission rules on cost recovery for long term number portability, but U S WEST reserves its right to challenge, and seek changes to, such rules.

10.2.8 Both Parties agree to follow the LNP switch request process established by the Parties and in compliance with industry guidelines.

10.2.9 Both Parties agree to comply with intra- and inter-company testing guidelines as established by the Western Region Implementation and Testing Team and/or State specific teams.

10.3 911/E911 Service

10.3.1 Description

10.3.1.1 911 and E911 provides an end user access to the applicable emergency service bureau, where available, by dialing a 3-digit universal telephone number (911).

10.3.1.2 Automatic Location Identification/Data Management System (ALI/DMS). The ALI/DMS database contains end user information (including name, address, telephone number, and sometimes special information from the local service provider or end user) used to determine to which Public Safety Answering Point (PSAP) to route the call. The ALI/DMS database is used to provide more routing flexibility for E911 calls than Basic 911.

10.3.1.3 Basic 911 directly connects to the PSAP all 911 calls from one or more local exchange switches that serve a geographic area. E911 provides additional selective routing flexibility for 911 calls. E911 uses end user data, contained in the ALI/DMS, to determine to which Public Safety Answering Point (PSAP) to route the call.

10.3.2 Terms and Conditions

10.3.2.1 E911 functions provided to CLEC shall be at the same level of accuracy and reliability as for such support and services that U S WEST provides to its end users for such similar functionality.

10.3.2.2 In counties where U S WEST has obligations under existing agreements as the primary provider of the 911 system to the county, CLEC will participate in the provision of the 911 System as described in Section 10.3.

10.3.2.3 U S WEST shall conform to all state regulations concerning emergency services.

10.3.2.4 U S WEST shall route E911 calls to the appropriate PSAP.

10.3.2.5 Each Party will be responsible for those portions of the 911 system for which it has total control, including any necessary maintenance to each Party's portion of the 911 system.

10.3.2.6 U S WEST will provide CLEC with the identification of the U S WEST 911 controlling office that serves each geographic area served by CLEC.

10.3.2.7 U S WEST will provide CLEC with the ten-digit telephone numbers of each PSAP agency, for which U S WEST provides the 911 function, to be used by CLEC to acquire emergency telephone numbers for operators to handle emergency calls in those instances where CLEC's end user dials "0" instead of "911". It shall be the responsibility of CLEC to verify or confirm the appropriate use of the contact information provided by U S WEST with each PSAP prior to offering 911 calls or publication of such data.

10.3.2.8 If a third party (*i.e.*, LEC) is the primary service provider to a county, CLEC will negotiate separately with such third party with regard to the provision of 911 service to the county. All relations between such third party and CLEC are separate from this SGAT and U S WEST makes no representations on behalf of the third party.

10.3.2.9 If CLEC is the primary service provider to the county, CLEC and U S WEST will negotiate the specific provisions necessary for providing 911 service to the county and will include such provisions in an amendment to this SGAT.

10.3.2.10 CLEC will separately negotiate with each county regarding the collection and reimbursement to the county of applicable end user taxes for 911 service.

10.3.2.11 CLEC is responsible for network management of its network components in compliance with the Network Reliability Council Recommendations and meeting the network standard of U S WEST for the 911 call delivery.

10.3.2.12 The Parties shall provide a single point of contact to coordinate all activities under this SGAT.

10.3.2.13 Except for trunking ordered from U S WEST by CLEC, neither Party will reimburse the other for any expenses incurred in the provision of E911 services.

10.3.3 E911 Database Updates

10.3.3.1 CLEC exchanges to be included in U S WEST's E911 Database will be indicated via written notice to the appropriate 911 authority (state agency or PSAP administrator) and will not require an amendment to this SGAT.

10.3.3.2 U S WEST's designated E911 database provider, an independent third party, will be responsible for maintaining the E911 database. U S WEST, or its designated database provider, will provide to CLEC an initial copy of the most recent Master Street Address Guide ("MSAG"), and subsequent versions on a quarterly basis, at no charge. MSAGs provided outside the quarterly schedule will be provided and charged on an individual case basis. The data will be provided in computer readable format. U S WEST shall provide CLEC access to the Master Street and Address Guide at a level of accuracy and reliability that is equivalent to the access U S WEST provides to itself.

10.3.4 E911 Database Updates for Facilities-Based CLECs

10.3.4.1 U S WEST will ensure that the 911 database entries for CLEC will be maintained with the same accuracy and reliability that U S WEST maintains for U S WEST's own customers.

10.3.4.2 For selective routing table updates, facilities-based CLECs will negotiate directly with U S WEST's database provider for the input and validation of end user data into the U S WEST Automatic Location Identification ("ALI") database. CLEC will negotiate directly with the PSAP (or PSAP agency's) DMS/ALI provider for input of end user data into the ALI database. In most cases the selective routing table updates and the ALI database will be managed by the same provider. CLEC assumes all responsibility for the accuracy of the data that CLEC provides for MSAG preparation and E911 Database operation.

10.3.4.3 If it is facilities-based, CLEC will provide end user data to U S WEST's agent for the U S WEST ALI database utilizing NENA-02-001 Recommended Formats For Data Exchange, NENA-02-002 Recommended Standard For Street Thoroughfare Abbreviations and NENA-02-003 Recommended Protocols For Data Exchange. U S WEST will furnish CLEC any variations to NENA recommendations required for ALI database input.

10.3.4.4 If it is facilities-based, CLEC will provide end user data to U S WEST's database provider for U S WEST's ALI database that is MSAG valid and meets all components of the NENA-02-004 Recommended Measurements For Data Quality.

10.3.4.5 If it is facilities-based, CLEC will update its end user records provided to U S WEST's database provider for U S WEST's ALI database to agree with the 911 MSAG standards for its service areas.

10.3.5 E911 Database Updates for Resale Based CLECs

10.3.5.1 For resold services, U S WEST, or its designated database provider, will provide updates to the ALI database in a manner that is at the same level of accuracy and reliability as such updates are provided for U S WEST's end-users. For resold accounts, CLEC shall provide U S WEST with accurate customer location information to be updated to the ALI/DMS database. U S WEST shall use its current process to update and maintain end user information in the ALI/DMS database.

10.3.6 E911 Database Accuracy

10.3.6.1 E911 Database accuracy shall be measured jointly by the PSAPs and U S WEST's database provider in a format supplied by U S WEST. The reports shall be forwarded to CLEC by U S WEST's database provider when relevant and will indicate incidents when incorrect or no ALI data is displayed. The reports provided to CLEC shall contain CLEC-specific information regarding CLEC's accounts.

10.3.6.2 Each discrepancy report will be jointly researched by U S WEST and CLEC. Corrective action will be taken immediately by the responsible Party.

10.3.6.3 Each Party providing updates to the E911 database will be responsible for the accuracy of its end user records. Each Party providing updates specifically agrees to indemnify and hold harmless the other Party from any claims, damages, or suits related to the accuracy of end user data provided for inclusion in the E911 Database.

10.3.7 E911 Interconnection

10.3.7.1 If required by CLEC, U S WEST shall interconnect direct trunks from CLEC's network to the Basic 911 PSAP, or the E911 tandem. Such trunks may alternatively be provided by CLEC. If provided by U S WEST, such trunks will be provided on a non-discriminatory basis. Any other 911/E911 charges will be borne by municipalities.

10.3.7.2 For CLEC-identified 911 trunk blockages, U S WEST agrees to take corrective action using the same trunking service procedures used for U S WEST's own E911 trunk groups.

10.3.7.3 The Parties will cooperate in the routing of 911 traffic in those instances where the ALI/ANI information is not available on a particular 911 call.

10.3.7.4 For a facility-based CLEC, U S WEST shall provide 911 interconnection, including the provision of dedicated trunks from CLEC end office switch to the 911 control office, at parity with what U S WEST provides itself.

10.3.8 E911 and Number Portability

10.3.8.1 When a U S WEST telephone number is ported out, the receiving CLEC shall be responsible to update the ALI/DMS database. When a CLEC telephone number is ported in, U S WEST shall be responsible to update the ALI/DMS database.

10.3.8.2 When Remote Call Forwarding (RCF) is used to provide number portability to the end user and a remark or other appropriate field information is available in the database, the shadow or "forwarded-to" number and an indication that the number is ported shall be added to the end user record by CLEC.

10.4 White Pages Directory Listings

10.4.1 Description

White Pages Listings Service (Listings) consists of U S WEST placing the names, addresses and telephone numbers of CLEC's end users in U S WEST's listing database, based on end

user information provided to U S WEST by CLEC. U S WEST is authorized to use CLEC end user listings as noted below.

10.4.2 Terms and Conditions

10.4.2.1 CLEC will provide in standard, mechanized format, and U S WEST will accept at no charge, one primary listing for each main telephone number belonging to CLEC's end users. Primary listings are defined in U S WEST general exchange tariffs.

10.4.2.2 CLEC will be charged for premium and privacy listings *(e.g.,* additional, foreign, cross reference) at U S WEST's General Exchange listing Tariff rates, less the wholesale discount, as described in Exhibit A.

10.4.2.3 Information on submitting and updating listings is available in U S WEST Facility Based and Co-Provider Listings User Documents. U S WEST will furnish CLEC the listings format specifications. Directory publishing schedules and deadlines will be provided to CLEC.

10.4.2.4 CLEC grants U S WEST a non-exclusive license to incorporate CLEC's end user listings information into its directory assistance database. U S WEST will incorporate CLEC end user listings in the directory assistance database. U S WEST will incorporate CLEC's end user listings information in all existing and future directory assistance applications developed by U S WEST.

10.4.2.5 CLEC end user listings will be treated the same as U S WEST's end user listings. No prior authorization shall be required for U S WEST to sell, make available, or release CLEC's end user listings to directory publishers, directory assistance providers, or other third parties. Listings shall not be provided or sold in such a manner as to segregate end users by carrier. U S WEST will not charge for updating and maintaining its listings database. CLEC will not receive compensation from U S WEST for any sale of listings by U S WEST.

10.4.2.6 To the extent that state Tariffs limit U S WEST's liability with regard to listings, the applicable state Tariff(s) is incorporated herein and supersedes the Limitation of Liability section of this SGAT with respect to listings only

10.4.2.7 U S WEST is responsible for maintaining listings, including entering, changing, correcting, rearranging and removing listings in accordance with CLEC orders.

10.4.2.8 U S WEST provides non-discriminatory appearance and integration of white pages listings for all CLEC's and U S WEST's end users. All requests for white pages directory listings, whether CLEC or U S WEST end users, follow the same processes for entry into the listings database.

10.4.2.9 U S WEST will take reasonable steps in accordance with industry practices to accommodate nonpublished and nonlisted listings provided that CLEC has supplied U S WEST the necessary privacy indicators on such listings.

10.4.2.10 CLEC white pages listings will be in the same font and size as listings for U S WEST customers, and will not be separately classified.

10.4.2.11 U S WEST processes for publication of white pages directory listings will make no distinction between CLEC and U S WEST subscribers. CLEC listings will be provided with the same accuracy and reliability as U S WEST's end user listings. U S WEST will ensure CLEC listings provided to U S WEST are included in the white pages directory published on U S WEST's behalf using the same methods and procedures, and under the same terms and conditions, as U S WEST uses for its own end user listings.

10.4.2.12 U S WEST shall ensure its third party publisher distributes appropriate alphabetical and classified directories (white and yellow pages) and recycling services to CLEC customers at parity with U S WEST end users, including providing directories a) upon establishment of new service; b) during annual mass distribution; and c) upon customer request.

10.4.2.13 CLEC represents and warrants the end user information provided to U S WEST is accurate and correct.

10.4.2.14 CLEC further represents and warrants that it has reviewed all listings provided to U S WEST, including end user requested restrictions on use, such as nonpublished and nonlisted.

10.4.2.15 CLEC shall be solely responsible for knowing and adhering to state laws or rulings regarding listings (*e.g.,* no solicitation requirement in the state of Arizona), and for supplying U S WEST with the applicable listing information.

10.4.2.16 CLEC agrees to provide to U S WEST its end user names, addresses and telephone numbers in a standard mechanized format, as specified by U S WEST.

10.4.2.17 CLEC will supply its ACNA/CIC or CLCC/OCN, as appropriate, with each order to provide U S WEST the means of identifying listings ownership.

10.4.2.18 Upon request by U S WEST, CLEC shall submit proof to U S WEST of authorization from each end user for which CLEC submits a change in end user's listing.

10.4.2.19 U S WEST will provide monthly listing verification proofs that provide the data to be displayed in the published white pages directory.

10.4.2.20 U S WEST will provide CLEC a reasonable opportunity to verify the accuracy of the listings to be included in the white pages directory.

10.4.2.21 CLEC may review and if necessary edit the white page listings prior to the close date for publication in the directory.

10.4.2.22 CLEC is responsible for all dealings with, and on behalf of, CLEC's end users, including:

10.4.2.22.1 All end user account activity (*e.g.,* end user queries and complaints);

10.4.2.22.2 All account maintenance activity (*e.g.,* additions, changes, issuance of orders for listings to U S WEST);

10.4.2.22.3 Determining privacy requirements and accurately coding the privacy indicators for CLEC's end user information. If end user information provided by CLEC to U S WEST does not contain a privacy indicator, no privacy restrictions will apply.

10.4.2.22.4 Any additional services requested by CLEC's end users.

10.4.2.23 Pursuant to Sec. 222 (a), (b), (c), (d), and (e) of the Telecommunications Act, U S WEST will provide subscriber lists information gathered in U S WEST's capacity as a provider of local exchange service on a timely and unbundled basis, under nondiscriminatory and reasonable rates, terms and conditions to CLEC upon request for the purpose of publishing directories in any format.

10.4.3 Rate Elements

The following rate elements apply to White Pages Listings and are contained in Exhibit A of this SGAT.

10.4.3.1 Primary Listings

10.4.3.2 Premium-Privacy Listing

10.4.4 Ordering Process

10.4.4.1 U S WEST provides training on white page listings requests and submission processes. The ordering process is similar to the service ordering process.

10.4.4.2 CLEC listings can be submitted for inclusion in U S WEST white pages directories according to the directions in the U S WEST Listings User Documents for Facility Based and Resale CLECs, which will be provided to CLEC upon request. Initial information and directions are available in the Interconnect and Resale Resource Guide.

10.4.4.3 CLEC can submit the OBF forms incorporated in the Local Service Request via IMA, fax or EDI.

10.5 Directory Assistance

10.5.1 Description

10.5.1.1 Directory assistance service is a telephone number, voice information service that U S WEST provides to its own end users and to other telecommunications carriers. U S WEST provides CLEC non-discriminatory access to U S WEST's directory assistance centers, services and directory assistance databases. There are three forms of Directory Assistance Services available pursuant to this SGAT -- Directory Assistance Service, Directory Assistance List Services, and Directory Assistance Database Service. These services are available with call branding, generic branding and Directory Assistance call completion options.

10.5.1.1.1 Directory Assistance Service – U S WEST branded or customer branded Directory Assistance Service. The published and non-listed telephone

numbers provided within the relevant geographic area are those contained in U S WEST's then current Directory Assistance database.

10.5.1.1.1.1 Regional Directory Assistance Service - Allows CLEC's end users to receive published and non-listed telephone numbers within the caller's NPA/LATA geographic areas, whichever is greater, in U S WEST's 14 state operating territory.

10.5.1.1.1.2 National Directory Assistance Service - Allows CLEC's end users to receive listings from U S WEST's Regional Directory Assistance database and from the database of the National Directory Assistance services vendor selected by U S WEST. CLEC must subscribe to Regional Directory Assistance Service to subscribe to National Directory Assistance service.

10.5.1.1.1.3 Call Branding Service – Allows CLEC's end users to receive the service options listed in 10.5.1.1.1.1 and 10.5.1.1.1.2 branded with the brand of CLEC, where technically feasible. Call Branding announces CLEC's name to CLEC's end user at the start and completion of the call. Call Branding is an optional service available to CLEC. If CLEC selects the Call Branding option, U S WEST will provide Call Branding to CLEC, where technically feasible.

a) Front End Brand - Announces CLEC's name to CLEC's end user at the start of the call. There is a nonrecurring charge to setup and record the Front End Brand message.

b) Back End Brand - Announces CLEC's name to CLEC's end user at the completion of the call. There is a nonrecurring charge to setup and record the Back End Brand message.

10.5.1.1.1.4 Directory Assistance Call Completion service - Allows CLEC's end users to connect, where technically feasible, to the requested local or intraLATA telephone number directly, using the U S WEST intraLATA toll network, without having to dial another call.

10.5.1.1.2 Directory Assistance List Services – Directory Assistance List Services is the bulk transfer of U S WEST's Directory Assistance database under a non-exclusive, non-transferable, revocable license to use the information solely for the purpose of providing Directory Assistance Service to its end user customers and incidental use by carriers subject to the terms and conditions of this SGAT. See Section 10.6 for terms and conditions relating to the Directory Assistance List Services.

10.5.1.1.2.1 If CLEC elects to build its own directory assistance service, it can obtain U S WEST directory listings through the purchase of the Directory Assistance List.

10.5.1.1.3 Directory Assistance Database Service – U S WEST shall provide CLEC non-discriminatory access to U S WEST's Directory Assistance Database or "Directory1" database, where technically feasible, on a "per dip" basis.

10.5.2 Terms and Conditions

10.5.2.1 U S WEST will provide CLEC non-discriminatory access to U S WEST's directory assistance databases, directory assistance centers and personnel to provide Directory Assistance service.

10.5.2.2 U S WEST's Directory Assistance database contains only those published and non-listed telephone number listings obtained by U S WEST from its own end users and other Telecommunications Carriers.

10.5.2.3 U S WEST will provide access to Directory Assistance Service via dedicated multi-frequency (MF) operator service trunks. CLEC may purchase operator service trunks from U S WEST or provide them itself. These operator service trunks will be connected directly to U S WEST's Directory Assistance host switch or directly to a remote Directory Assistance switch. CLEC will be required to order or provide at least one operator services trunk for each NPA served.

10.5.2.4 U S WEST will perform Directory Assistance Services for CLEC in accordance with operating methods, practices, and standards in effect for all U S WEST end users. U S WEST will provide the same priority of handling for CLEC's end user calls to U S WEST's Directory Assistance service as it provides for its own end user calls. Calls to U S WEST's directory assistance are handled on a first come, first served basis, without regard to whether calls are originated by CLEC or U S WEST end users.

10.5.2.5 Call Branding for Directory Assistance will entail recording and setting up a brand message. Where technically necessary, dedicated interoffice facilities may be required.

10.5.2.6 If CLEC elects to access the U S WEST Directory Assistance databases on a per dip basis, U S WEST will provide to CLEC the facility and equipment specifications necessary to enable CLEC to obtain compatible facilities and equipment.

10.5.2.7 CLEC's customers may dial 1+411 or 1+NPA+555-1212 to access U S WEST.

10.5.2.8 A facility-based CLEC may choose to have its customers dial a unique number or use the same dialing pattern as U S WEST end users to access U S WEST Directory Assistance operators.

10.5.3 Rate Elements

The following rate elements apply to directory assistance service and are contained in Exhibit A of this SGAT.

10.5.3.1 A per call rate is applicable for Regional Directory Assistance and National Directory Assistance Service selected by CLEC.

10.5.3.2 A non-recurring setup and recording fee will be charged for establishing each Call Branding option. Such non-recurring fee must be paid before service commences.

10.5.3.3 A per call rate is applicable for Call Completion. Additional charges for U S WEST IntraLATA Toll Service may also apply for completed IntraLATA Toll calls.

10.5.4 Ordering Process

CLEC will order Directory Assistance Service by completing the "U S WEST Operator Services/Directory Assistance Questionnaire for Local Service Providers." The "U S WEST Operator Services/Directory Assistance Questionnaire for Local Service Providers" may be obtained from CLEC's U S WEST account manager.

10.5.5 Billing

10.5.5.1 U S WEST will track and bill CLEC on a monthly basis for the number of calls placed to U S WEST's Directory Assistance service by CLEC's end users.

10.5.5.2 For purposes of determining when CLEC is obligated to pay the per call rate, the call shall be deemed made and CLEC shall be obligated to pay when the call is received by the Operator Services switch. Further, an end user may request and receive no more than two telephone numbers per Directory Assistance call. U S WEST will not credit, rebate or waive the per call charge due to any failure to provide a telephone number.

10.6 Directory Assistance List

10.6.1 Description

10.6.1.1 Directory Assistance List (DA List) Information consists of name, address and telephone number information for end users of U S WEST and other LECs and, where available, related elements required in the provision of Directory Assistance service to CLEC's end users. In the case of end users who have non-published listings, U S WEST shall provide the end user's local numbering plan area ("NPA"), address, and an indicator to identify the non-published status of the listing to CLEC; however, U S WEST will not provide the non-published telephone number.

10.6.1.2 U S WEST will provide DA List Information via initial loads and daily updates either by means of a magnetic tape or Network Data Mover (NDM) or as otherwise mutually agreed upon by the Parties. U S WEST will provide all changes, additions or deletions to the DA List Information overnight on a daily basis. The Parties will use a mutually agreed upon format for the data loads.

10.6.1.3 DA List Information shall specify whether the U S WEST subscriber is a residential, business, or government subscriber, and the listings of other carriers will specify such information where it has been provided on the carrier's listing order.

10.6.1.4 In the event CLEC requires a reload of DA List Information from U S WEST's database in order to validate, synchronize or reconcile its database, a reload will be made available according to the rate specified in Exhibit A.

10.6.1.5 U S WEST and CLEC will cooperate in the designation of a location to which the data will be provided.

10.6.2 Terms and Conditions

10.6.2.1 U S WEST grants to CLEC a non-exclusive, non-transferable, revocable license to use the DA List Information solely for the purpose of providing DA service to its end user customers and incidental use by carriers, subject to the terms and conditions of this SGAT. As it pertains to the DA List Information in this SGAT," Directory Assistance Service" shall mean the provision, via a live operator or a mechanized system, of telephone number and address information for an identified telephone service end user or the name and/or address of the telephone service end user for an identified telephone number.

10.6.2.2 CLEC shall not use the DA List Information provided hereunder for any other purpose whatsoever. By way of example and not limitation, U S WEST's DA List Information shall not be used by CLEC for soliciting subscribers, telemarketing, creating or distributing marketing lists or other compilations of marketing information, or for publishing any form of a directory.

10.6.2.3 U S WEST shall retain all right, title, interest and ownership in and to the DA Listing Information it provides hereunder. CLEC acknowledges and understands that while it may disclose the names, addresses, and telephone numbers (or an indication of non-published status) of U S WEST's end users to a third party calling its Directory Assistance for such information, the fact that such end user subscribes to U S WEST's telecommunications services is confidential and proprietary information and shall not be disclosed to any third party.

10.6.2.4 CLEC shall not sublicense, copy or allow any third party to access, download, copy or use the DA List Information, or any portions thereof, or any information extracted therefrom. Each Party shall take commercially reasonable and prudent measures to prevent disclosure and unauthorized use of U S WEST's DA List Information at least equal to the measures it takes to protect its own confidential and proprietary information, including but not limited to implementing adequate computer security measures to prevent unauthorized access to U S WEST's DA List Information when contained in any database.

10.6.2.5 Any disclosure of the fact that an end user subscribes to U S WEST's telecommunications services or unauthorized use of U S WEST's DA List Information shall be considered a material breach of this SGAT and shall be resolved under the Dispute Resolution provisions of this SGAT.

10.6.2.6 Within five (5) days after the expiration or earlier termination of this SGAT, CLEC shall (a) return and cease using any and all DA List Information which it has in its possession or control, (b) extract and expunge any and all copies of such DA List Information, any portions thereof, and any and all information extracted therefrom, from its files and records, whether in print or electronic form or in any other media whatsoever, and (c) provide a written certification to U S WEST from an officer that all of the foregoing actions have been completed.

10.6.2.7 CLEC is responsible for ensuring that it has proper security measures in place to protect the privacy of the end user information contained within the DA List Information. CLEC must remove from its database any telephone number for an end user whose listing has become non-published when so notified by U S WEST.

10.6.2.8 Audits -- In accordance with Section 18, U S WEST may request a comprehensive audit of CLEC's use of the DA List Information. In addition to the terms specified in 19, the following also apply:

10.6.2.8.1 As used herein, "Audit" shall mean a comprehensive review of the other Party's delivery and use of the DA List Information provided hereunder and such other Party's performance of its obligations under this SGAT. Either Party (the "Requesting Party") may perform up to two (2) Audits per 12-month period commencing with the effective date of this SGAT. U S WEST shall be entitled to "seed" or specially code some or all of the DA List Information that it provides hereunder in order to trace such information during an Audit and ensure compliance with the disclosure and use restrictions set forth in Section 10.6.2.2above.

10.6.2.8.2 All paper and electronic records will be subject to audit.

10.6.3 Rate Elements

Recurring and non-recurring rate elements for DA List Information are described below and are contained in Exhibit A of this SGAT.

10.6.3.1 Initial Database Load -- A "snapshot" of data in the U S WEST DA List Information database or portion of the database at the time the order is received.

10.6.3.2 Reload -- A "snapshot" of the data in the U S WEST DA List Information database or portion of the database required in order to refresh the data in CLEC's database.

10.6.3.3 Daily Updates -- Daily change activity affecting DA List Information in the listings database.

10.6.3.4 One-Time Set-Up Fees -- Charges for special database loads.

10.6.3.5 Output Charges -- Media charges resulting from either the electronic transmission or tape delivery of the DA List Information, including any shipping costs.

10.6.4 Ordering

10.6.4.1 CLEC may order the initial DA List Information load or update files for U S WEST's local exchange service areas in its 14 state operating territory or, where technically feasible, CLEC may order the initial DA List Information load or update files by U S WEST White Page Directory Code or NPA.

10.6.4.2 Special requests for data at specific geographic levels (such as NPA) must be negotiated in order to address data integrity issues.

10.6.4.3 CLEC shall use the Directory Assistance List Order Form found in the Interconnect & Resale Resource Guide.

10.7 Toll and Assistance Operator Services

10.7.1 Description

10.7.1.1 Toll and assistance operator services are a family of offerings that assist end users in completing local and long distance calls. U S WEST provides nondiscriminatory access to U S WEST operator service centers, services and personnel.

10.7.1.1.1 Local Assistance. Assists CLEC end users requesting help or information on placing or completing local calls, connects CLEC end users to home NPA directory assistance, and provides other information and guidance, including referral to the business office and repair, as may be consistent with U S WEST's customary practice for providing end user assistance.

10.7.1.1.2 IntraLATA Toll Assistance. Assists CLEC end users requesting help or information on placing or completing intraLATA toll calls. Nothing in this Section is intended to obligate U S WEST to provide any toll services to CLEC or CLEC's end users. U S WEST will direct CLEC's end user to contact its provider to complete intraLATA toll calls.

10.7.1.1.3 Emergency Assistance. Provide assistance for handling a CLEC end user's local and intraLATA toll calls to emergency agencies, including but not limited to, police, sheriff, highway patrol and fire. CLEC is responsible for providing U S WEST with the appropriate emergency agency numbers and updates.

10.7.1.1.4 Busy Line Verification ("BLV") is performed when CLEC's end user requests assistance from the operator bureau to determine if the called line is in use. The operator will not complete the call for the end user initiating the BLV inquiry. Only one BLV attempt will be made per end user call, and a charge shall apply.

10.7.1.1.5 Busy Line Interrupt ("BLI") is performed when CLEC's end user requests assistance from the operator to interrupt a telephone call in progress. The operator will interrupt the busy line and inform the called party that there is a call waiting. The operator will not connect CLEC's end user and the calling party. The operator will make only one BLI attempt per end user call and the applicable charge applies whether or not the called party releases the line.

10.7.1.1.6 Quote Service – Provide time and charges to hotel/motel and other CLEC end users for guest/account identification.

10.7.2 Terms and Conditions

10.7.2.1 Interconnection to the U S WEST Operator Services platform is technically feasible at two distinct points on the trunk side of the platform. The first connection point is an operator services trunk connected directly to the U S WEST Operator Services host switch. The second connection point is an operator services trunk connected directly to a remote U S WEST Operator Services switch.

10.7.2.2 Trunk provisioning and facility ownership must follow U S WEST guidelines.

10.7.2.3 In order for CLECs to use U S WEST's operator services, each NPA served requires an operator service trunk between CLEC's end office and the Interconnection point on the U S WEST switch.

10.7.2.4 The technical requirements of operator service trunk are covered in the Operator Services Systems Generic Requirement (OSSGR), Bellcore document FR-NWT-000271, Section 6 (Signaling) and Section 10 (System Interfaces) in general requirements form.

10.7.2.5 Each Party's operator bureau shall accept BLV and BLI inquiries from the operator bureau of the other Party in order to allow transparent provision of BLV/BLI traffic between the Parties' networks.

10.7.2.6 Each Party shall route BLV/BLI traffic inquiries over separate direct trunks (not the local/intraLATA trunks) established between the Parties' respective operator bureaus.

10.7.2.7 U S WEST will perform Operator Services in accordance with operating methods, practices, and standards in effect for all its end users. U S WEST will respond to CLEC's end user calls to U S WEST's operator services according to the same priority scheme as it responds to U S WEST's end user calls. Calls to U S WEST's operator services are handled on a first come, first served basis, without regard to whether calls are originated by CLEC or U S WEST end users.

10.7.2.8 It is understood that U S WEST shall not be obligated to provide specific operator services where there are facility or technical limitations. U S WEST, in its reasonable discretion, may from time-to-time modify and change the nature, extent, and detail of specific operator services.

10.7.2.9 U S WEST shall maintain adequate equipment and personnel to reasonably perform the Operator Services. CLEC shall provide and maintain the facilities necessary to connect its end users to the locations where U S WEST provides the Operator Services and to provide all information and data needed or reasonably requested by U S WEST in order to perform the Operator Services.

10.7.2.10 Call Branding is an optional service available to CLEC. Call Branding announces CLEC's name to CLEC's end user at the start of the call and at the completion of the call. If CLEC selects the Call Branding option, U S WEST will provide Call Branding to CLEC where technically feasible.

a) Front End Brand – Announces CLEC's name to CLEC's end user at the start of the call. There is a nonrecurring charge to setup and record the Front End Brand message.

b) Back End Brand – Announces CLEC's name to CLEC's end user at the completion of the call. There is a nonrecurring charge to setup and record the Back End Brand message.

10.7.2.11 Call branding for toll and operator services will entail recording and setup of a brand message. Dedicated interoffice facilities will be required where technically necessary. CLEC must provide a forecast of the expected volume of calls.

10.7.2.12 CLECs customers may dial "0" or "0+" to access U S WEST operator services. A facility-based CLEC may choose to have its customers access U S WEST operators by dialing a unique number or by using the same dialing pattern as U S WEST end users.

10.7.3 Rate Elements

U S WEST toll and assistance operator services are offered under two pricing options. Option A offers a per message rate structure. Option B offers a work second or a per call structure. Applicable recurring and nonrecurring rate elements are detailed below and in Exhibit A of this SGAT.

10.7.3.1 Option A - Operator Services Rate Elements

10.7.3.1.1 Operator Handled Calling Card – For each completed calling card call that was dialed 0+ where the operator entered the calling card number.

10.7.3.1.2 Machine Handled Call – For each completed call that was dialed 0+ where the end user entered the required information, such as calling card number.

10.7.3.1.3 Station Call – For each completed station call, including station sent paid, collect, third number special billing or 0- calling card call.

10.7.3.1.4 Person Call – For each completed person to person call regardless of the billing used by the end user.

10.7.3.1.5 Connect to Directory Assistance – For each operator placed call to directory assistance.

10.7.3.1.6 Busy Line Verify – For each call where the operator determines that conversation exists on a line.

10.7.3.1.7 Busy Line Interrupt – For each call where the operator interrupts conversation on a busy line and requests release of the line.

10.7.3.1.8 Operator Assistance – For each local call, whether completed or not, that does not potentially generate an operator surcharge. These calls

include, but are not limited to: calls given the DDD rate because of transmission problems; calls where the operator has determined there should be no charge, such as Busy Line Verify attempts where conversation was not found on the line; calls where the end user requests information from the operator and no attempt is made to complete a call; and calls for quote service.

10.7.3.1.9 "Completed call" as used in this Section shall mean that the end user makes contact with the location, telephone number, person or extension designated by the end user.

10.7.3.2 Option B - Per Work Second and Computer Handled Calls

10.7.3.2.1 Operator Handled - CLEC will be charged per work second for all calls originating from its end users and facilities that are routed to U S WEST's operator for handling. Work second charging begins when the U S WEST operator position connects with CLEC's end user and terminates when the connection between the U S WEST operator position and CLEC's end user is terminated.

10.7.3.2.2 Machine handled - calls that are routed without operator intervention. Machine handled calls include, but are not limited to, credit card calls where the end user enters the calling card number, calls originating from coin telephones where the computer requests deposit of coins, additional end user key actions, recording of end user voice, etc.

10.7.3.3 Call Branding Nonrecurring Charge. U S WEST will charge to CLEC a nonrecurring setup and recording fee for establishing each Call Branding option. CLEC must pay such non-recurring charge prior to commencement of the service.

10.7.4 Ordering Process

CLEC will order Operator Services by completing the "U S WEST Operator Services/Directory Assistance Questionnaire for Local Service Providers." Copies of the "U S WEST Operator Services/Directory Assistance Questionnaire for Local Service Providers" may be obtained from CLEC's designated U S WEST account manager.

10.7.5 Billing

10.7.5.1 U S WEST will track usage and bill CLEC for the calls placed by CLEC's end users and facilities.

10.7.5.2 U S WEST will compute CLEC's invoice based on both Option A (Price Per Message) and Option B (Price Per Work Second and Computer Handled Calls). U S WEST will charge CLEC whichever option results in a lower charge.

10.7.5.3 If, due to equipment malfunction or other error, U S WEST does not have available the necessary information to compile an accurate billing statement, U S WEST may render a reasonably estimated bill, but shall notify CLEC of the methods of such estimate and cooperate in good faith with CLEC to establish a fair, equitable estimate. U S WEST shall render a bill reflecting actual billable quantities when and if the information necessary for the billing statement becomes available.

10.8 Access to Poles, Ducts, Conduits, and Rights of Way

10.8.1 Description

10.8.1.1 Pole Attachments - U S WEST will lease available pole attachment space to CLEC for the placing of CLEC's facilities for the purpose of transmitting Telecommunications Services.

10.8.1.2 Ducts and Conduits - U S WEST will lease available underground ducts/conduits to CLEC for the purpose of placing CLEC's facilities for transmitting Telecommunications Services.

10.8.2 Terms and Conditions

U S WEST shall provide CLEC non-discriminatory access to poles, ducts, conduit and rights of way on terms and conditions found in the U S WEST Pole and Attachment And/Or Innerduct Occupancy General Terms and Conditions. U S WEST will not favor itself over CLEC when provisioning access to poles, ducts, conduits and rights of way. U S WEST shall not give itself preference when assigning space.

10.8.2.1 Subject to the provisions of this SGAT, U S WEST agrees to issue to CLEC authorization for CLEC to attach, maintain, rearrange, transfer and remove at its sole expense its facilities on Poles/Innerduct owned in whole or in part by U S WEST, subject to Orders placed by CLEC. Any and all rights granted to CLEC shall be subject to and subordinate to any future local, state and/or federal requirements.

10.8.2.2 U S WEST will rely on such codes as the National Electrical Safety Code (NESC) to prescribe standards with respect to capacity, safety, reliability, and general engineering principles.

10.8.2.3 Federal requirements, such as those imposed by Federal Energy Regulatory Commission (FERC) and Occupational Safety and Health Administration (OSHA), will continue to apply to the extent such requirements affect requests for attachments or occupancy to U S WEST facilities under Section 224(f)(1) of the Act.

10.8.2.4 CLEC shall provide a map of the requested Poles/Innerduct route, including estimated distances between major points, the identification and location of the Poles/Innerduct and a description of CLEC's facilities. U S WEST agrees to provide to CLEC relevant plats, maps, engineering records and other data within a reasonable time of receiving a bona fide request for such information.

10.8.2.5 Except as expressly provided herein, nothing herein shall be construed to compel U S WEST to construct, install, modify or place any Poles/Innerduct or other facility for use by CLEC.

10.8.2.6 U S WEST retains the right to determine the availability of space on Poles/Innerduct consistent with 47 USC § 224 and FCC rules pursuant to 47 USC § 224. In the event U S WEST determines that a amount of rearrangement of the existing facilities on Poles/Innerduct is required before CLEC's facilities can be

accommodated, the cost of such modification will be included in CLEC's nonrecurring charges for the associated Order ("Make-Ready fee").

10.8.2.7 U S WEST shall make manhole ingress and egress for Innerduct access available to CLEC. U S WEST will perform a feasibility study to determine whether to provide a stub out via the pre-constructed knock out within the manhole, or to perform a core drill of the manhole.

10.8.2.8 Where such authority does not already exist, CLEC shall be responsible for obtaining the necessary legal authority to occupy Poles/Innerduct on governmental, federal, Native American, and private rights of way. CLEC shall obtain any permits, licenses, bonds, or other necessary legal authority and permission, at CLEC's sole expense, in order to perform its obligations under this SGAT. CLEC shall contact all owners of public and private rights-of-way to obtain the permission required to perform the work prior to entering the property or starting any work thereon. CLEC shall comply with all conditions of rights-of-way and permits. Once such permission is obtained, all such work will be performed by U S WEST.

10.8.2.9 Access to a U S WEST Central Office manhole will be permitted on a case-by-case basis. If space is available, U S WEST will allow access through the Central Office manhole to the POI (Point of Interconnection).

10.8.2.10 If CLEC requests U S WEST to replace or modify existing Poles/Innerduct to increase its strength or capacity for the sole benefit of CLEC, CLEC shall pay U S WEST the total replacement cost, U S WEST's cost to transfer its attachments to new Poles/Innerduct, as necessary, and the cost for removal (including destruction fees) of the replaced Poles/Innerduct, if necessary. Ownership of new Poles/Innerduct shall vest to U S WEST. To the extent that a modification is incurred for the benefit of multiple parties, CLEC shall pay a proportionate share of the total cost based on the ratio of the amount of new space occupied by the facilities to the total amount of space occupied by all parties joining the modification. Modifications that occur in order to bring Poles/Innerduct into compliance with applicable safety or other requirements shall be deemed to be for the benefit of multiple parties and CLEC shall be responsible for its share of the modification cost. U S WEST does not and will not favor itself over other carriers when provisioning access to poles, innerduct and rights-of- way.

10.8.2.11 U S WEST reserves the right to make on-site/final construction, inspections of CLEC's facilities occupying the Poles/Innerduct system. CLEC shall reimburse U S WEST for the cost of such inspections except where specified in this Section.

10.8.2.12 When final construction inspection by U S WEST has been completed, CLEC shall correct such non-complying conditions within the period of time specified by U S WEST in its written notice. If corrections are not completed within the specified period, occupancy authorizations for the Poles/Innerduct system where non-complying conditions remain uncorrected shall suspend forthwith, regardless of whether CLEC has energized the facilities occupying said Poles/Innerduct system and CLEC shall remove its facilities from said Poles/Innerduct in accordance with the provisions of this Section. U S WEST may deny further occupancy authorization to CLEC until such non-complying conditions are corrected or until CLEC's facilities are removed from the

Poles/Innerduct system where such non-complying conditions exist. If agreed between both Parties, U S WEST shall perform or have performed such corrections and CLEC shall pay U S WEST the cost of performing such work. Subsequent inspections to determine if appropriate corrective actions have been taken may be made by U S WEST.

10.8.2.13 Once CLEC's facilities begin occupying the Poles/Innerduct system, U S WEST may perform periodic inspections. U S WEST shall bear the cost of such inspections unless the results of the inspection reveal any violation or hazard, or that CLEC has in any other way failed to comply with the provisions of this SGAT; in which case CLEC shall reimburse U S WEST the costs of inspections and re-inspections, as required. CLEC's representative may accompany U S WEST on such field inspections. The cost of periodic inspection or any special inspections found necessary due to the existence of sub-standard or unauthorized occupancies shall be billed separately.

10.8.2.14 The costs of inspections made during construction and/or the final construction survey and subsequent inspection shall be billed to CLEC upon completion of the inspections.

10.8.2.15 Final construction, subsequent, and periodic inspections or the failure to make such inspections, shall not impose any liability of any kind upon U S WEST nor relieve CLEC of any responsibilities, obligations, or liability assigned under this SGAT.

10.8.2.16 CLEC may use individual workers of its choice to perform any work necessary for the attaching of its facilities so long as such workers have the same qualifications and training as U S WEST's workers. CLEC may use any contractor approved by U S WEST to perform Make-Ready Work.

10.8.3 Rate Elements

U S WEST fees for attachments are in accordance with Section 224 of the Act and FCC rules promulgated thereunder, as well as the rates established by the Commission including the following rates, as reflected in Exhibit A.

10.8.3.1 Inquiry Fee. A non-refundable charge used to recover the costs associated with performing an internal record review to determine if a requested route and/or facility is available for lease.

10.8.3.2 Field Verification Fee. A non-refundable charge which recovers the field survey required for a site investigation and to determine scope of any required make-ready work.

10.8.3.3 Make-Ready Work. A non-refundable charge which recovers the necessary work required to make the requested facility available for lease. For innerduct leases, this could include, but is not limited to, the placing of innerduct in conduit/duct systems or core drilling of manholes. For pole attachment requests, this could include, but is not limited to, the replacement of poles to meet required clearances over roads or land.

10.8.3.4 Pole Attachment Fee. An annual fee which is charged for the occupancy of one foot of pole space.

10.8.3.5 Innerduct Occupancy Fee. An annual fee which is charged for the occupancy of an innerduct on a per foot basis.

10.8.4 Ordering

The Ordering Process includes the following procedures:

10.8.4.1 Inquiry. CLEC will supply the General Information section of the U S WEST Pole and Anchor Attachment and/or Innerduct Occupancy Form along with the Inquiry Fee.

10.8.4.2 There are two forms of inquiries, standard inquiries and nonstandard inquiries.

10.8.4.2.1 A standard inquiry may include any or all of the following items:

- Not more than 30 manhole sections
- Not more than 100 poles
- Not more than 2 miles of linear private rights of way

10.8.4.2.2 Nonstandard inquiries are those inquiries that exceed the requirements shown above for standard inquiries. Nonstandard inquiries must be negotiated on an individual basis.

10.8.4.3 Within 10 days of receipt of a standard inquiry for access of poles or innerducts, U S WEST will perform a records verification only of the requested route, distances, structure ownership, number of manholes, and/or number of poles as appropriate and provide a Poles/Innerduct Permit Processing Costs Quotation (estimated costs for field verification). The field verification required for innerduct lease requests includes the identification and mapping of conduits and respective innerducts and the identification of any make ready work required to make innerduct available. The field verification required for pole attachments will include a physical inspection of all U S WEST poles along the requested route for available space to attach, identification of clearance requirements and any required make ready work that would be required in order to add additional attachments. The Poles/Innerduct Permit Processing Costs Quotation shall be valid for ninety (90) calendar days.

10.8.4.6 The costs included in the Cost Quotation will recover the actual costs incurred by U S WEST in determining if Poles/Innerduct space is available to meet CLEC's request; however, CLEC will be responsible for payment of the actual costs incurred if such costs exceed the estimate. If the actual costs are less than the estimate, an appropriate credit will be made towards the Poles/Innerduct Make-Ready or nonrecurring fees. If U S WEST denies the Poles/Innerduct request, U S WEST will refund the difference between the costs incurred and those prepaid by CLEC, if any.

10.8.4.7 Upon review and acceptance of the Cost Quotation and payment of the estimated costs, U S WEST will commence the field verification. Within 35 days of

CLEC's acceptance of the Cost Quotation and payment of the estimated costs regarding a standard inquiry, U S WEST will grant or deny the standard inquiry. Denials shall be in writing and shall be specific and include all relevant evidence or information supporting the denial pursuant to 47 USC § 224(f)(2).

10.8.4.8 If the inquiry is granted, U S WEST shall provide CLEC a Poles/Innerduct Order containing estimated Make-Ready costs, field survey drawings, and annual recurring charges. Upon receipt of an accepted Poles/Innerduct Order from CLEC and applicable payment for the Make-Ready fees identified, U S WEST will assign CLEC's requested space and complete the Make-Ready work which may be required. Unless U S WEST is requested by CLEC to perform work associated with the attachment of facilities, U S WEST will notify CLEC when Poles/Innerduct are ready for attachment of facilities.

10.8.4.9 For the period beginning at the time of the making of a granted inquiry and ending ninety (90) days following the grant of an inquiry, U S WEST shall reserve such available poles, ducts, conduit, and right of way for CLEC that CLEC may reasonably request. CLEC shall pay an appropriate reservation fee mutually agreed upon by the Parties for such reservation and shall elect whether to accept the poles, ducts, conduits, or right of way within the ninety (90) day period following the granting of the inquiry. CLEC may accept such facilities by sending written notice to U S WEST.

10.8.4.9.1 During the reservation period, if another party, including U S WEST, makes a bona fide and good faith request for the use of any poles, ducts, conduits or right of way that CLEC has previously reserved, CLEC shall have a "right of first refusal" over these facilities. If CLEC chooses to exercise its right of first refusal, it shall do so by providing U S WEST written notice of same within ten (10) business days following receipt of written notice from U S WEST advising CLEC of the bona fide and good faith request.

10.8.4.9.2 To ensure proper use of reserved facilities, after the expiration of the reservation period or upon exercise of its right of first refusal, whichever occurs earlier, CLEC must begin paying the rates for access (whether or not it has actually installed or attached facilities) and shall begin construction on the facility within six (6) months or release its reservation.

10.8.4.9.3 After acceptance by CLEC, CLEC shall have six (6) months to begin attachment and/or installation of its facilities to the poles, ducts, conduit and right of way or request U S WEST to begin make ready or other construction activities. Any such construction, installation or make ready by CLEC shall be completed by the end of one (1) year after written notice of acceptance. CLEC shall not be in default of the six-month or one-year requirement above if such default is caused in any way by any action, inaction or delay on the part of U S WEST or its affiliates or subsidiaries.

10.8.5 Billing

CLEC agrees to pay U S WEST Poles/Innerduct usage fees ("Fees") as specified in the Order. Fees will be computed in compliance with applicable local, state and federal guidelines. Such Fees will be assessed on an annual basis with a $100.00 minimum per application. Annual

Fees will be assessed as of January 1 of each year. Fees are not refundable except as expressly provided herein.

10.8.6 Maintenance and Repair

In the event of any service outage affecting both U S WEST and CLEC, repairs shall be effectuated on a nondiscriminatory basis as established by local, state or federal requirements. Where such requirements do not exist, repairs shall be made in the following order: electrical, telephone (local), telephone (long distance), and cable television, or as mutually agreed to by the users of the affected Poles/Innerduct.

10.9 Unbundled Dedicated Interoffice Transport (UDIT)

U S WEST shall provide Unbundled Dedicated Interoffice Transport (UDIT) in a non-discriminatory manner according to the following terms and conditions.

10.9.1 Description

10.9.1.1 Unbundled Dedicated Interoffice Transport (UDIT) provides CLEC with a network element of a single transmission path between U S WEST Wire Centers in the same LATA and state. The UDIT Entrance Facility provides transport from the U S WEST Serving Wire Center to the CLEC's wire center or an IXC's point of presence. UDIT is a flat rated bandwidth-specific interoffice transmission path designed to a DSX in each U S WEST Wire Center. UDIT is available in DS0, DS1 and DS3 where facilities are available. UDIT is also available in OC-n bandwidths on an ICB basis where available. CLEC can assign channels and transport its choice of voice or data. Specifications, interfaces and parameters are described in Technical Publication 77389.

10.9.1.2 An Unbundled Multiplexer is offered as a stand alone element associated with UDIT. A 3/1 Multiplexer provides CLEC with the ability to de-multiplex the DS3 44.736 Mbps signal to 28 DS1 1.544 Mbps channels. The 3/1 Multiplexer, in conjunction with an ITP, provides a DS3 signal terminated at a demarcation point and 28 DS1 signals terminated at a demarcation point. A 1/0 Multiplexer provides CLEC with the ability to de-multiplex the DS1 1.544 Mbps signal to 24 DS0 64 Kbps channels. The 1/0 Multiplexer provides a DS1 signal terminated at a demarcation point and 24 DS0 signals terminated at a demarcation point.

10.9.2 Terms and Conditions

10.9.2.1 CLEC is responsible for performing cross connections at a demarcation point between UDIT and other unbundled loops, ancillary and finished services and transmission design work, including regeneration requirements for such connections.

10.9.2.2 CLEC must order all multiplexing elements and regeneration requirements with its initial installation for the 3/1 Multiplexer, including all 28 DS1s and the settings on the multiplexer cards. If options are not selected and identified on the order by CLEC, the order will be held until options are selected. For the 1/0 Multiplexer, the low side channels may be ordered as needed. Low Side Channelization charges are assigned as channels are ordered.

10.9.2.3 CLEC shall not use unbundled interoffice transport as substitutes for special or switched access services, except to the extent CLEC provides such services to its end users in association with local exchange services.

10.9.3 Rate Elements

10.9.3.1 DS1 UDIT rates are contained in Exhibit A of this SGAT and include the following elements:

a) DS1 Transport Termination (Fixed) Rate Element. This recurring rate element provides a 1.544 Mbps termination at a DSX or DCS. In addition to the fixed rate element, a per-mile rate element, as described below, also applies.

b) DS1 Transport Facilities (Per Mile) Rate Element. This recurring rate element provides a transmission path of 1.544 Mbps between U S WEST Wire Centers. This is a mileage sensitive element based on the V&H coordinates of the DS1 UDIT. The mileage is calculated between the originating and terminating offices.

c) DS1 Entrance Facility Rate Element. This recurring rate element provides a transmission path of 1.544 Mbps between a U S WEST Wire Center and CLEC wire center or IXC point of presence.

d) DS1 Non-Recurring Charge. One-time charges apply for a specific work activity associated with installation of the DS1 service.

10.9.3.2 DS3 UDIT rates are contained in Exhibit A of this SGAT and include the following elements:

a) DS3 Transport Termination (Fixed) Rate Element. This recurring rate element provides a 44.736 Mbps termination. In addition to the fixed rate element, a per-mile rate element, as described below, also applies.

b) DS3 Transport Facilities (Per Mile) Rate Element. This recurring rate element provides a transmission path of 44.736 Mbps between U S WEST Wire Centers. This is a mileage sensitive element based on the V&H coordinates of the DS3 UDIT. The mileage is calculated between the originating and terminating offices.

c) DS3 Entrance Facility Rate Element. This recurring rate element provides a transmission path of 44.736 Mbps between a U S WEST wire center and CLEC wire center or IXC point of presence.

d) DS3 Non-Recurring Charge. One-time charges apply for a specific work activity associated with installation of the DS3 service.

10.9.3.3 DS0 UDIT rates are contained in Exhibit A of this SGAT and include the following elements:

a) DS0 Transport Termination (Fixed) Rate Element. This recurring rate element provides a 64 Kbps termination. In addition to the fixed rate element, a per-mile rate element, as described below, also applies.

b) DS0 Transport Facilities (Per Mile) Rate Element. This recurring rate element provides a transmission path of 64 Kbps between U S WEST Wire Centers. This is a mileage sensitive element based on the V&H coordinates of the DS0 UDIT. The mileage is calculated between the originating and terminating offices.

c) DS0 Non-Recurring Charge. One-time charges apply for a specific work activity associated with installation of the DS0 service.

10.9.3.4 Low Side Channelization (LSC) Charge. A recurring charge for low side multiplexed channel cards and settings at each end of the DS0 UDIT.

10.9.3.5 3/1 Multiplexing rates are contained in Exhibit A of this SGAT, and include the following:

a) Recurring Multiplexing Charge. The DS3 Central Office Multiplexer provides de-multiplexing of one DS3 44.736 Mbps to 28 1.544 Mbps channels.

b) Non-recurring Multiplexing Charge. One-time charges apply for a specific work activity associated with installation of the Multiplexing service.

10.9.3.6 1/0 Multiplexing rates are contained in Exhibit A of this SGAT, and include the following charges:

a) Recurring Multiplexing Charge. The DS0 Central Office Multiplexer provides de-multiplexing of one DS1 1.544 Mbps to 24 64 Kbps channels.

b) Non-recurring Multiplexing Charge. One-time charges apply for a specific work activity associated with installation of the Multiplexing service, including low side channelization of all 28 channels.

c) Low Side Channelization (LSC). A recurring charge for low side multiplexed channel cards and settings plus a non-recurring charge for each individual channelization provisioning.

10.9.4 Ordering Process

10.9.4.1 Ordering processes and installation intervals are as follows:

10.9.4.1.1 UDIT is ordered via the ASR process. Ordering processes are contained in Section 12 of this SGAT.

10.9.4.1.2 Standard installation intervals for UDIT are contained in the Interconnect & Resale Resource Guide.

10.9.4.1.3 Subsequent changes to the quantity of services on an existing order will require a revised order. Also, additional charges apply for the following modifications to existing orders:

- Service date changes;
- Partial cancellation;
- Design change; and
- Expedited order.

10.9.4.1.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply. See Arizona Access tariff for applicable rates.

10.9.4.1.5 Definitions of the most common critical dates that occur during the ordering and installation process are included in Section 4 of this SGAT.

10.9.4.2 UDIT is ordered with basic installation. U S WEST will notify CLEC when the work activity is complete.

10.9.4.3 UDIT 3/1 multiplexing is provisioned as a complete system with terminations at the demarcation point and all multiplexing cards. CLEC must order settings for all cards at the time of the multiplexing request.

10.9.4.4 For UDIT 1/0 multiplexing, the high side is fully provisioned with the order. The low side is provisioned when low side channels are ordered. Optional card settings are selected by CLEC at the time of the DS0 order.

10.9.4.5 U S WEST will perform industry standard tests when installing UDIT service.

10.9.5 Maintenance and Repair

10.9.5.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and U S WEST cross connections will be repaired by U S WEST. Maintenance and Repair processes are contained in Section 12 of this SGAT.

10.10 Shared Interoffice Transport

10.10.1 Description

10.10.1.1 Shared Transport is defined as interoffice transmission facilities shared by more than one carrier, including U S WEST, between end office switches, between end office switches and tandem switches, and between tandem switches, and U S WEST's network.

10.10.1.2 Shared Transport is only provided with Local Switch Port elements. The existing routing tables resident in the switch will direct both U S WEST and CLEC traffic over U S WEST's interoffice message trunk network.

10.10.1.3 CLEC may custom route operator services or directory assistance calls to unique operator services/directory services trunks.

10.10.1.4 CLEC may not mix Unbundled Dedicated Interoffice Transport (UDIT) and shared transport in the same local calling area.

10.10.2 Terms and Conditions

10.10.2.1 CLEC shall provide an 18 month forecast of anticipated demand by route to U S WEST.

10.10.10.2 CLEC shall submit forecasts at least quarterly.

10.10.3 Rate Elements

10.10.3.1 Shared Transport will be billed on a minute-of-use basis in accordance with the rate described in Exhibit A.

10.10.4 Ordering Process

Shared Transport is ordered with Unbundled Line Port and unbundled switching via the LSR process. Shared transport is assumed to be the choice of routing when ordering a port, unless specified differently by CLEC. Ordering processes are contained in Section 12 of this SGAT. Installation intervals are contained in the Interconnect & Resale Resource Guide.

10.10.5 Maintenance and Repair

Maintenance and Repair are the sole responsibility of U S WEST. Maintenance and Repair processes are contained in Section 12 of this SGAT.

10.11 Unbundled Customer Controlled Rearrangement Element (UCCRE)

10.11.1 Description

10.11.1.1 Unbundled Customer Controlled Rearrangement Element (UCCRE) provides the means by which CLEC controls the configuration of unbundled network elements (UNEs) or ancillary services on a near real time basis through a digital cross connect device. UCCRE utilizes the DigitalCross-Connect System (DCS). UCCRE is available in U S WEST Wire Centers that contain a DCS and such DCS is UCCRE compatible.

10.11.2 Terms and Conditions

10.11.2.1 DCS ports are DS1, DS3 and Virtual Ports (Virtual Ports are for connecting one end user to another). The DCS port is connected to the demarcation point using tie cables via the appropriate DSX cross-connect panel. The DSX panel serves both as a "Design-To" point and a network interface at the DCS. CLEC is responsible for designing to the "Design-To" point. CLEC may connect the UCCRE ports to its elements or CLEC designated equipment. If CLEC desires DS0 port functionality, CLEC will order a DS1 UCCRE port and provide its own multiplexer (or DS1 UDIT multiplexers) and connect them together. This combination will form the equivalent of 24 DS0-level ports.

10.11.2.2 The reconfiguration of the service is accomplished at the DS0 signal level. Reconfiguration of these services can be accomplished through two methods: Dial Up or Attendant Access.

10.11.2.2.1 Dial Up Access. U S WEST will provide access to mutually agreed upon UCCRE points in those offices where UCCRE is available. U S WEST will provide and engineer this service in the same manner that it is currently provided to U S WEST's end users.

10.11.2.2.2 Attendant Access. When CLEC requests U S WEST to make changes on its behalf, an attendant access charge will apply per transaction.

10.11.3 Rate Elements

10.11.3.1 Recurring rate elements include:

DS1 Port
DS3 Port
Dial Up Access
Attendant Access

10.11.3.2 Non-recurring rate elements include:

DS1 Port
DS3 Port
Virtual Ports

10.11.4 Ordering Process

10.11.4.1 Ordering processes and installation intervals are contained in Section 12 of this SGAT. UCCRE is ordered via the ASR process.

10.11.4.2 UCCRE is ordered with the Basic Installation option. U S WEST will begin the work activity on the negotiated due date and notify CLEC when the work activity is complete. Test results performed by U S WEST are not provided to CLEC.

10.12 Local Tandem Switching

10.12.1 Description

10.12.1.1 The local tandem switching element establishes a temporary transmission path between two other switches, but does not include the transport needed to complete the call. The local tandem switching element also includes the functions that are centralized in local tandem switches rather than in separate end office switches.

10.12.2 Terms and Conditions

10.12.2.1 If CLEC obtains its local tandem switching from a third party tandem provider, tandem to tandem connections will be required between U S WEST and the third party tandem provider.

10.12.3 Rate Elements

10.12.3.1 A DS1 Trunk Port is a 4-wire DS1 trunk side switch port terminating at a DS1 demarcation point and incurs a non-recurring charge. Each DS1 Tandem Trunk Port includes a subset of 24 DS0 channels capable of supporting local message type traffic and incurs a non-recurring charge to establish trunk group members.

10.12.3.2 Use of local tandem switching is billed on an originating per minute of use basis.

10.12.4 Ordering Process

10.12.4.1 Requests for DS1 Trunk Port(s) must be followed by separate order(s) to channelize trunk ports into DSO trunk group and members as defined in Section 10.9 of this SGAT.

10.12.5 Maintenance and Repair

The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and U S WEST cross connections will be repaired by U S WEST. Maintenance and Repair processes are contained in Section 12 of this SGAT.

10.13 Local Switching

10.13.1 Description

10.13.1.1 The unbundled switching encompasses line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch. The features, functions, and capabilities of the switch include the basic switching function, as well as the same basic capabilities that are available to U S WEST's customers. Unbundled switching also includes access to all vertical features that the switch is capable of providing, as well as any technically-feasible customized routing functions. Moreover, CLEC may purchase unbundled switching in a manner that permits CLEC to offer, and bill for, exchange access and termination of local traffic.

10.13.1.2 U S WEST's trunk ports are utilized to access routing tables resident in U S WEST's switch, as necessary to provide access to shared transport. Shared transport is described in Section 10.10 of this SGAT.

10.13.1.3 Unbundled switching also permits CLEC to purchase a dedicated trunk port on the local switch. CLEC may direct originating traffic to such a dedicated trunk via customized routing.

10.13.1.4 Line ports include:
- Analog Line Port;
- Digital Line Port.

10.13.1.5 Trunk ports include:
- DS1 Local Message Trunk Port.

10.13.1.6 The following are attributes of line ports:
- Telephone Number;
- Directory Listing;
- Dial Tone;
- Signaling (loop or ground start);
- On/Off Hook Detection;
- Audible and Power Ringing;
- Automatic Message Accounting (AMA) Recording;
- Access to 911, Operator Services, and Directory Assistance;
- Blocking Options (900 services).

10.13.1.7 Analog Line Port. The analog line port is a two wire interface on the line-side of the end office switch that is extended to the MDF. A separate ITP must be ordered for each analog line-side port to provide the connection from the MDF to the demarcation point. The analog line port enables CLEC to access vertical features. A non-recurring charge applies to establish the line side port, as described in Exhibit A of this SGAT.

10.13.1.8 Vertical features are software attributes on end office switches. Vertical features for the Analog Line Side Port are available separately as follows:

Call Hold
Call Transfer
Three Way Calling
Call Pickup
Call Waiting
Cancel Call Waiting
Distinctive Ringing
Speed Call Long – Customer Changeable
Station Dial Conferencing
Call Forwarding Busy Line
Call Forwarding Don't Answer
Call Forwarding Variable
Call Forwarding Variable Remote
CLASS Call Waiting ID
CLASS Calling Name & Number
CLASS Calling Number Delivery
CLASS Calling Number Delivery Blocking
CLASS Continuous Redial
CLASS Last Call Return
CLASS Priority Calling
CLASS Selective Call Forwarding
CLASS Selective Call Rejection
CLASS Anonymous Call Rejection
Call Park (Store & Retrieve)
Message Waiting Indication A/V

10.13.1.9 Digital Line Side Port (Supporting BRI ISDN)

10.13.1.9.1 Basic Rate Interface Integrated Services Digital Network (BRI ISDN) is a digital architecture that provides integrated voice and data capability (2 wire). A BRI ISDN Port is a Digital 2B+D (2 Bearer Channels for voice or data and 1 Delta Channel for signaling and D Channel Packet) line-side switch connection with BRI ISDN voice and data basic elements. The BRI ISDN Port has interLATA and intraLATA (where available) carrier choice, access to 911, and U S WEST Operator Services. For flexibility and customization, optional features can be added. BRI ISDN Port does not offer B Channel Packet service capabilities. The serving arrangement conforms to the internationally developed, published, and recognized standards generated by International Telegraph and Telephone Union (formerly CCITT).

10.13.1.9.2 Vertical features for the Digital Line Side Port supporting BRI/ISDN are available separately as follows:

2 B & D
2 Primary Directory Numbers (PDNs)
Call Appearances – Two per Terminal
Normal Ringing
Caller ID Blocking per call

10.13.1.10 Digital Trunk Ports

10.13.1.10.1 DS1 Local Message Trunk Port (Supporting Local Message Traffic). A DS1 Trunk Port is a DS1 trunk side switch port that is extended to the trunk main distributing frame and is connected to the demarcation point through an ITP. Each DS1 Trunk Port includes a subset of 24 DS0 channels capable of supporting local message type traffic. Requests for DS1 Trunk Port(s) must be followed by a separate order for a Message Trunk Group, as further described in this Section. A non-recurring charge applies to establish the trunk port and are contained in Exhibit A of this SGAT.

10.13.1.10.2 Message Trunk Group. A Message Trunk Group is a software feature that establishes the trunk group and its associated trunk members. Signaling and addressing attributes are defined at the group level. Trunk members may be associated with individual channels of the DS1 Trunk Port.

10.13.1.10.3 Requests for establishing new outgoing and two-way Message Trunk Groups must be coordinated with and followed by requests for Customized Routing. Incoming only trunk groups do not require Custom Routing.

10.13.1.11 Operator and Directory Assistance services may be requested with analog interfaces where available.

10.13.1.12 DSO Analog Trunk Port - DS0 Analog Trunk Ports are available on an individual case basis.

10.13.2 Terms and Conditions

10.13.2.1 CLEC may purchase all vertical features that are loaded in U S WEST's end office switch. CLEC may request features that are not activated in a U S WEST end office switch utilizing the BFR Process contained in Section 17 of this SGAT. If CLEC requests features that are loaded, but not activated in a U S WEST end office switch, appropriate recurring and nonrecurring charges will apply.

10.13.2.2 Local switch ports include CLEC use of U S WEST's signaling network for traffic originated from the line-side switching port. CLEC access to the U S WEST signaling network shall be of substantially the same quality as the access that U S WEST uses to provide service to its own customers.

10.13.2.3 CLEC shall be responsible for updating the 911/E911 database through U S WEST's third party database provider for any unbundled switch port ordered. Additional 911/E911 provisions are contained in Section 10.3 of this SGAT.

10.13.2.4 The line-side port includes the connection between the end office switch and the MDF. The connection from the MDF to the demarcation point shall be an ITP provided by U S WEST pursuant to the rates in Exhibit A. The trunk-side port includes the connection between the end office switch and the TMDF. The connection from the TMDF to the demarcation point shall be an ITP provided by U S WEST pursuant to the

rates in Exhibit A. The demarcation point for line-side and trunk-side ports shall be as described in Section 9.1.3.

10.13.3 Rate Elements

10.13.3.1 Each port type described above will have a separate associated port charge, including monthly recurring charges and one-time non-recurring charges which are contained in Exhibit A of this SGAT.

10.13.3.2 Local usage will be measured and billed on minutes of use. Until terminating recording capability is installed, two times originating usage will be billed as a surrogate.

10.13.3.3 Vertical features will be offered as options for unbundled local switching at rates set forth in Exhibit A of this SGAT.

10.13.4 Ordering

10.13.4.1 Ordering intervals are contained in the Interconnect & Resale Resource Guide.

10.13.4.2 Unbundled local switch ports are required when ordering unbundled shared transport as described in the Interconnect & Resale Resource Guide.

10.14 Customized Routing

10.14.1 Description

Customized Routing permits CLEC to designate a particular outgoing trunk that will carry certain classes of traffic originating from CLEC's customers. Customized routing enables CLEC to direct particular classes of calls to particular outgoing trunks which will permit CLEC to self-provide or select among other providers of interoffice facilities, operator services and directory assistance. Customized routing is a software function of a switch. Customized Routing may be ordered as an application with Resale or Unbundled Switching.

10.14.2 Terms and Conditions

10.14.2.1 Customized Routing will be offered on a first-come, first-served basis.

10.14.2.2 CLEC shall provide a comprehensive routing plan associated with any custom routing request.

10.14.2.3 CLEC must place the associated trunk orders prior to the establishment or deployment of Line Class Codes. U S WEST shall assign a Line Class Code to CLEC's custom routing plan.

10.14.2.4 Line Class Codes are deployed in specific End Offices.

10.14.3 Rate Elements

10.14.3.1 Development of a Line Class Code is billed on an individual case basis for each switch in which a new Line Class Code is installed.

10.14.3.2 Installation of a Line Class Code is billed on an individual case basis for each switch in which it is installed.

10.14.4 Ordering Process

10.14.4.1 CLEC shall issue a Service Inquiry form detailing the routing and facility requirements for Customized Routing prior to a pre-order meeting with U S WEST. Refer to the New Customer Questionnaire contained in the Interconnect & Resale Resource Guide for a copy of the Service Inquiry.

10.14.4.2 After the Service Inquiry form is completed and provided to U S WEST, the pre-order meeting will be jointly established to provide U S WEST with the comprehensive network plan, specific custom routing requirements and desired due dates.

10.14.4.3 U S WEST will provide CLEC a detailed time and cost estimate thirty (30) business days after the pre-order meeting. After the time and cost estimate is provided and any appropriate trunk orders are issued, CLEC will issue an LSR for Line Class Code development and implementation.

10.14.5 Maintenance and Repair

Maintenance and Repair are the sole responsibility of U S WEST. Maintenance and Repair processes are contained in Section 12 of this SGAT.

10.15 Access to Signaling

10.15.1 Description

10.15.1.1 U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and signaling transfer points. Access to U S WEST's signaling network provides for the exchange of signaling information between U S WEST and CLEC necessary to exchange traffic and access call-related databases. Signaling networks enable CLEC the ability to send signals between its switches and U S WEST's switches, and between its switches and those third party networks with which U S WEST's signaling network is connected. CLEC may access U S WEST's signaling network from each of its switches via a signaling link between its switch and the U S WEST STP. The connection between CLEC's switch and the U S WEST signaling network will be provided in substantially the same manner as U S WEST connects one of its own switches to the STP.

10.15.1.2 Common Channel Signaling Capability/SS7 (CCSAC/SS7) provides multiple pieces of signaling information via the SS7 network. This signaling information includes, but is not limited to, specific information regarding calls made on associated Feature Group D trunks and/or LIS trunks, Line Information Database data, Local

Number Portability, Custom Local Area Signaling Services, 8XX set up information, Call Set Up information and transient messages.

10.15.1.3 Optional Features of CCSAC/SS7 are dependent on specific CLEC design requirements as well as the existence of adequate transport facilities. Transport facilities must be in place to accommodate Call Set Up of related Feature Group D and/or LIS messages, transient messages, and other ancillary services (*e.g.*, LIDB data and 8XX set up information).

10.15.2 Terms and Conditions

10.15.2.1 All elements of the unbundled CCSAC/SS7 arrangement will be developed on an individual case basis based on CLEC's design requirements. All of CLEC's unbundled design elements are subject to facility requirements identified below.

10.15.2.2 At a minimum, transport facilities must exist from CLEC's Point of Presence or Signaling Point of Interface (SPOI) to the identified U S WEST STP location. Unbundled transport facilities to accommodate CCSAC/SS7 signaling may be developed using unbundled dedicated interoffice transport as defined above in Section 9.

10.15.2.3 CLEC's CCSAC/SS7 design requirements will include, but are not limited to:

10.15.2.3.1 STP Port - This element is the point of termination to the signal switching capabilities of the STP. Access to a U S WEST STP Port is required at a DS0 level.

10.15.2.3.2 Specific Point Code detail including the identification of CLEC's Originating, Destination and Signaling Options (*i.e.*, ISDN User Part [ISUP] or Transaction Capabilities Application Part [TCAP] requirements).

10.15.2.3.3 All signaling routing requirements will be identified in CLEC's design. CLEC will provide industry standard codes identifying U S WEST end offices, local tandems, sub-tending end offices and STPs that will be included in the designed unbundled signaling arrangement.

10.15.2.4 The CCSAC/SS7 unbundled arrangement must meet the following requirements:

10.15.2.4.1 Both U S WEST and CLEC are obligated to follow existing industry standards as described in Bellcore documents including but not limited to GR-905 CORE, GR-954-CORE, GR-394-CORE and U S WEST Technical Publication 77342.

10.15.2.4.2 CLEC's switch or network SS7 node must meet industry and U S WEST certification standards.

10.15.2.4.3 Unbundled transport facilities identified above must be provisioned at a minimum DS1 capacity at CLEC's Point of Presence or SPOI.

This facility must be exclusively used for the transmission of network control signaling data.

10.15.2.4.4 Calling Party Number (CPN) will be delivered by CLEC to U S WEST in accordance with FCC requirements.

10.15.2.4.5 Carrier Identification Parameter (CIP) will be delivered by CLEC to U S WEST in accordance with industry standards, where technically feasible.

10.15.2.4.6 Provisions relating to call related databases (*i.e.,* 8XX, LIDB, Advanced Intelligent Network (AIN), etc.) are contained in Section 10.16 of this SGAT.

10.15.3 Rate Elements

Rates for the unbundled CCSAC/SS7 elements will be on an individual case basis based on CLEC's specific design requirements. Both nonrecurring and monthly recurring rates may be applicable. Message rating applies to all messages traversing the U S WEST signaling network. Messages which are transient in nature (not destined for U S WEST databases) will be assessed message rates. Pricing detail is provided in Exhibit A of this SGAT. Rate elements for unbundled CCSAC/SS7 elements are:

10.15.3.1 Nonrecurring Rates. CCSAC Option Activation Charge – Assessed for adding or changing a point code in the signaling network. U S WEST will charge CLEC based upon its selection of either basic or database activation, as detailed in Exhibit A of this SGAT.

10.15.3.2 Recurring Rates

10.15.3.2.1 STP Port - a monthly recurring charge, per connection into the STP.

10.15.3.2.2 Signal Formulation Charge - a per signaling message charge for formulating the ISUP and TCAP message at an SP/SSP.

10.15.3.2.3 Signal Transport Charge - a per signaling message charge for the transmission of signaling data between the local STP and an end office SP/SSP. This rate element includes separate charges for ISUP and TCAP messages.

10.15.3.2.4 Signal Switching Charge - a per signaling message charge for switching an SS7 message at the local STP. This rate element includes separate charges for ISUP and TCAP messages.

10.15.4 Ordering

10.15.4.1 CCSAC/SS7 unbundled CLEC-designed elements will initially require design information from CLEC. Ordering for CCSAC/SS7 will be handled on an individual case basis, using service activation meetings between CLEC and U S WEST. CLEC will provide a Translation Questionnaire, Link Data Sheet and ASR during the service activation meetings.

10.15.4.2 Due date intervals for CCSAC/SS7 will be established on an individual case basis.

10.15.5 Maintenance and Repair

The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and U S WEST cross connections will be repaired by U S WEST. Maintenance and Repair processes are contained in Section 12 of this SGAT.

10.16 AIN Services

10.16.1 Description

AIN services are offered and available as an enhancement to CLEC's SS7 capable network structure and operation of AIN Version 0.1 capable switches.

10.16.1.1 Access to AIN Service Creation Environment - (AASCE) allows CLEC to utilize U S WEST's AIN service application development process to develop new AIN services or features. AASCE is determined on an individual case basis. The elements are also combined on an individual case basis to meet CLEC's request. Services developed through the AASCE process can either be implemented in U S WEST's network or handed off to CLEC to be installed in its own network.

10.16.1.2 Access to AIN OSS/SMS (AAOS) - This service allows CLEC to provide specific U S WEST AIN services/features to its end users as well as any AIN service that is deployed for CLEC utilizing the AASCE process in U S WEST's SCP. U S WEST is responsible for the provisioning of these AIN services. CLEC will be able to populate data for provisioning of the Call Processing Records (CPRs) stored in the SCP for AIN services. The process to provision, modify or update information in the AIN databases is predominately manual.

10.16.1.3 AIN Query Processing (AQP) - TCAP queries are used to collect information from the AIN database for use in call processing of the AIN based services above. CLEC launches a query from an AIN capable switch over the SS7 network to the U S WEST Signal Transfer Point (STP). Routing may be accomplished in two scenarios:

a) CLEC Service Switching Point (SSP) through a U S WEST Local STP and then to the U S WEST Regional STP (RSTP).

b) Through a CLEC RSTP to a U S WEST RSTP arrangement.

From the RSTP the query is directed to U S WEST's SCP to collect data for the response to the originating switch.

10.16.2 Terms and Conditions

10.16.2.1 Access to AIN Service Creation Environment (AASCE) - Since each proposed service is unique and complex, when AASCE is ordered, U S WEST conducts a feasibility study which estimates the amount of time and cost necessary to develop the proposed service or enhancement. The charges associated with the feasibility analysis and the associated charges shall be developed pursuant to the BFR process as described in Section 17. The service is developed and tested in a U S WEST lab environment. If the service is implemented in U S WEST's network, it goes through network test prior to implementation.

10.16.2.2 Access to AIN OSS/SMS (AAOS)

10.16.2.2.1 Prior to activation of the AIN feature, CLEC's switch point code must be activated for AIN processing on the CCSAC/SS7 link(described in Section 10.15) that is sending the AIN query.

10.16.2.2.2 U S WEST will provide requirements for data load preparation and delivery by CLEC.

10.16.2.2.3 In order to make AAOS service work, service logic must be loaded to provision an AIN service on the platform for CLEC. U S WEST is responsible for provisioning the Call Processing Record (CPR) in the SCP.

10.16.2.2.4 Each end user line must be provisioned by the facility owner. CLEC is responsible for setting the AIN trigger in its switch.

10.16.2.2.5 AIN Query Processing. U S WEST will certify and test the CLEC switch for AIN message transmission to assure quality performance as described in Section 10.15. U S WEST and CLEC will test cooperatively.

10.16.3 Rate Elements

10.16.3.1 Access to AIN Service Creation Environment (AASCE). Hourly rates are applicable for each component of the AASCE service according to the estimates determined in the feasibility analysis. The specific charges for each component and the terms and conditions for payment shall be described in the BFR response described above.

10.16.3.2 Access to AIN OSS/SMS (AAOS). AAOS is billed a monthly recurring and a one-time nonrecurring charge for each AIN feature activated, per telephone number.

10.16.3.3 AIN Query Processing. The AIN service is billed a monthly recurring and/or a per query charge.

10.16.4 Ordering

10.16.4.1 AASCE is ordered on an individual case basis and is coordinated through the U S WEST Account Manager. Due date intervals for the proposal phase are detailed below:

a) Within five business days of an inquiry, U S WEST will provide CLEC with the Service Request Form.

b) Within ten business days of receiving the Service Request, U S WEST will provide a written acknowledgment of receipt.

c) Within 15 business days of acknowledgment, U S WEST will assess the Service Request and prepare for a meeting with CLEC to review the Service Request.

d) U S WEST will be available to attend a Service Request Meeting within five business days of the completion of the assessment. The Service Request will be considered accepted once U S WEST and CLEC come to an agreed-upon understanding of the service feature set and scope.

e) Within 30 business days of acceptance of the Service Request, U S WEST will provide a response, the Service Evaluation, which includes an initial service evaluation and development time and cost estimates.

f) Within 90 business days of customer approval of the Service Evaluation, U S WEST will complete a Feasibility Analysis, development time and costs.

Remaining deliverables are negotiated with CLEC so that mutually-agreeable due dates based on service complexity are established.

10.16.4.2 AAOS is ordered using the LSR form.

10.16.4.3 In the event that miscellaneous charges apply, they will be applied consistent with the application used for equivalent services ordered by U S WEST end users.

10.16.4.4 Upon receipt of a complete and accurate LSR, U S WEST will load CLEC records into the AIN database with ten days. U S WEST will also establish translations at the STP to allow query access from CLEC switch within ten days.

10.16.4.5 Completion notification will be either by e-mail or by fax.

10.16.4.6 AIN Query Processing (AQP) – is specific to the service ordered and must be established at the time of the AAOS ordering process.

10.17 Interconnection to Line Information Database (LIDB)

10.17.1 Line Information Database (LIDB) Storage

10.17.1.1 Description -- LIDB Storage

10.17.1.1.1 Line Information Database (LIDB) stores various telephone line numbers and Special Billing Number (SBN) data used by operator services systems to process and bill Alternately Billed Services (ABS) calls. The operator services system accesses LIDB data to provide originating line (calling number), billing number and terminating line (called number) information. LIDB is used for calling card validation, fraud prevention, billing or service restrictions and the sub-account information to be included on the call's billing record.

10.17.1.1.2 Bellcore's GR-446-CORE defines the interface between the administration system and LIDB including specific message formats (Bellcore's TR-NWP-000029, Section 10).

10.17.1.2 Terms and Conditions -- LIDB Storage

CLEC will provide initial data, add, update or delete data, and license said data to U S WEST for placement in U S WEST's LIDB. CLEC will provide and maintain necessary information to enable U S WEST to provide LIDB services. CLEC will ensure, to the extent possible, the accuracy of the data provided to U S WEST for storage in U S WEST's LIDB, and supply updated and changed data in a timely manner.

10.17.1.3 Rate Elements -- LIDB Storage

LIDB Data Storage does not have a recurring charge. When electronic access becomes available, a one-time non-recurring fee will be charged for the initial load of CLEC's data into LIDB.

10.17.1.4 Ordering -- LIDB Storage

U S WEST will be responsible for loading and updating CLEC's line records into the LIDB database from the data provided by CLEC. The establishment of CLEC line records will be provisioned through an interim manual process. An ASCII file must be e-mailed from CLEC to U S WEST. Updates, adds, changes and deletions subsequent to the initial file for establishment can either be e-mailed or faxed to U S WEST. CLEC is responsible for the accuracy of the data which is sent to U S WEST. Inquiries from CLEC must be faxed to U S WEST using the approved forms appropriate for the type of inquiry requested.

10.17.2 Line Validation Administration System (LVAS) Access

10.17.2.1 Description -- LVAS Access

10.17.2.1.1 LVAS is the comprehensive administrative management tool which loads the LIDB data and coordinates line record updates in U S WEST's

redundant LIDB databases. LVAS is the vehicle which audits stored information and assures accurate responses.

10.17.2.1.2 LVAS access is available only to facility-based CLECs.

10.17.2.2 Terms and Conditions -- LVAS Access

10.17.2.2.1 CLEC will provide U S WEST with the following information:

a) The LIDB service requested (*i.e.*, calling name, calling cards, Originating Line Number Screening (OLNS), ABS, etc.);

b) CLEC's Revenue Accounting Office (RAO), Operating Customer Number (OCN), and/or Local Service Provider Identification (LSPI);

c) The NPA NXX and signaling point codes for the operator or end office switches from which queries are launched;

d) The identity of CLEC's SS7 provider for Number Portability, ABS, OLNS and calling name;

e) The identity of CLEC's operator services provider for ABS queries;

f) A forecast for changes in volumes of line records, both increases and decreases; and

g) The contact names and fax numbers of all CLEC personnel to be contacted for fraud notification and LIDB data administration.

10.17.2.2.2 CLEC shall e-mail to U S WEST an ASCII file containing the CLEC's line records two times per day, as appropriate; at 12:00 p.m. and 5:00 p.m., Mountain Time.

10.17.2.2.3 Within 24 hours of receipt of the file, U S WEST will attempt to load the file into LVAS. If U S WEST successfully loads the file into LVAS, the originator of CLEC's files will be notified by U S WEST.

10.17.2.2.4 In the event that U S WEST is not successful in loading the file because errors were detected, U S WEST will e-mail the file back to CLEC with an error notice.

10.17.2.2.5 CLEC will e-mail to U S WEST all updates, adds, changes, and deletions to the initial file.

10.17.2.2.6 U S WEST will provide to CLEC the necessary methods and procedures when the LVAS electronic interface becomes available.

10.17.2.3 Rate Elements -- LVAS Access

10.17.2.3.1 LIDB Line Record Initial Load Charge - CLEC shall reimburse U S WEST for all charges U S WEST incurs relating to the input of CLEC's end user line record information, including the formatting of data so that it may be loaded into LVAS.

10.17.2.3.2 Mechanized Service Account Update - LVAS Access is the product which allows CLEC to add, update and delete telephone line numbers from the U S WEST LIDB for CLEC's end users. U S WEST will charge CLEC for each addition or update processed.

10.17.2.3.3 Individual Line Record Audit - CLEC may verify the data for a given ten digit line number using an inquiry of its end user data.

10.17.2.3.4 Account Group Audit - CLEC may audit an individual Account Group NPA-NXX.

10.17.2.4 Expedited Request Charge for Manual Updates - CLEC may request an expedited manual update to the LIDB database that requires immediate action (*i.e.*, deny PIN number). U S WEST shall assess CLEC an expedited request charge for each manual update.

10.17.2.5 Ordering -- LVAS Access.

LVAS report queries from CLEC must be faxed to U S WEST MIDAS center using the approved forms appropriate for the type of inquiry requested.

10.17.2.6 Billing - Line Validation Administration System (LVAS) Access.

When electronic access becomes available, a per query rate will apply to each Mechanized Service Account Update, Individual Line Record Audit, Account Group Audit, and Expedited Request Charge for Manual Updates.

10.17.3 LIDB Query Service

10.17.3.1 Description - LIDB Query Service

10.17.3.1.1 LIDB Query Service provides information to query originators for use in processing Alternately Billed Services (ABS) calls. ABS call types include calling card, billed to third number, and collect calls.

10.17.3.1.2 U S WEST will process on behalf of CLEC LIDB queries from query originators (Telecommunications Carriers) requesting CLEC telephone line number data. U S WEST allows LIDB query access through U S WEST regional STPs.

10.17.3.2 Terms and Conditions - LIDB Query Service

10.17.3.2.1 All LIDB queries and responses from operator services systems and end offices are transmitted over a CCS network using a Signaling System 7

(SS7) protocol (TR-NWT-000246, Bell Communications Research Specification of Signaling System 7).

10.17.3.2.2 The application data needed for processing LIDB data are formatted as Transaction Capabilities Application Part (TCAP) messages. TCAP messages may be carried as an application level protocol using SS7 protocols for basic message transport.

10.17.3.2.3 The SCP node provides all protocol and interface support. CLEC SS7 connections will be required to meet Bellcore's GR905, TR954 and U S WEST's Technical Publication 77342 specifications.

10.17.3.2.4 U S WEST will include CLEC-provided data in U S WEST's LIDB, and allow access to the data subject to U S WEST negotiated agreements with Telecommunications Carriers, allowing CLEC's end users the same benefits of said agreements as enjoyed by U S WEST end users. U S WEST will update CLEC data, as requested by CLEC. U S WEST will perform services provided hereunder and determine the applicable standard for the data, in accordance with operating methods, practices and standards in effect.

10.17.3.3 Rate Elements - LIDB Query Service

A query validation rate and a query transportation rate will apply to all LIDB queries for Alternately Billed Services (ABS) calls processed by an Operator Services Switch. These rates apply in addition to the rates for CCSAC.

10.17.3.4 Ordering - LIDB Inquiry Service

10.17.3.4.1 LIDB requires a connection to the Common Channel Signaling Network (CCSN). Therefore, CLEC must have Common Channel Signaling Access Capability (CCSAC).

10.17.3.4.2 Provisioning of LIDB is done via the LIDB Access Request Form. Upon receipt of an accurate LIDB Access Request Form, U S WEST will complete all necessary work and service will be available within seven (7) business days.

10.17.3.4.3 In addition to the LIDB Request Form, Hub providers requesting LIDB services on behalf of end users must furnish U S WEST a Proof of Authorization to prove that they have customer authorization to provide these services. This letter must be on file prior to provisioning.

10.17.3.5 Billing LIDB Query Service

LIDB Query Service will be billed as outlined in Exhibit A.

10.17.4 Fraud Alert Notification

10.17.4.1 Description - Fraud Alert Notification

The WatchDog Fraud Management System (FMS) processes the LIDB query detail records to establish patterns and identify potential fraudulent situations. WatchDog issues an alert to the U S WEST Fraud Investigation Unit (FIU). U S WEST will notify CLEC of system alerts on CLEC end user lines.

10.17.4.2 Terms and Conditions - Fraud Alert Notification

U S WEST will notify CLEC of system alerts on CLEC end user lines. At the direction of CLEC, U S WEST will institute a block to prevent any further occurrence of fraud or uncollectible toll charges in accordance with practices used by U S WEST for its own end users. Such practices include, but are not limited to, removing from valid data those data which incur fraud or uncollectible toll charges.

10.17.4.3 Rate Elements - Fraud Alert Notification

Fraud Alert Notification will be billed on a time and material basis per alert.

10.17.4.4 Ordering - Fraud Alert Notification

As part of the planning for LIDB Data Storage, CLEC will provide U S WEST a contact for fraud notification. The contact must be available 24 hours a day, 7 days a week. U S WEST will not take any action when fraud notification is received other than to notify CLEC. CLEC may request that U S WEST deny a calling card. Any request of this type must be followed up by a fax as a confirmation.

10.18 8XX Database Query Service

10.18.1 8XX Database Query Service is an originating service which provides the Carrier Identification Code (CIC) and/or the vertical features associated with the 8XX number. Call routing information in the SMS/800 Database reflects the desires of the owner of the 8XX number as entered in the SMS/800 by its chosen responsible organization.

10.18.2 8XX Optional Features

10.18.2.1 POTS Translation - Delivers the ten-digit Plain Old Telephone Service (POTS) number to CLEC. To determine that the call originated as an 8XX number, the trunk group must be provisioned with Automatic Number Identification (ANI). ANI digit 24 will be delivered to the trunk group.

10.18.2.2 Call Handling and Destination Features - This will allow routing options by specifying a single carrier, multiple carriers, single termination or multiple terminations. Multiple terminations may require the POTS translation feature. Variable routing options are:

Routing by originating NPA-NXX-XXXX;
Time of day;
Day of week;

Specified date;
Allocation by percentage.

10.18.3 Rate Elements

10.18.3.1 The recurring charges for 8XX Database Query Service, POTS Translation, and Call Handling and Destination Features are contained in Exhibit A of this SGAT.

10.18.3.2 The rates for 8XX Database Query Service only apply to queries for local 8XX calls. Local calls are defined as 8XX calls where the calling party number and the terminating party number (the POTS number to which the 8XX number is translated) are in the same free calling area.

10.18.3.3 A non-recurring Point Code Activation Charge will apply for CLEC to activate 8XX Database Query Service. This rate element is contained in the CCSAC/SS7 section of Exhibit A.

10.18.4 Ordering Process

10.18.4.1 CLEC shall order access to U S WEST local STP (links and ports) prior to or in conjunction with 8XX Database Query Service.

10.18.4.2 The information and time intervals to order STP (links and ports) are contained in the Common Channel Signaling Capability/SS7 Section of this SGAT. STP links and ports are required with 8XX Database Query Service.

10.18.4.3 8XX Database Query Service shall be provided within 30 days after CLEC has access to the U S WEST local STP.

10.18.5 Technical Requirements

10.18.5.1 U S WEST shall make U S WEST's Toll Free Number Database available, through its STPs, for CLEC to query from CLEC's designated switch.

10.18.5.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a U S WEST switch.

10.18.6 Interface Requirements

The signaling interface between CLEC's or other local switch and the Toll-Free Number Database shall use the TCAP protocol as specified in the technical references together with the signaling network interface.

10.18.7 Technical References

SCPs/Databases shall be consistent with the following technical references:

10.18.7.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, Issue 1 (Bellcore, December 199X);

10.18.7.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP) (Bellcore, March 1994);

10.18.7.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);

10.18.7.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);

10.18.7.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995); and

10.18.7.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995).

10.19 InterNetwork Calling Name (ICNAM)

10.19.1 Description

10.19.1.1 InterNetwork Calling Name (ICNAM) is a U S WEST service that allows CLEC to query U S WEST's ICNAM database and secure the listed name information for the requested telephone number (calling number), in order to deliver that information to CLEC's end users.

10.19.1.2 ICNAM database contains current listed name data by working telephone number served or administered by U S WEST, including listed name data provided by other Telecommunications Carriers participating in the Calling Name Delivery Service arrangement.

10.19.2 Terms and Conditions

10.19.2.1 In response to queries properly received at U S WEST's ICNAM database, U S WEST will provide the listed name of the calling party that relates to the calling telephone number (when the information is actually available in U S WEST's database and the delivery thereof is not blocked or otherwise limited by the calling party or other appropriate request). CLEC is responsible for properly and accurately launching and transmitting the query from its serving office to the U S WEST database.

10.19.2.2 In response to proper signaling queries, U S WEST will provide CLEC with ICNAM database end user information if the calling party's end user information is stored in the U S WEST ICNAM database. As a result, the called party end user can identify the calling party listed name prior to receiving the call, except in those cases where the calling party end user has its ICNAM information blocked.

10.19.2.3 U S WEST will allow CLEC to query U S WEST's ICNAM database in order to obtain ICNAM information which identifies the calling party end user.

10.19.2.4 The ICNAM service shall include the database dip and transport from U S WEST's regional STP to U S WEST's SCP where the database is located.

Transport from CLEC's network to U S WEST's local STP is provided via Links, which are described and priced in the CCSAC/SS7 Section of this SGAT.

10.19.2.5 CLEC shall send queries conforming to the American National Standards Institute's (ANSI) approved standards for SS7 protocol and per the following specification standard documents:

Bellcore-SS7 Specification, TR-NPL-000246
ANSI-SS7 Specifications
Message Transfer Part T1.111
Signaling Connection Control Part T1.112
Transaction Capabilities Application Part T1.114
Bellcore-CLASS Calling Name Delivery
Generic Requirements, TR-NWT-001188
Bellcore-CCS Network Interface Specifications, TR-TSV-000905

10.19.2.6 CLEC acknowledges that transmission in the above protocol is necessary for U S WEST to provision its ICNAM services. CLEC will adhere to other applicable standards, which include Bellcore specifications defining service applications, message types and formats. U S WEST may modify its network pursuant to other specification standards that may become necessary to meet the prevailing demands within the United States telecommunications industry. All such changes shall be announced in advance and coordinated with CLEC.

10.19.2.7 All queries to U S WEST's ICNAM database shall use a subsystem number (the designation of application) value of 250 with a translation type value of 5. CLEC acknowledges that such subsystem number and translation type values are necessary for U S WEST to properly process queries to U S WEST's ICNAM database.

10.19.2.8 CLEC acknowledges and agrees that SS7 network overload due to extraordinary volumes of queries and/or other SS7 network messages can and will have a detrimental effect on the performance of U S WEST's SS7 network. CLEC further agrees that U S WEST, in its sole discretion, shall employ certain automatic and/or manual overload controls within the U S WEST SS7 network to safeguard against any detrimental effects. U S WEST shall report to CLEC any instances where overload controls are invoked due to CLEC's SS7 network, and CLEC agrees in such cases to take immediate corrective actions as necessary to cure the conditions causing the overload situation.

10.19.2.9 U S WEST shall exercise reasonable efforts to provide accurate and complete ICNAM information in U S WEST's ICNAM database. The ICNAM information is provided on an as-is Basis with all faults. U S WEST does not warrant or guarantee the correctness or the completeness of such information; however, U S WEST will access the same ICNAM database for CLEC's queries as U S WEST accesses for its own queries. In no event shall U S WEST have any liability for system outage or inaccessibility or for losses arising from the authorized use of the ICNAM data by CLEC.

10.19.2.10 CLEC shall arrange its Calling Party Number based services in such a manner that when a calling party requests privacy, CLEC will not reveal that caller's name or number to the called party (CLEC's end user). CLEC will comply with all FCC

guidelines and, if applicable, the appropriate Commission rules, with regard to honoring the privacy indicator.

10.19.2.11 U S WEST retains full and complete ownership and control over the ICNAM database and all information in its database. CLEC agrees not to copy, store, maintain or create any table or database of any kind from any response received after initiating an ICNAM query to U S WEST's database. CLEC will prohibit its end users from copying, storing, maintaining, or creating any table or database of any kind from any response provided by CLEC to its end user after CLEC initiated an ICNAM query to U S WEST's ICNAM database.

10.19.2.12 U S WEST reserves the right to temporarily discontinue the ICNAM service if CLEC's incoming calls are so excessive as determined by U S WEST to jeopardize the viability of the ICNAM service.

10.19.3 Rate Elements

Rate elements for ICNAM services are contained in Exhibit A of this SGAT.

10.19.4 Billing

10.19.4.1 CLEC agrees to pay U S WEST for each and every query initiated into U S WEST's ICNAM database for any information, whether or not any information is actually provided.

10.19.4.2 ICNAM rates will be billed to CLEC monthly by U S WEST for the previous month.

10.19.5 Ordering Process

10.19.5.1 CLEC shall order access to U S WEST local STP (links and ports) prior to or in conjunction with ICNAM Services. Section 10.15 contains information on ordering SS7 and STP links and ports.

10.19.5.2 If CLEC has an existing database of names that needs to be compiled into the appropriate format, ICNAM service will begin 30 days after U S WEST has received from CLEC its database information.

10.19.5.3 If CLEC has no existing customer base, then ICNAM service will begin seven (7) days after U S WEST receives the CLEC order.

Section 11.0 - NETWORK SECURITY

11.1 Protection of Service and Property. Each Party shall exercise the same degree of care to prevent harm or damage to the other Party and any third parties, its employees, agents or end users, or their property as it employs to protect its own personnel, end users and property, etc.

11.2 Each Party is responsible to provide security and privacy of communications. This entails protecting the confidential nature of telecommunications transmissions between end users during technician work operations and at all times. Specifically, no employee, agent or representative shall monitor any circuits except as required to repair or provide service of any end user at any time. Nor shall an employee, agent or representative disclose the nature of overheard conversations, or who participated in such communications or even that such communication has taken place. Violation of such security may entail state and federal criminal penalties, as well as civil penalties. CLEC is responsible for covering its employees on such security requirements and penalties.

11.3 The U S WEST telecommunications network is part of the national security network, and as such, is protected by federal law. Deliberate sabotage or disablement of any portion of the underlying equipment used to provide the network is a violation of federal statutes with severe penalties, especially in times of national emergency or state of war. CLEC is responsible for covering its employees on such security requirements and penalties.

11.4 U S WEST and CLEC share responsibility for security and network protection for each collocation arrangement. Each Party's employees, agents or representatives must secure its own portable test equipment, spares, etc. and shall not use the test equipment or spares of other parties. Use of such test equipment or spares without written permission constitutes theft and may be prosecuted. Exceptions are the use of U S WEST ladders in the Wire Center, either rolling or track, which CLEC may use in the course of work operations. U S WEST assumes no liability to CLEC, its agents, employees or representatives, if CLEC uses a U S WEST ladder available in the Wire Center.

11.5 Each Party is responsible for the physical security of its employees, agents or representatives. Providing safety glasses, gloves, etc. must be done by the respective employing Party. Hazards handling and safety procedures relative to the telecommunications environment is the training responsibility of the employing Party. Proper use of tools, ladders, and test gear is the training responsibility of the employing Party.

11.6 In the event that one Party's employees, agents or representatives, inadvertently damage or impair the equipment of the other Party, prompt notification will be given to the damaged Party, by verbal notification between the Parties' technicians at the site or by telephone to each Party's 24 x 7 security numbers.

11.7 Each Party shall comply at all times with U S WEST security and safety procedures and requirements.

11.8 U S WEST will allow CLEC to inspect or observe spaces which house or contain CLEC equipment or equipment enclosures at any time and to furnish CLEC with all keys, entry codes, lock combinations, or other materials or information which may be needed to gain entry into any secured CLEC space, in a manner consistent with that used by U S WEST.

11.9 U S WEST will limit the keys used in its keying systems for enclosed collocated spaces which contain or house CLEC equipment or equipment enclosures to its employees and representatives to emergency access only. CLEC shall further have the right to change locks where deemed necessary for the protection and security of such spaces.

11.10 Keys may entail either metallic keys or combination electronic ID/key cards. It is solely the responsibility of CLEC to ensure keys are not shared with unauthorized personnel and recover keys and electronic ID/keys promptly from discharged personnel, such that office security is always maintained. U S WEST has similar responsibility for its employees.

11.11 CLEC will train its employees, agents and vendors on U S WEST security policies and guidelines.

11.12 When working on U S WEST ICDF Frames or in U S WEST equipment line-ups, CLEC employees, agents and vendors agree to adhere to U S WEST quality and performance standards provided by U S WEST and as specified in this SGAT.

11.13 CLEC shall report all material losses to U S WEST Security. All security incidents are to be referred directly to local U S WEST Security – 1-888-U S WEST-SECURE. In cases of emergency, CLEC shall call 911 and 1-888-U S WEST-SECURE.

11.14 CLEC employees, agents and vendors will the identification/access card above the waist and visible at all times.

11.15 CLEC employees will ensure adherence by its employees, agents and vendors to all U S WEST environmental health and safety regulations. This includes all fire/life safety matters, OSHA, EPA, Federal, State and local regulations, including evacuation plans and indoor air quality.

11.16 CLEC employees, agents and vendors will secure and lock all doors and gates.

11.17 CLEC will report to U S WEST all property and equipment losses immediately, any lost cards or keys, vandalism, unsecured conditions, security violations, anyone who is unauthorized to be in the work area or is not wearing the U S WEST identification/access card.

11.18 CLEC's employees, agents and vendors will comply with U S WEST Central Office fire and safety regulations, which include but are not limited to, wearing safety glasses in designated areas, keeping doors and aisles free and clean of trip hazards such as wire, checking ladders before moving, not leaving test equipment or tools on rolling ladders, not blocking doors open, providing safety straps and cones in installation areas, using electrostatic discharge protection, and exercising good housekeeping.

11.19 Smoking is not allowed in U S WEST buildings, Wire Centers, and all other U S WEST facilities. No open flames shall be permitted anywhere within the buildings. Failure to abide by this restriction will result in immediate denial of access for that individual and will constitute a violation of the access rules, subjecting CLEC to denial of unescorted access.

11.20 No flammable or explosive fluids or materials are to be kept or used anywhere within the U S WEST buildings or on the grounds.

11.21 No weapons of any type are allowed on U S WEST premises. Vehicles on U S WEST property are subject to this restriction as well.

11.22 CLEC's employees, agents or vendors may not make any modifications, alterations, additions or repairs to any space within the building or on the grounds.

11.23 U S WEST employees may request CLEC's employee, agent or vendor to stop any work activity that in their reasonable judgment is a jeopardy to personal safety or poses a potential for damage to the building, equipment of services within the facility.

11.24 U S WEST is not liable for any damage, theft or personal injury resulting from CLEC's employees, agents or vendors parking in a U S WEST parking area.

11.25 CLEC's employees, agents or vendors outside the designated CLEC access area or without proper identification will be asked to vacate the premises and U S WEST Security will be notified. Continued violations may result in termination of access privileges.

11.26 Building related problems may be referred to the U S WEST Work Environment Centers:

800-879-3499 (CO, WY, AZ, NM)
800-201-7033 (all other U S WEST states)

11.27 CLEC will submit a U S WEST Collocation Access Application form for individuals needing to access U S WEST facilities. CLEC and U S WEST will meet to review applications and security requirements.

11.28 CLEC employees, agents and vendors will utilize only corridors, stairways and elevators that provide direct access to CLEC's space or the nearest restroom facility. Such access will be covered in orientation meetings. Access shall not be permitted to any other portions of the building.

11.29 CLEC will collect identification/access cards for any employees, agents or vendors no longer working on behalf of CLEC and forward them to U S WEST Security. If cards or keys cannot be collected, CLEC will immediately notify U S WEST at 800-210-8169.

11.30 CLEC will assist U S WEST in validation and verification of identification of its employees, agents and vendors by providing a telephone contact available 7 days a week, 24 hours a day.

11.31 CLEC employees, agents and vendors will notify U S WEST Service Assurance (800-713-3666) when gaining access into a Central Office after hours. Normal business hours are 7:00 a.m. to 5:00 p.m.

11.32 CLEC will notify U S WEST if CLEC has information that its employee, agent or vendor poses a safety and/or security risk. U S WEST may deny access to anyone who in the reasonable judgment of U S WEST threatens the safety or security of facilities or personnel.

11.33 CLEC will supply to U S WEST Security, and keep up to date, a list of its employees, agents and vendors who require access to CLEC's space. The list will include names and social security numbers. Names of employees, agents or vendors to be added to the list will be provided to U S WEST Security, who will provide it to the appropriate U S WEST personnel.

11.34 Revenue Protection. U S WEST shall make available to CLEC all present and future fraud prevention or revenue protection features. These features include, but are not limited to, screening codes, 900 and 976 numbers. U S WEST shall additionally provide partitioned access to fraud prevention, detection and control functionality within pertinent Operations Support Systems which include but are not limited to LIDB Fraud monitoring systems.

11.35 Law Enforcement Interface. U S WEST provides emergency assistance to 911 centers and law enforcement agencies seven days a week/twenty-four hours a day. Assistance includes, but is not limited to release of 911 trace and subscriber information; in-progress trace requests; establishing emergency trace equipment, release of information from an emergency trap/trace or *57 trace; requests for emergency subscriber information; assistance to law enforcement agencies in hostage/barricade situations, kidnappings, bomb threats, extortion/scams, runaways and life threats.

11.36 U S WEST provides trap/trace, pen register and Title III assistance directly to law enforcement, if such assistance is directed by a court order. This service is provided during normal business hours, Monday through Friday. Exceptions are addressed in the above paragraph. The charges for these services will be billed directly to the law enforcement agency, without involvement of CLEC, for any lines served from U S WEST Wire Centers or cross boxes.

11.37 In all cases involving telephone lines served from U S WEST Wire Centers or cross boxes, whether the line is a resold line or part of an unbundled switch or Loop element, U S WEST will perform trap/trace Title III and pen register assistance directly with law enforcement. CLEC will not be involved or notified of such actions, due to non-disclosure court order considerations, as well as timely response duties when law enforcement agencies are involved. Exceptions to the above will be those cases, as yet undetermined, where CLEC must participate due to technical reasons wherein its circuitry must be accessed or modified to comply with law enforcement, or for legal reasons that may evolve over time. CLEC will provide U S WEST with a 24 hour a day, 7 days a week contact for processing such requests, should they occur.

Section 12.0 - ACCESS TO OPERATIONAL SUPPORT SYSTEMS (OSS)

12.1 Description

12.1.1 U S WEST has developed and shall continue to provide Operational Support Systems (OSS) interfaces using electronic gateways. These gateways act as a mediation or control point between CLEC's and U S WEST's OSS. These gateways provide security for the interfaces, protecting the integrity of the U S WEST OSS and databases. U S WEST's OSS interfaces have been developed to support Pre-ordering, Ordering and Provisioning, Maintenance and Repair and Billing. Included below is a description of the products and functions supported by U S WEST OSS interfaces and the technology used by each. This section describes the interfaces that U S WEST has developed and shall provide to CLEC. Additional technical information and details shall be provided by U S WEST in training sessions and documentation, such as the "Interconnect Mediated Access User's Guide" U S WEST will continue to make improvements to the electronic interfaces as technology evolves, providing notification to CLEC consistent with the provisions of this Section.

12.1.2 Through its electronic gateways, U S WEST shall provide CLEC nondiscriminatory access to U S WEST's operational support systems for pre-ordering, ordering and provisioning, maintenance and repair, and billing for resale and unbundled network elements. For those functions with a retail analogue, such as pre-ordering and ordering and provisioning of resold services, U S WEST shall provide CLEC access to its OSS in substantially the same time and manner as it provides to itself. For those functions with no retail analogue, such as pre-ordering and ordering and provisioning of unbundled elements, U S WEST shall provide CLEC access to U S WEST's OSS sufficient to allow an efficient competitor a meaningful opportunity to compete.

12.2 OSS Support for Pre-Ordering, Ordering and Provisioning

12.2.1 Local Service Request (LSR) Ordering Process

12.2.1.1 CLEC shall use electronic interfaces for orders placed using the LSR Ordering Process for the services it supports. The electronic interface gateways include both the Electronic Data Interchange (EDI) interface and the Interconnect Mediated Access (IMA) Graphical User Interface (GUI).

12.2.1.2 The EDI interface provides a single interface for Pre-Order and Order transactions from CLEC to U S WEST and is transaction based, rather than batch based. The interface standards for EDI are based upon the Order & Billing Forum (OBF) Local Service Order Guidelines (LSOG), the Telecommunication Industry Forum (TCIF) Customer Service Guideline and the American National Standards Institute/Accredited Standards Committee (ANSI ASC) X12 using Secured Sockets Layer 3 (SSL3) protocol with exceptions as specified in the IMA and EDI disclosure documents which are provided in conjunction with the implementation responsibilities contained in this Section.

12.2.1.3 The IMA GUI also provides a single interface for Pre-Order and Order transactions from CLEC to U S WEST and is browser based. The IMA GUI interface is based on the LSOG and utilizes a WEB standard technology, Hyper Text Markup

Language (HTML) and the Transmission Control Protocol/Internet Protocol (TCP/IP) to transmit messages.

12.2.1.4 Functions

12.2.1.4.1 Pre-ordering refers to the set of activities performed in conjunction with placing an order. Pre-order consists of the following functions: validate address, service availability, review Customer Service Record (CSR), check facility availability, reserve telephone numbers, and schedule appointments. The electronic interface gateways provide on-line capabilities to perform these functions. Not all functions apply to all products.

a) Validate address will verify the end user's address.

b) Service Availability will return the list of POTS products and services available in the Central Office switch serving a particular end user address which will indicate to CLEC, among other things, which products and services are available for resale in the Central Office switch serving a particular end user address. The information is the same as that provided to U S WEST retail operations.

c) Review Customer Service Record (CSR) gives CLEC the ability to request a display of local exchange services and features (CPNI) U S WEST is currently providing to an end user.

d) Check Facility Availability will provide an indication of whether existing facilities are available or if new facilities are required, and if a technician must be dispatched to provide the facilities requested at the end user's address. This transaction does not reserve facilities and does not guarantee that facilities will or will not be available when the order is submitted.

e) Reserve Telephone Numbers provides CLEC with the ability to select an end user's telephone number. The reservation process is further divided into telephone number availability, selection, exchange and return functionality. Expiration period for selection and submission of Telephone Number are:

- A period up to thirty (30) minutes in which to make a telephone number selection. If this time limit is exceeded, and no attempt has been made to select the telephone numbers, the telephone numbers are sent back to the OSS and an error message is displayed on the LSR. A new query will need to be performed for available telephone numbers.

- When a telephone number has been reserved, there is a twenty-four (24) hour business period that the telephone number may be included on an LSR. If the time limit is exceeded, the telephone number is returned to the OSS.

f) Schedule Appointment allows CLEC to retrieve a calendar of available appointments and to reserve an appointment date and time so that a technician can be dispatched for premises and/or non-premises work.

g) Expiration period for selection and submission of Appointment Reservation are:

- A selection must be made within a thirty (30) minute period. If an appointment has been selected and the time limit was exceeded, an error message will display. If the error message displays, an updated list of available appointments will need to be requested. If an appointment has already been reserved for this Purchase Order Number, the Appointment Confirmation window will be displayed and will be pre-populated with confirmation number, appointment date and time, and after and before times.

- Appointments are reserved for a 24-hour business period. If the appointment is not attached to a submitted order within 24 business hours, the appointment is returned. When the appointment is successfully reserved, confirmation of the appointment will be displayed to CLEC.

12.2.1.4.2 Ordering and Provisioning

Submitting an LSR will result in the provisioning and installation, if necessary, of an end user's service. The functional set associated with ordering is: Create New LSR, Open LSR, Query LSR Status and FOC Return.

12.2.1.4.2.1 Create New LSR allows entry of information specific to the LSR, including required OBF forms, validates information and submits the LSR for processing.

12.2.1.4.2.2 Open LSR allows CLEC to save LSRs it is not ready to submit for processing as a pending status. When an LSR is saved as pending, all the data in all the forms associated with the LSR is saved. This feature permits CLECs to access, edit, submit, re-save, and purge pending LSRs. In addition, for issued LSRs, CLEC can issue supplementals and cancellations.

12.2.1.4.2.3 Query LSR Status allows CLEC to obtain the status of the LSR. Status is provided to CLEC upon inquiry. Order status functions include the following: Submitted, In Review, Issued, Rejected, Errored, Completed and Jeopardy.

12.2.1.4.2.4 FOC Return returns a Firm Order Confirmation to CLEC. The FOC confirms that U S WEST has received a SR, issued an order, and assigned an order number for tracking.

12.2.1.5 Forecast of Usage

12.2.1.5.1 CLEC shall supply U S WEST with a forecast of products and volumes anticipated to be ordered through the electronic interface gateways on a quarterly basis.

12.2.1.5.2 U S WEST will use CLEC's forecast to provide CLEC sufficient capacity to provide the services and elements requested. If CLEC exceeds its capacity without notification, to the extent that it causes degradation to other users' response times, CLEC's use of its capacity on the IMA or EDI server may be discontinued until a resolution can be mutually agreed to by both Parties. U S WEST will attempt to notify CLEC before discontinuing CLEC's use of the IMA or EDI server; however U S WEST reserves the right to discontinue use if it is unable to contact CLEC.

12.2.1.5.3 When CLEC requests from U S WEST more than twenty SecureIDs, CLEC shall use a T1 line instead of dial-up capabilities.

12.2.1.6 Access Service Request (ASR) Ordering Process

12.2.1.6.1 The Exchange Access Control and Tracking (EXACT) system may be used for orders placed using the ASR process. EXACT is based upon the OBF Access Service Order Guidelines (ASOG). The EXACT interface accepts a batch file that is transmitted via a Network Data Mover (NDM) connection to U S WEST from CLEC. It is CLEC's responsibility to obtain the appropriate software to interface with U S WEST's EXACT system.

12.2.1.7 Facility Based EDI Listing Process

The Facility Based EDI Listing Process is a single interface from CLEC to U S WEST. This interface is based upon the OBF LSOG and ANSI ASC X12 standards, version 4010. This interface enables CLEC listing data to be translated and passed into the U S WEST listing database. After U S WEST's daily batch processing, a Confirmation/Completion record (for every PON provided on input) is returned to CLEC via an EDI 855 transaction.

12.2.2 Maintenance and Repair

12.2.2.1 Maintenance and Repair electronic interfaces support the tracking and resolution of customer's repair and maintenance needs as reported to CLEC. They facilitate the exchange of updated information and progress reports between U S WEST and CLEC while the Trouble Report (TR) is open and a U S WEST technician is working on the resolution.

12.2.2.2 CLEC shall use the electronics interface gateways for reporting trouble. The electronic interface gateways are comprised of either the Mediated Access System Electronic Bonding (MEDIACC EB) interface or the IMA GUI interface.

12.2.2.3 The MEDIACC EB interface uses CMIP protocol over X25 packet switching network using ANS T1M1.5 227/228 standards.

12.2.2.4 The IMA GUI also provides a single interface for trouble reporting from CLEC to U S WEST and is browser based. The IMA GUI interface uses a Berkley Socket interface based upon ANSI T1M1.5 227/228 standards. The IMA GUI uses JAVA as the standard. The IMA GUI interface currently supports trouble reporting for resale and UNEs.

12.2.2.5 Functions

12.2.2.5.1 Maintenance and Repair - The functions, processes and systems used in repair are based on a Trouble Report (TR), which is an electronic document maintained in one or more OSS. A TR contains information about the end user, the trouble, the status of the work on the trouble and the results of the investigation and resolution efforts. These business processes will be made available to CLEC in the following functional set: open a trouble report, modify a trouble report, notification of status change, view trouble report status, or cancel a trouble report, receive a trouble report history, resubmit/delete an erred trouble report and close a trouble report.

a) Open Trouble Report is the mechanism that captures information needed to resolve the trouble. Once a TR has been opened, if CLEC is using MEDIACC EB, U S WEST sends an electronic transaction to CLEC identifying information about the TR (*e.g.,* commitment date and tracking number).

b) In IMA for POTS, and in EBTA for POTS and designed services, Modify Trouble Report allows CLEC to modify the trouble severity (for example; change from "service affecting" to "out of service") and trouble narrative on a TR until it has been cleared.

c) Status Change Notification provides notification to CLEC that the status of a previously opened TR has changed. If CLEC is using MEDIACC EB, CLEC will receive this notification via an electronic transaction. If CLEC is using the IMA GUI interface, CLEC will receive this notification via email and/or fax.

d) View Trouble Report Status/Trouble Report Status Request allows CLEC to view the status of an opened Trouble Report if CLEC is using IMA GUI. If CLEC is using MEDIACC EB, U S WEST sends an electronic transaction to CLEC with the status of an opened TR after CLEC sends an electronic transaction to request the status.

e) Cancel Trouble Report allows CLEC to request cancellation of a previously opened TR. Once a request to cancel is received, an orderly cessation of the trouble resolution process begins. If U S WEST has completed any work before the trouble resolution process is stopped, charges to CLEC may apply.

f) Trouble Report History provides CLEC with historical information on up to the last three trouble reports. For resale, the disposition and trouble report date and time are provided. For design services and

UNEs, the trouble report date and time, a text description of the disposition, the U S WEST Trouble Report Number, and the trouble type are provided. IMA provides trouble report history.

g) Resubmit/Delete allows trouble reports to be resubmitted or deleted via IMA GUI if, prior to entering U S WEST's OSS, the transaction fails or errors. This transaction is only valid if the TR has not entered U S WEST's OSS. This transaction is currently available only via IMA GUI.

h) Close a Trouble Report, for resale, allows U S WEST to close the TR once work is complete. For design services and UNEs, U S WEST sends CLEC a request for verification to close. CLEC then authorizes or denies the closure. CLEC has twenty-four (24) hours to respond. If a response is not received within that time frame, the TR will automatically be closed. U S WEST provides notification to CLEC that a TR has been closed because the trouble was resolved. Additional information, (*e.g.*, disposition, disposition description, outage duration, maintenance of service, charge indicator) is also included. If CLEC is using MEDIACC EB, CLEC will receive this response via an electronic transaction. If CLEC is using the IMA GUI interface, CLEC will receive this response via email and/or fax.

i) Provides MLT test results gives the CLEC the ability to request a loop test for POTS service via EBTA. When CLEC submits a TR through IMA, the technician handling the TR will order a MLT test in appropriate situations.

12.2.3 Hours of Operation

U S WEST's electronic interface gateways will be available to CLECs according to the following schedule:

Function	Monday – Friday	Saturday	Sunday
IMA Pre-Order & Order	06:00 – 20:00		
Exact Order	06:00 – 19:00	07:00 – 17:00	
Repair	02:15 – 23:15	07:00 – 21:00	13:00 – 17:00

U S WEST shall notify CLECs regarding system downtime through mass facsimile distribution and pop-up windows in the IMA GUI. All referenced times are Mountain Time.

The preceding times represent the period of when U S WEST commits that its OSS interfaces and downstream systems will be functioning (except for unforeseen system crashes) and its personnel will be available to assist CLEC. U S WEST's OSS interfaces are typically available 23 hours a day. CLEC may call any maintenance and repair issues to the applicable repair center 24 hours per day, seven days per week. U S WEST shall provide CLEC current repair contact numbers.

12.2.4 Billing

12.2.4.1 For products billed out of the U S WEST Interexchange Access Billing System (IABS) system, U S WEST will utilize the existing CABS/BOS format and technology for the transmission of bills.

12.2.4.2 For products billed out of the U S WEST Customer Record Information System (CRIS), U S WEST will utilize the existing EDI standard for the transmission of monthly local billing information. EDI is an established standard under the auspices of the ANSI/ASC X12 Committee. A proper subset of this specification has been adopted by the Telecommunications Industry Forum (TCIF) as the "811 Guidelines" specifically for the purposes of telecommunications billing.

12.2.5 Outputs

Output information will be provided to CLEC in the form of bills, files, and reports. Bills will capture all regular monthly and incremental/usage charges and present them in a summarized format. The files and reports delivered to CLEC provide more detailed information than the bills. They come in the following categories:

Usage Record File	Line Usage Information
Loss and Completion	Order Information
Category 11	Facility Based Line Usage Information
SAG/FAM	Street Address/Facility Availability Information

12.2.5.1 Bills

12.2.5.1.1 CRIS Summary Bill - The CRIS Summary Bill represents a monthly summary of charges for most wholesale products sold by U S WEST. This bill includes a total of all charges by entity plus a summary of current charges and adjustments on each sub-account. Individual sub-accounts are provided as billing detail and contain monthly, one time charges and incremental/call detail information. The Summary Bill provides one bill and one payment document for CLEC. These bills are segmented by state and bill cycle. The number of bills received by CLEC is dictated by the product ordered and the U S WEST region in which CLEC is operating. The CRIS Summary Bill transmission methods are listed in Exhibit C.

12.2.5.1.2 IABS Bill - The IABS Bill represents a monthly summary of charges. This bill includes monthly and one time charges plus a summary of any usage charges. These bills are segmented by product, LATA, billing account number (BAN) and bill cycle. The IABS Summary Bill & Sub Account Bill Data transmission methods are listed in Exhibit C.

12.2.5.2 Files and Reports

12.2.5.2.1 Daily Usage Record File provides the accumulated set of call information for a given day as captured or recorded by the network switches. This file will be transmitted Monday through Friday, excluding U S WEST holidays. This information is a file of unrated U S WEST originated usage

messages and rated CLEC originated usage messages. It is provided in Alliance for Telecommunication Industry Solution (ATIS) standard (Electronic Message Interface) EMI format. This EMI format is outlined in the documentSR-320; which can be obtained directly from ATIS. The Daily Usage Record File contains multi-state data for the Data Processing Center generating this information. Individual state identification information is contained with the message detail. U S WEST will provide this data to CLEC with the same level of precision and accuracy it provides itself. This file will be provided for the following list of products:

Resale

Unbundled Switch Port

12.2.5.2.2 The charge for this Daily Usage Record File is contained in Exhibit A of this SGAT.

12.2.5.2.3 Routing of in-region IntraLATA Collect, Calling Card, and Third Number Billed Messages - U S WEST will distribute in-region intraLATA collect, calling card, and third number billed messages to CLEC and exchange with other CLECs operating in region in a manner consistent with existing inter-company processing agreements. Whenever the daily usage information is transmitted to a carrier, it will contain these records for these types of calls as well.

12.2.5.2.4 Loss Report provides CLEC with a daily report that contains a list of accounts that have had lines and/or services disconnected. This may indicate that the end user has changed CLECs or removed services from an existing account. This report also details the order number, service name and address, and date this change was made. Individual reports will be provided for the following list of products:

Interim Number Portability

Resale

Unbundled Loop

Unbundled Line-side Switch Port

This report media is described in Exhibit C.

12.2.5.2.5 Completion Report provides CLEC with a daily report. This report is used to advise CLEC that the order(s) for the service(s) requested is complete. It details the order number, service name and address and date this change was completed. Individual reports will be provided for the following list of products:

Interim Number Portability

Resale

Unbundled Loop

Unbundled Line-side Switch

This report media is described in Exhibit C.

12.2.5.2.6 Category 11 Records are Exchange Message Records (EMR) which provide mechanized record formats that can be used to exchange access usage information between U S WEST and CLEC. Category 1101 series records are used to exchange detailed access usage information.

12.2.5.2.7 Category 1150 series records are used to exchange summarized Meet Point Billed access minutes-of-use.

These mechanized records are available from U S WEST in the following formats:

NDM (direct connect or dial-up)

Comet

Tape

Cartridge

12.2.5.2.8 SAG/FAM Files. The SAG (Street Address Guide)/ FAM (Features Availability Matrix) files contain the following information:

SAG provides Address and Serving Central Office Information.

FAM provides USOCs and descriptions by state (POTS services only), and USOC availability by NPA-NXX with the exception of Centrex. InterLATA/IntraLATA carriers by NPA-NXX.

These files are made available via a download process. They can be retrieved by ftp (file transfer protocol), NDM connectivity, or a Web browser.

12.2.6 Modifications to OSS Interfaces

CLEC and U S WEST agree to discuss the modification of OSS interfaces based upon evolving standards (*e.g.,* data elements, protocols, transport networks, etc.) and guidelines issued by or referenced by relevant ATIS committees. Establishment of new, or changes to, industry standards and guidelines will be reviewed semi-annually. The review will consider standards and guidelines that have reached final closure as well as those published in final form. Both Parties agree to evaluate evolving standards and determine the relevant modification to be implemented based upon the latest approved version adopted or the latest version reflecting final closure by the relevant ATIS committee or subcommittee. As a result of the review, U S WEST shall draft appropriate interface specifications that shall be made available to CLEC through the electronic gateway disclosure document. Changes shall be implemented in the next release after the distribution of the electronic gateway disclosure document to the CLECs.

12.2.6.1 In the course of establishing operational ready system interfaces between U S WEST and CLEC to support local service delivery, CLEC and U S WEST may need to define and implement system interface specifications that are supplemental to existing standards. CLEC and U S WEST will submit such specifications to the appropriate standards committee and will work towards their acceptance as standards.

12.2.6.2 Release updates will be based on regulatory obligations as dictated by the FCC or Commissions and, as time permits, business requirements. U S WEST will provide to CLEC the features list for modifications to the interface. Specifications for interface modifications will be provided to CLEC three weeks prior to the release date. CLEC is required to upgrade to the current release within six months of the installation date.

12.2.7 CLEC Responsibilities for Implementation of OSS Interfaces

12.2.7.1 Before any CLEC implementation can begin, CLEC must completely and accurately answer the New Customer Questionnaire. This questionnaire is provided by the U S WEST account manager and details information needed by U S WEST to establish service for CLEC.

12.2.7.2 Once U S WEST receives a complete and accurate New Customer Questionnaire, U S WEST and CLEC will mutually agree upon time frames for implementation.

12.2.7.3 If using the EDI interfaces, U S WEST will provide CLEC with a copy of the Production Readiness Verification Document. CLEC is obligated to meet the requirements specified in the Production Readiness Verification Document regardless of whether CLEC chooses to participate in the Production Readiness Verification Test.

12.2.8 CLEC Responsibilities for On-going Support for OSS Interfaces

12.2.8.1 If using the IMA GUI interface, CLEC must work with U S WEST to train CLEC personnel on the IMA GUI functions that CLEC will be using. U S WEST and CLEC shall concur on which IMA GUI functions should be included in CLEC's training. U S WEST and CLEC shall make reasonable efforts to schedule training in a timely fashion.

12.2.8.2 An exchange protocol will be used to transport EDI formatted content. CLEC must perform certification testing of exchange protocol prior to using EDI.

12.2.8.3 If CLEC is using EDI, U S WEST shall provide CLEC with a pre-allotted amount of time to complete certification of its business scenarios. It is the sole responsibility of CLEC to schedule an appointment with U S WEST for certification of its business scenarios. CLEC must comply with the agreed upon dates and times scheduled for the certification of its business scenarios. If the certification of business scenarios is delayed due to CLEC, it is the sole responsibility of CLEC to schedule new appointments for certification of its business scenarios. Conflicts in the schedule could result in certification being delayed. If a delay is due to U S WEST, U S WEST will honor CLEC's schedule through the use of alternative hours.

12.2.8.4 If CLEC is using the EDI interface, CLEC must work with U S WEST to certify the business scenarios that CLEC will be using in order to ensure successful transaction processing. U S WEST and CLEC shall mutually agree to the business scenarios for which CLEC is required to be certified. Certification is granted only for a specific release of EDI. New releases of EDI may require re-certification of some or all business scenarios. A determination as to the need for re-certification will be made by the U S WEST coordinator in conjunction with the release manager of each EDI release. Notice of the need for re-certification will be provided to CLEC three weeks prior to the release date.

12.2.8.5 In the event of electronic interface trouble, CLEC shall use its best efforts to isolate and resolve the trouble using the guidelines provided in the Production Readiness Verification document. If CLEC cannot resolve the problem, then CLEC should contact the Local Service Provider (LSP) Systems Help Desk. The LSP Systems Help Desk is CLEC's Single Point of Contact for electronic interface trouble.

12.2.9 CLEC Support

12.2.9.1 U S WEST shall provide adequate assistance to CLEC for CLEC to understand how to implement and use the OSS functions to which U S WEST is providing access. This assistance will include training, documentation, and a LSP Help Desk. The LSP Help Desk will provide a single point of entry for CLEC to gain assistance in areas involving connectivity, system availability, and file outputs. The LSP Systems Help Desk is available Monday through Friday, 6:00 a.m. until 8:00 p.m. Mountain Time, excluding U S WEST holidays. The Help Desk areas are further described below.

12.2.9.1.1 Connectivity covers trouble with CLEC's access to the U S WEST system for hardware configuration requirements with relevance to EDI and IMA GUI; software configuration requirements with relevance to EDI and IMA GUI; modem configuration requirements, T1 configuration and dial in string requirements, firewall access configuration, SecurID configuration, Profile Setup, and password verification.

12.2.9.1.2 System Availability covers system errors generated during an attempt by CLEC to place orders or open trouble reports through EDI and IMA GUI. These system errors are limited to: POTS; Design Services and Repair.

12.2.9.1.3 File Outputs covers CLEC's output files and reports produced from its usage and order activity. File outputs system errors are limited to: Daily Usage File; Loss / Completion File, IABS Bill, CRIS Summary Bill, Category 11 Report and SAG/FAM Reports.

12.2.9.2 Additional assistance to CLECs is available through various web sites. These web sites provide electronic interface training information and user documentation and technical specifications.

12.2.10 Compensation/Cost Recovery

On-going and one-time startup charges, as applicable, will be billed at rates to be specified by the Commission at the completion of appropriate cost docket hearings. U S WEST shall establish rates for any systems charges not included in appropriate cost docket hearings .

12.3 Maintenance and Repair

12.3.1 Service Levels

12.3.1.1 U S WEST will provide repair and maintenance for all services covered by this SGAT in a manner equal to that which U S WEST provides for itself.

12.3.1.2 During the term of this SGAT, U S WEST will provide necessary maintenance business process support to allow CLEC to provide similar service quality to that provided by U S WEST to its end users.

12.3.1.3 U S WEST will perform repair service that is equal in timeliness and quality to that which it provides to its own end users.

12.3.2 Branding

12.3.2.1 Should U S WEST need to use various forms for communication with CLEC end users (while out on premise dispatches on behalf of CLEC, for example), U S WEST will use unbranded forms.

12.3.2.2 If required by CLEC, U S WEST will use branded forms at CLEC's full expense, covering training costs, storage, printing, distribution and all other branding-related costs.

12.3.3 Service interruptions

12.3.3.1 The characteristics and methods of operation of any circuits, facilities or equipment of either Party connected with the services, facilities or equipment of the other Party pursuant to this SGAT shall not: 1) interfere with or impair service over any facilities of the other Party, its affiliated companies, or its connecting and concurring carriers involved in its services; 2) cause damage to the plant of the other Party, its affiliated companies, or its connecting concurring carriers involved in its services; 3) violate any applicable law or regulation regarding the invasion of privacy of any communications carried over the Party's facilities; or 4) create hazards to the employees of either Party or to the public. Each of these requirements is hereinafter referred to as an "Impairment of Service".

12.3.3.2 If it is confirmed that either Party is causing an Impairment of Service, as set forth in this Section, the Party whose network or service is being impaired (the "Impaired Party") shall promptly notify the Party causing the Impairment of Service (the "Impairing Party") of the nature and location of the problem. The Impaired Party shall advise the Impairing Party that, unless promptly rectified, a temporary discontinuance of the use of any circuit, facility or equipment may be required. The Impairing Party and the Impaired Party agree to work together to attempt to promptly resolve the Impairment

of Service. If the Impairing Party is unable to promptly remedy the Impairment of Service, the Impaired Party may temporarily discontinue use of the affected circuit, facility or equipment.

12.3.3.3 To facilitate trouble reporting and to coordinate the repair of the service provided by each Party to the other under this SGAT, each Party shall designate a repair center for such service.

12.3.3.4 Each Party shall furnish a trouble reporting telephone number for the designated repair center. This number shall give access to the location where records are normally located and where current status reports on any trouble reports are readily available. If necessary, alternative out-of-hours procedures shall be established to ensure access to a location that is staffed and has the authority to initiate corrective action.

12.3.3.5 Before either Party reports a trouble condition, it shall use its best efforts to isolate the trouble to the other's facilities.

12.3.3.5.1 In cases where a trouble condition affects a significant portion of the other's service, the Parties shall assign the same priority provided to other interconnecting CLECs and itself.

12.3.3.5.2 The Parties shall cooperate in isolating trouble conditions.

12.3.4 Trouble Isolation

12.3.4.1 Pursuant to applicable Arizona Tariffs, U S WEST will bill appropriate Trouble Isolation Charges for dispatched work done by U S WEST where the trouble is found to be on the end user's side of the NID or trouble is found to be in CLEC's portion of the network.

12.3.4.2 Other Trouble Isolation Charges may be imposed by U S WEST on CLEC for other internal repair work incurred on behalf of CLEC and later found to be in CLEC network components.

12.3.5 Inside Wire Maintenance

Except where specifically required by state or federal regulatory mandates, U S WEST will not perform any maintenance of inside wire (premise wiring beyond the end user's NID) for CLEC or its end users.

12.3.6 Testing/Test Requests/Coordinated Testing/UNEs

12.3.6.1 U S WEST shall have no obligation to test an end user's line or circuit, but may in appropriate circumstances.

12.3.6.2 Prior to any test being conducted on a line, U S WEST must receive a trouble report from CLEC.

12.3.6.3 U S WEST end users are not given test results. On manually-reported trouble, U S WEST will not provide to CLEC the test results for its trouble reports. For electronically-reported trouble, CLEC may be provided various basic test results.

12.3.6.4 U S WEST's test systems do not support testing of unbundled network elements. CLEC shall isolate the trouble condition on UNE end users to U S WEST's portion of the end user's service before U S WEST accepts a trouble report for that end user.

12.3.7 Workcenter Interfaces

12.3.7.1 U S WEST and CLEC shall work cooperatively to develop positive, close working relationships among corresponding workcenters involved in the trouble resolution processes.

12.3.8 Misdirected Repair Calls

12.3.8.1 CLEC and U S WEST will employ the following procedures for handling misdirected repair calls:

12.3.8.1.1 CLEC and U S WEST will provide their respective end users with the correct telephone numbers to call for access to their respective repair bureaus.

12.3.8.1.2 End users of CLEC shall be instructed to report all cases of trouble to CLEC. End users of U S WEST shall be instructed to report all cases of trouble to U S WEST.

12.3.8.1.3 To the extent the correct provider can be determined, misdirected repair calls will be referred to the proper provider of Basic Exchange Telecommunications Service.

12.3.8.1.4 CLEC and U S WEST will provide their respective repair contact numbers to one another on a reciprocal basis.

12.3.8.1.5 In responding to repair calls, neither Party shall make disparaging remarks about each other, nor shall they use these repair calls as the basis for internal referrals or to solicit end users to market services.

12.3.9 Major Outages/Restoral/Notification

12.3.9.1 U S WEST will notify CLEC of major network outages as soon as is practical. This notification will be via e-mail to CLEC's identified contact. With the minor exception of certain proprietary information, U S WEST will utilize the same thresholds and processes for external notification as it does for internal purposes. This major outage information will be sent via e-mail on the same frequency schedule as is provided internally within U S WEST. Service restoration will be non-discriminatory, and will be accomplished as quickly as possible according to U S WEST and/or industry standards.

12.3.9.2 U S WEST will meet with associated personnel from CLEC to share contact information and review U S WEST's outage restoral processes and notification processes.

12.3.10.10 U S WEST's emergency restoration process operates on a 7X24 basis.

12.3.10 Protective Maintenance

12.3.10.1 U S WEST will perform scheduled maintenance equal in quality to that which it provides to itself.

12.3.10.2 U S WEST will work cooperatively with CLEC to develop industry-wide processes to provide as much notice as possible to CLEC of pending maintenance activity. Such process work will include establishment of reasonable thresholds and notification standards.

12.3.11 Hours of Coverage

12.3.11.1 U S WEST's repair operation is seven days a week, 24 hours a day. Not all functions or locations are covered with scheduled employees on a 7X24 basis. Where such 7X24 coverage is not available, U S WEST's repair operations center (always available 7X24) can call-out technicians or other personnel required for the situation.

12.3.12 Escalations

12.3.12.1 U S WEST will provide trouble escalation procedures to CLEC. Such procedures will be based on the processes U S WEST employs for its own end users. U S WEST escalations are manual processes.

12.3.12.2 U S WEST repair escalations begin with calls to the up-front trouble reporting centers.

12.3.13 Dispatch

12.3.13.1 U S WEST will provide maintenance dispatch personnel on the same schedule as it provides for its own end users.

12.3.13.2 Upon the receipt of a trouble report from CLEC, U S WEST will do all that is reasonable and practical, according to internal and industry standards, to resolve the repair condition. U S WEST will dispatch repair personnel on occasion to repair the condition. It will be U S WEST's decision whether or not to send a technician out on a dispatch. U S WEST reserves the right to make this dispatch decision based on the best information available to it in the trouble resolution process. It is not always necessary to dispatch to resolve trouble; should CLEC require a dispatch when U S WEST believes the dispatch is not necessary, appropriate charges will be billed by U S WEST to CLEC for those dispatch-related costs.

12.3.13.3 For POTS lines, U S WEST will not request authorization from CLEC prior to dispatch. For lines supported by U S WEST's designed services process,

U S WEST may accept CLEC authorization to dispatch. U S WEST's operational processes are regularly reviewed and may be altered in the future. Should processes be changed, CLEC will be notified.

12.3.13.4 CLEC shall perform appropriate trouble isolation and screening prior to submitting a trouble report to U S WEST.

12.3.14 Electronic Reporting

12.3.14.1 CLEC may submit Trouble Reports through IMA or MEDIACC EB.

12.3.15 Intervals/Parity

12.3.15.1 Similar trouble conditions, whether reported on behalf of U S WEST end users or on behalf of CLEC end users, will receive similar commitment intervals.

12.3.16 Jeopardy Management

12.3.16.1 Notification to CLEC will be given on the same basis that a trouble report interval is likely to be missed.

12.3.17 Trouble Screening

12.3.17.1 CLEC shall screen and test its end user trouble reports completely enough to insure that it sends to U S WEST only trouble reports that involve U S WEST facilities.

12.3.17.2 U S WEST will cooperate with CLEC to show CLEC how U S WEST screens trouble conditions in its own centers, so that CLEC will employ similar techniques in its centers.

12.3.18 Maintenance Standards

12.3.18.1 U S WEST will cooperate with CLEC to meet the maintenance standards outlined in this SGAT.

12.3.18.2 On manually-reported trouble, U S WEST will inform CLEC of repair completion as soon as is practical after its completion. On electronically reported trouble reports the electronic system will automatically update status information, including trouble completion, across the joint electronic gateway.

12.3.19 End User Interfaces

12.3.19.1 CLEC will be responsible for all interactions with its end users including service call handling and notifying its end users of trouble status and resolution.

12.3.19.2 All U S WEST employees who perform repair service for CLEC end users will be trained in non-discriminatory behavior.

12.3.20 Repair Call Handling

12.3.20.1 Manually-reported repair calls by CLEC to U S WEST will be answered with the same quality and speed as U S WEST answers calls from its own end users.

12.3.21 Single Point of Contact

12.3.21.1 U S WEST will provide a single point of contact for CLEC to report maintenance issues and trouble reports seven days a week, twenty-four hours a day. A single 7X24 trouble reporting telephone number will be provided to CLEC for each category of trouble situation being encountered.

12.3.22 Network Information

12.3.22.1 U S WEST maintains an information database, available to CLEC for the purpose of allowing CLEC to obtain information about U S WEST's NPAs, LATAs, Access Tandems and Central Offices.

12.3.22.2 This database is known as the ICONN database, available to CLEC via U S WEST's Web site.

12.3.22.3 CPNI information and NXX activity reports are also included in this database.

12.3.22.4 ICONN is updated every two weeks.

12.3.23 Maintenance Windows

12.3.23.1 Generally, U S WEST performs major switch maintenance activities off-hours, during certain "maintenance windows".

12.3.23.2 Generally, the maintenance window is between 10:00 p.m. through 6:00 am Monday through Friday, and Saturday 10:00 p.m. through Monday 6:00 am, Mountain Time.

12.3.23.3 Although U S WEST normally does major switch maintenance during the above maintenance window, there will be occasions where this will not be possible.

12.3.23.4 Planned generic upgrades to U S WEST switches are included in the ICONN database, available to CLEC via U S WEST's Web site.

12.4 Local Interconnection Data Exchange for Billing

12.4.1 There are certain types of calls or types of Interconnection that require exchange of billing records between the Parties, including, for example, alternate billed and Toll Free Service calls. The Parties agree that all call types must be routed between the networks, accounted for, and settled among the Parties. Certain calls will be handled via the Parties' respective operator service platforms. The Parties agree to utilize, where possible and appropriate, existing accounting and settlement systems to bill, exchange records and settle revenue.

12.4.2 The exchange of billing records for alternate billed calls (*e.g.*, calling card, bill-to-third-number and collect) will be distributed through the existing CMDS processes, unless otherwise separately agreed to by the Parties.

12.4.3 Inter-Company Settlements ("ICS") revenues will be settled through the Calling Card and Third Number Settlement System ("CATS"). Each Party will provide for its own arrangements for participation in the CATS processes, through direct participation or a hosting arrangement with a direct participant.

12.4.4 Non-ICS revenue is defined as IntraLATA collect calls, calling card calls, and billed to third number calls which originate on one service provider's network and are billed by another service provider located within the same U S WEST geographic specific region. The Parties agree to negotiate and execute an agreement for settlement of non-ICS revenue. This separate arrangement is necessary since existing CATS processes do not permit the use of CATS for non-ICS revenue. The Parties agree that current message distribution processes, including the CMDS system or U S WEST in-region facilities, can be used to transport the call records for this traffic.

12.4.5 Both Parties will provide the appropriate call records to the intraLATA Toll Free Service provider, thus permitting the service provider to bill its end users for the inbound Toll Free Service. No adjustments to bills via tapes, disks or NDM will be made without the mutual agreement of the Parties.

12.4.6 A charge will apply for Category 1101XX and 1150XX records sent by U S WEST to CLEC in an EMR mechanized format. These records are used to provide information necessary for CLEC to bill the Interexchange Carrier for jointly provided Switched Access Services and 8XX database queries. The charge is for each record created and transmitted is listed in Exhibit A of this SGAT.

Section 13.0 - ACCESS TO TELEPHONE NUMBERS

13.1 Nothing in this SGAT shall be construed in any manner to limit or otherwise adversely impact either Party's right to request an assignment of any NANP number resources including, but not limited to, central office (NXX) codes pursuant to the Central Office Code Assignment Guidelines published by the Industry Numbering Committee ("INC") as INC 95-0407-008 (formerly ICCF 93-0729-010). The latest version of the Guidelines will be considered the current standard.

13.2 Central Office Code Administration has now transitioned to Lockheed Martin. Both Parties agree to comply with Industry guidelines and commission rules, including those sections requiring the accurate reporting of data to the Central Office Code Administrator.

13.3 It shall be the responsibility of each Party to program and update its own switches and network systems pursuant to the Local Exchange Routing Guide (LERG) to recognize and route traffic to the other Party's assigned NXX codes. Neither Party shall impose any fees or charges whatsoever on the other Party for such activities. The Parties will cooperate to establish procedures to ensure the timely activation of NXX assignments in their respective networks.

13.4 Each Party is responsible for administering NXX codes assigned to it. Each Party is responsible for updating the LERG data for NXX codes assigned to its switches. Each Party shall use the LERG published by Bellcore or its successor for obtaining routing information and shall provide through an authorized LERG input agent, all required information regarding its network for maintaining the LERG in a timely manner.

13.5 Each Party shall be responsible for notifying its end users of any changes in numbering or dialing arrangements to include changes such as the introduction of new NPAs or new NXX codes.

Section 14.0 - LOCAL DIALING PARITY

14.1 The Parties shall provide local dialing parity to each other as required under Section 251(b)(3) of the Act. U S WEST will provide local dialing parity to competing providers of telephone exchange service and telephone toll service, and will permit all such providers to have non-discriminatory access to telephone numbers, operator services, directory assistance, and directory listings, with no unreasonable dialing delays.

Section 15.0 - U S WEST Dex

U S WEST and CLEC agree that certain issues outside the provision of basic white page directory listings, such as yellow pages advertising, yellow pages listings, directory coverage, access to call guide pages (phone service pages), applicable listings criteria, white page enhancements and publication schedules will be the subject of negotiations between CLEC and directory publishers, including U S WEST Dex. U S WEST acknowledges that CLEC may request U S WEST to facilitate discussions between CLEC and U S WEST Dex.

Section 16.0 - REFERRAL ANNOUNCEMENT

16.1 When an end user changes from U S WEST to CLEC, or from CLEC to U S WEST, and does not retain its original main/listed telephone number, the Party formerly providing service to the end user will provide a transfer of service announcement on the abandoned telephone number. Each Party will provide this referral service consistent with its Tariff. This announcement will provide details on the new number that must be dialed to reach the end user.

Section 17.0 - BONA FIDE REQUEST PROCESS

17.1 Any request for Interconnection or access to an unbundled network element or ancillary service that is not already available as described herein shall be treated as a Bona Fide Request (BFR). U S WEST shall use the BFR Process to determine the terms and timetable for providing the requested Interconnection, access to UNEs or ancillary services, if available, and the technical feasibility of new/different points of Interconnection. U S WEST will administer the BFR Process in a non-discriminatory manner.

17.2 A BFR shall be submitted in writing and on the appropriate U S WEST form for BFRs. CLEC and U S WEST will work together to prepare the BFR form. This form shall be accompanied by the non-refundable Processing Fee specified in Exhibit A of this SGAT. The form will request, and CLEC will need to provide, at a minimum: (a) a technical description of each requested Network Element or new/different points of Interconnection or ancillary services; (b) the desired interface specification; (c) each requested type of Interconnection or access; (d) a statement that the Interconnection or Network Element or ancillary service will be used to provide a Telecommunications Service; (e) the quantity requested; (f) the specific location requested; (g) if the requested unbundled network element is a proprietary element as specified in Section 251(d)(2) of the Act, CLEC must submit documentation that demonstrates that access to such Network Element is necessary, that the failure to provide access to such Network Element would impair the ability of CLEC to provide the services that it seeks to offer, and that CLEC's ability to compete would be significantly impaired or thwarted without access to such requested proprietary element; and (h) if the requested Unbundled Network Element is a non-proprietary element as specified in Section 251(d)(2) of the Act, CLEC must submit documentation that demonstrates that denial of access to such non-proprietary unbundled network element would impair the ability of CLEC to provide the services that it seeks to offer, and that CLEC's ability to compete would be significantly impaired or thwarted without access to such unbundled network element.

17.3 Within fifteen (15) business days of its receipt, U S WEST shall acknowledge receipt of the BFR and in such acknowledgment advise CLEC of missing information, if any, necessary to process the BFR. Thereafter, U S WEST shall promptly advise CLEC of the need for any additional information required to complete the analysis of the BFR.

17.4 Within thirty (30) business days of its receipt of the BFR and all information necessary to process it, U S WEST shall provide to CLEC a preliminary analysis of the BFR. The preliminary analysis shall specify U S WEST's conclusions as to whether or not the requested Interconnection or access to an unbundled network element complies with the unbundling requirements of the Act.

17.5 If U S WEST determines during the thirty (30) day period that a BFR does not qualify as an unbundled network element or Interconnection or ancillary service that is required to be provided under the Act, U S WEST shall advise CLEC as soon as reasonably possible of that fact, and U S WEST shall promptly, but in no case later than ten business days after making such a determination, provide a written report setting forth the basis for its conclusion.

17.6 If U S WEST determines during the thirty (30) day period that the BFR qualifies under the Act, it shall notify CLEC in writing of such determination within ten (10) business days.

17.7 As soon as feasible, but in any case within 90 business days after U S WEST notifies CLEC that the BFR qualifies under the Act, U S WEST shall provide to CLEC a BFR quote. The BFR quote will include, at a minimum, a description of each Interconnection, Network Element, and ancillary service, the quantity to be provided, any interface specifications, and the applicable rates (recurring and nonrecurring) including the separately stated development costs and construction charges of the Interconnection, unbundled network element or ancillary service and any minimum volume and term commitments required.

17.8 If U S WEST has indicated minimum volume and term commitments, then within 30 business days of its receipt of the BFR quote, CLEC must either agree to purchase under those commitments, cancel its BFR, or seek mediation or arbitration.

17.9 If CLEC has agreed to minimum volume and term commitments under the preceding paragraph, CLEC may cancel the BFR or volume and term commitment at any time, but in the event of such cancellation CLEC will pay U S WEST's reasonable development costs incurred in providing the Interconnection, Unbundled Network Element, or ancillary service to the extent that those development costs are not otherwise amortized.

17.10 If either Party believes that the other Party is not requesting, negotiating or processing any BFR in good faith, or disputes a determination or quoted price or cost, it may seek arbitration pursuant to the Dispute Resolution provision of this SGAT.

Section 18.0 - AUDIT PROCESS

18.1 "Audit" shall mean the comprehensive review of:

18.1.1 Data used in the billing process for services performed, including reciprocal compensation, and facilities provided under this SGAT; and

18.1.2 Data relevant to provisioning and maintenance for services performed or facilities provided by either of the Parties for itself or others that are similar to the services performed or facilities provided under this SGAT for Interconnection or access to unbundled loops, ancillary and finished services.

18.2 The data referred to above shall be relevant to any performance indicators that are adopted in connection with this SGAT, through negotiation, arbitration or otherwise. This Audit shall take place under the following conditions:

18.2.1 Either Party may request to perform an Audit.

18.2.2 The Audit shall occur upon thirty (30) business days written notice by the requesting Party to the non-requesting Party.

18.2.3 The Audit shall occur during normal business hours.

18.2.4 There shall be no more than two Audits requested by each Party under this SGAT in any 12-month period.

18.2.5 The requesting Party may review the non-requesting Party's records, books and documents, as may reasonably contain information relevant to the operation of this SGAT.

18.2.6 The location of the Audit shall be the location where the requested records, books and documents are retained in the normal course of business.

18.2.7 All transactions under this SGAT which are over twenty-four (24) months old will be considered accepted and no longer subject to Audit. The Parties agree to retain records of all transactions under this SGAT for at least 24 months.

18.2.8 Each Party shall bear its own expenses occasioned by the Audit, provided that the expense of any special data collection shall be born by the requesting Party.

18.2.9 The Party requesting the Audit may request that an Audit be conducted by a mutually agreed-to independent auditor. Under this circumstance, the costs of the independent auditor shall be paid for by the Party requesting the Audit.

18.2.10 In the event that the non-requesting Party requests that the Audit be performed by an independent auditor, the Parties shall mutually agree to the selection of the independent auditor. Under this circumstance, the costs of the independent auditor shall be shared equally by the Parties.

18.2.11 The Parties agree that if an Audit discloses error(s), the Party responsible for the error(s) shall, in a timely manner, undertake corrective action for such error(s). All errors not corrected within thirty (30) business days shall be escalated to the Vice-President level.

18.3 All information received or reviewed by the requesting Party or the independent auditor in connection with the Audit is to be considered Proprietary Information as defined by this SGAT. The non-requesting Party reserves the right to require any non-employee who is involved directly or indirectly in any Audit or the resolution of its findings as described above to execute a nondisclosure agreement satisfactory to the non-requesting Party. To the extent an Audit involves access to information of other competitors, CLEC and U S WEST will aggregate such competitors' data before release to the other Party, to insure the protection of the proprietary nature of information of other competitors. To the extent a competitor is an affiliate of the Party being audited (including itself and its subsidiaries), the Parties shall be allowed to examine such affiliates' disaggregated data, as required by reasonable needs of the Audit.

Section 19.0 - CONSTRUCTION CHARGES

19.1 All rates, charges and initial service periods specified in this SGAT contemplate the provision of network Interconnection services and access to unbundled loops or ancillary services to the extent existing facilities are available. Except for modifications to existing facilities necessary to accommodate Interconnection and access to unbundled loops or ancillary services specifically provided for in this SGAT, U S WEST will consider requests to build additional or further facilities for network Interconnection and access to unbundled loops or ancillary services, as described in the applicable section of this SGAT.

19.2 All necessary construction will be undertaken at the discretion of U S WEST, consistent with budgetary responsibilities, consideration for the impact on the general body of end users and without discrimination among the various carriers.

19.3 A quote for CLEC's portion of a specific job will be provided to CLEC. The quote will be in writing and will be binding for ninety (90) business days after the issue date. When accepted, CLEC will be billed the quoted price and construction will commence after receipt of payment. If CLEC chooses not to have U S WEST construct the facilities, U S WEST reserves the right to bill CLEC for the expense incurred for producing the engineered job design.

19.4 In the event a construction charge is applicable, CLEC's service application date will become the date upon which U S WEST receives the required payment.

Section 20.0 - SERVICE PERFORMANCE

20.1 General Provisions

20.1.1 U S WEST will provide reports of service indicators which will assist in an evaluation of the service provided to CLEC.

20.1.2 In no instance shall this SGAT be construed to require U S WEST to provide superior levels of service to CLEC in comparison to the level of service which U S WEST provides to itself or its own end users.

20.1.3 U S WEST may obtain from CLEC comparable service indicators for the services CLEC provides to U S WEST pursuant to this SGAT.

20.2 Service Performance Indicators

The following Service Performance Indicators will be provided to CLEC upon request, but no more frequently than once per month, subject to the provisions of this Section. Performance Indicators characterized as "Core" indicators are those that measure most directly the service or process outcome U S WEST provides to CLEC. Performance Indicators characterized as "Diagnostic" indicators are those that measure aspects of service quality that support aspects measured by core indicators, that represent subprocess outcomes, or that are otherwise duplicative to some degree of aspects measured by "Core" indicators.

20.2.1 Core Service Performance Indicators. U S WEST will report results for the service groupings specified below using service performance indicators as defined in Exhibit B:

A. Local Interconnection Trunks - Ordering and Provisioning:

1. Installation Commitments Met (percent) [OP-3]
2. Installation Interval (average) [OP-4]
3. Installation Trouble Reports (percent) [OP-5]
4. Delayed Days (average) [OP-6]

B. Local Interconnection Trunks Maintenance and Repair:

5. All Troubles Cleared within 4 hours (percent) [MR-5]
6. Mean Time to Restore (average) [MR-6]
7. Repair Repeat Report Rate (average) [MR-7]
8. Trouble Rate (percent) [MR-8]

C. Network Interconnection:

9. Trunk Blocking – Interconnection Trunks (percent) [NI-1]
10. Trunk Blocking – Local Interoffice ("Common") Trunks (percent) [NI-2]

D. Collocation Provisioning:

11. Installation Commitments Met (percent) [CP-1]
12. Installation Interval (average) [CP-2]

E. Access to OSS Functions:

13. Gateway Availability - Human to-Computer Interface (percent) [GA-1]
14. Gateway Availability - Computer-to-Computer Interface (percent) [GA-2]
15. Pre-Order/Order Response Times – Human-to-Computer Interface (average) [PO-1]
16. Pre-Order/Order Response Times - Computer–to-Computer Interface (average) [PO-2]
17. Speed of Answer – Provisioning and Repair Centers (average) [OP-1 & MR-1]
18. Calls Answered within 20 Seconds – Provisioning and Repair Centers (percent) [OP-2 & MR-2]
19. Mean Time to Provide U S WEST-Recorded Usage Records [BI-1]
20. Mean Time to Deliver Invoices [BI-2]

F. Access to Unbundled Loops Ordering and Provisioning:

21. Installation Commitments Met (percent) [OP-3]
22. Installation Interval (average) [OP-4]
23. Installation Trouble Reports (percent) [OP-5]
24. Delayed Days (average) [OP-6]
25. Coordinated Cutover Interval (average) [OP-7]
26. Coordinated Cutover Combined (with INP) Intervals (average) [OP-9]

G. Access to Unbundled Loops Maintenance and Repair:

27. Out of Service Cleared within 24 hours (percent) [MR-3]
28. All Troubles Cleared within 48 hours (percent) [MR-4]
29. Mean Time to Restore (average) [MR-6]
30. Repair Repeat Report Rate (percent) [MR-7
31. Trouble Rate (percent) [MR-8]

H. Access to Unbundled Transport and Unbundled Switching Ordering and Provisioning:

32. Installation Commitments Met (percent) [OP-3]
33. Installation Interval (average) [OP-4]
34. Installation Trouble Reports (percent) [OP-5]
35. Delayed Days (average) [OP-6]

I. Access to Unbundled Transport and Local Switching Maintenance and Repair:

36. All Troubles Cleared within 4 hours (percent) [MR-5]
37. Mean Time to Restore (average) [MR-6]
38. Repair Repeat Report Rate (percent) [MR-7]
39. Trouble Rate (percent) [MR-8]

J. Access to Emergency Services:

40. ALI Database updates Within 24 Hours (percent) [ES-1]
41. 911/E911 ES Trunk Installation Intervals (average) [ES-2]

K. Access to Directory Assistance and Operator Services:

42. Speed of Answer (average) [DA-1 and OS-1]
43. Calls Answered within 10 seconds (percent) [DA-2 and OS-2]

L. Number Portability Ordering and Provisioning:

44. Installation Commitments Met – INP (percent) [OP-3]
45. Installation Interval – INP (average) [OP-4]
46. Installation Trouble Reports – INP (percent) [OP-5]
47. Coordinated Cutover Intervals – INP (average) [OP-8]

M. Number Portability Maintenance and Repair:

48. Out Of Service Cleared within 24 hours (percent) [MR-3]
49. All Troubles Cleared within 48 hours (percent) [MR-4]
50. Mean Time To Restore (average) [MR-6]
51. Repair Repeat Report Rate (percent) [MR-7]
52. Trouble Rate (percent) [MR-8]

N. Resale Services Ordering and Provisioning:

53. Installation Commitments Met (percent) [OP-3]
54. Installation Interval (average) [OP-4]
55. Installation Trouble Reports (percent) [OP-5]
56. Delayed Days (average) [OP-6]

O. Resale Services Maintenance and Repair:

57. Out of Service Cleared within 24 hours – Non-designed Repair Process (percent) [MR-3]
58. All Troubles Cleared within 48 hours – Non-designed Repair Process (percent) [MR-4]
59. All Troubles Cleared within 4 hours – Designed Repair Process (percent) [MR-5]
60. Mean Time to Restore (average) [MR-6]
61. Repair Repeated Report Rate (percent) [MR-7]
62. Trouble Rate (percent) [MR-8]

20.2.2 Diagnostic Indicators. U S WEST will report results for the service groupings specified below using service performance indicators as defined in Exhibit B:

A. Pre-Order/Order:

1. Electronic Flow-through of Local Service Requests (LSRs) to the Service Order Processor (percent) [DPO-1]

2. LSR Rejection Notice Interval (average) [DPO-2]
3. LSRs Rejected (percent) [DPO-3]
4. Firm Order Confirmation (FOC) Interval (average) [DPO-4]

B. Ordering and Provisioning:

5. CLEC or CLEC's Customer-Caused Installation Misses (percent) [DOP-1]
6. Delayed Orders Completed more than 15 days past the commitment date (percent) [DOP-2]
7. Delayed Orders Completed more than 90 days past the commitment date (percent) [DOP-3]
8. CLEC or CLEC's Customer-Caused Coordinated Cutover Misses (percent) [DOP-4]

C. Maintenance & Repair:

9. CLEC or CLEC's Customer-Caused Trouble Reports (percent) [DMR-1]

D. Collocation Provisioning:

10. CLEC or CLEC's Customer-Caused Collocation Misses (percent) [DCP-1]
11. Collocation Feasibility Study Interval (average) [DCP-2]
12. Collocation Feasibility Study Commitments Met (percent) [DCP-3]
13. Average Collocation Quote Interval (percent) [DCP-4]

E. Network Interconnection:

14. Provisioning Intervals – U S WEST Interoffice Trunks (average) [DNI-1]
15. Local Interconnection Final Trunk Group Utilization (average) [DNI-2]

20.3 Service Quality Performance Results Reports

20.3.1 For Resale, U S WEST will provide service performance results for performance indicators listed above for CLEC, other CLECs in aggregate, U S WEST end users, and where applicable, for U S WEST affiliates.

20.3.2 For LIS trunks, U S WEST will provide service performance indicator results as follows:

20.3.2.1 Performance results will be provided for LIS trunks procured by CLECs that have utilized joint planning with U S WEST in procuring LIS trunks, and the performance results for LIS trunk services that U S WEST provides to its affiliates which furnish Telecommunications Services, or

20.3.2.2 If CLEC does not participate in joint forecasting and joint planning, CLEC results will be compared to the results of other CLECs that have not participated in joint forecasting.

20.3.3 For unbundled network elements and ancillary services, U S WEST will provide service performance results for performance indicators listed above for CLEC, and other CLECs in aggregate.

20.4 Performance Results Provided to CLEC

The performance results provided to CLEC by U S WEST shall be consistent with the U S WEST Service Performance Indicator Descriptions (PID), which are contained in Exhibit B.

20.5 Performance Results Provided Under this SGAT

The Performance results provided under this SGAT are to be used solely for the purposes set forth herein, and shall be treated as "Proprietary Information" as provided in Section 5.16 of this SGAT.

20.6 Service Performance - Reported Events

20.6.1 When applicable, U S WEST will report service-related performance results for all "events". An "event" is the activity that generates the measurement.

20.6.2 U S WEST will report CLEC results referenced above provided that CLEC has ordered and is utilizing the services reported.

20.6.3 U S WEST will provide the reports on a calendar monthly basis. These reports will be provided upon request within forty-five (45) calendar days of the close of the preceding month.

20.7 Self-Executing Remedies

The purpose and focus of remedies provisions under this SGAT shall be to resolve significant differences in service quality that have been identified through appropriate comparisons of the service performance results reported for the performance indicators defined above. Self-executing remedies are those actions, defined herein, that U S WEST will undertake in good faith and in cooperation with CLEC to respond to such differences immediately, without waiting for determination of whether actual discrimination may exist.

20.7.1 For this purpose, significant differences shall be considered to be those that are determined to be statistically, operationally, and materially significant in each of three (3) or more consecutive months and that reflect a probability that inferior service was apparently provided to CLEC, based on the relevant comparison of performance indicator results. Statistical significance shall be determined as defined in 20.7.3 below. Operational and material significance shall be established by including for comparison only those results that have (a) minimum sample sizes of 30 each, and (b) a relevant comparison demonstrating a service performance difference of a magnitude that can be reasonably considered to have a perceptible effect on end-user customers or CLEC operations.

20.7.2 The Parties shall not rely on any service performance results to determine whether any trend suggesting that non-compliance with the Act may be occurring until U S WEST has collected six months of data. Nothing herein shall be construed to indicate that a significant difference, of itself, means that actual discrimination exists.

20.7.3 Determination of the statistical significance of any difference in appropriately comparable results shall be based on statistical testing for (1) differences in means (where performance indicator results are reported as averages) or (2) differences in proportions (where performance indicator results are reported as percentages), as follows:

a) Determination of the significance of a difference in mean values of each monthly service performance indicator result shall be based on a "permutation" test using what is commonly referred to as a standard "Z" statistic and a maximum of 1,000 randomly selected permutations of the samples.

b) The significance of a difference in proportional measurements shall be based on direct calculation of the probability of the observed difference using the binomial distribution with a pooled *p* value.

c) A difference in results by either test type (i.e., differences in means or differences in proportions) will be deemed statistically significant if the appropriate one tailed test indicates, with 99 percent confidence, that the performance indicator results being compared appear to be from different populations of performance. In other words, that service being provided to CLEC appears to be inferior to that represented by the comparable results (such as, results representing service provided to CLECs in aggregate or to U S WEST retail).

20.7.4 For each case in which a significant difference as defined above has occurred, U S WEST shall:

a) Immediately investigate to determine the cause(s) of the difference and, where feasible, begin good-faith efforts to resolve the difference;

b) Within 45 days, provide to CLEC a written explanation of the result of the investigation as to cause(s) and, as applicable, an action plan describing (a) what has and will be done to resolve the difference, (b) what cooperative actions and timelines on the part of CLEC are needed to facilitate or expedite resolution, and (c) listing key milestones for use by the Parties in tracking progress;

c) Offer and meet with designated CLEC representatives monthly to discuss progress on resolving the difference(s);

d) Escalate to vice president level any significant difference that has or is not projected to be resolved within three months of the difference first being identified as significant as defined above, with commitment at that level to direct due diligence toward removing obstacles and expediting resources where feasible and necessary to resolve the difference as soon as possible.

20.7.5 If a statistically and operationally significant difference has occurred in the trend results for any particular performance indicator, the Parties shall allow three (3) months to correct the difference in the trend results. If the statistically and operationally significant difference in trend results is corrected within the three (3) month time, no action, formal or informal, shall be taken by either Party with respect to that difference.

20.7.6 If the statistically and operationally significant difference in trend results is not corrected within the three (3) month time frame, the Dispute Resolution provision of this SGAT shall apply.

20.8 Delaying Events

20.8.1 A Party's failure to meet a requirement in this Section of this SGAT shall not be included when that failure is a result, directly or indirectly, of a Delaying Event.

20.8.2 A "Delaying Event" means:

20.8.2.1 Failure by either Party to perform any of its obligations set forth in this SGAT,

20.8.2.2 Any delay, act or failure to act by an end user, agent or subcontractor of the other Party or

20.8.2.3 Any Force Majeure Event.

20.8.3 If a Delaying Event prevents either Party from performing a measured activity, then such measured activity shall be excluded from the performance indicator(s).

20.9 Records Retention for Service Performance Indicators

Each Party shall maintain complete and accurate records for the specified review period of its performance under this SGAT for each measured activity. Each Party shall provide such records to the other Party in a self-reporting format. Such records shall be in the format kept in the performing Party's ordinary course of business. The Parties agree that such records shall be deemed "Confidential Information".

20.10 Joint Defense and Advocacy

The Parties shall jointly and separately advocate and defend the sufficiency of this SGAT in addressing the nondiscrimination requirements of the Act and wholesale services performance measurements reporting rights, remedies and related terms and conditions in any forum in which its sufficiency might be challenged.

20.11 Cost Recovery

Each Party reserves the right to recover the costs associated with the creation of the above measures, indicators, and reports through a future proceeding before a regulatory body. Such a proceeding may address a wide range of implementation costs not otherwise recovered through charges established herein.

Section 21.0 - NETWORK STANDARDS

21.1 The Parties recognize that U S WEST services and network elements have been purchased and deployed, over time, to Bellcore and U S WEST technical standards. Specification of standards is built into the U S WEST purchasing process, whereby vendors incorporate such standards into the equipment U S WEST purchases. U S WEST supplements generally held industry standards with U S WEST Technical Publications.

21.2 The Parties recognize that equipment vendors may manufacture telecommunications equipment that does not fully incorporate and may differ from industry standards at varying points in time (due to standards development processes and consensus) and either Party may have such equipment in place within its network. Except where otherwise explicitly stated within this SGAT, such equipment is acceptable to the Parties, provided said equipment does not pose a security, service or safety hazard to persons or property.

21.3 Generally accepted and developed industry standards which the Parties agree to support include, but are not limited to:

21.3.1 Switching

GR-954-CORE LIDB
GR-2863-CORE AIN
GR-1428-CORE Toll Free Service
GR-1432-CORE TCAP
GR-905-CORE ISUP
GR-1357-CORE Switched Fractional DS1
GR-1298-CORE AIN Switching System Generic Requirements
GR-1299-CORE AIN Service Control Point Adjunct Interface Generic Requirements
TR-NWT-001284 AIN 0.1 Switching System Generic Requirements
GR-905-CORE Common Channel Signaling Network Interface Specification
GR-1432-CORE CCS Network Interface Specification Bellcore TR-TSY-000540, Issue 2R2
GR-305-CORE
GR-1429-CORE
GR-2863-CORE
FR-64 LATA LSSGR
GR-334-CORE Switched Access Service
TR-NWT-000335 Voice Grade Special Access Services
TR-TSY-000529 Public LSSGR
TR-NWT-000505 LSSGR Call Processing
FR-NWT-000271 OSSGR
TR-NWT-001156 OSSGR Subsystem
SR-TSY-001171 System Reliability Analysis

21.3.2 Transport

Bellcore FR-440
TR-NWT-000499 (TSGR) Transport Systems Generic Requirements
GR-820-CORE Generic Transmission Surveillance; DS1 and DS3 Performance

GR-253-CORE Synchronous Optical Network Systems (SONET)
TR-NWT-000507 Transmission
TR-NWT-000776 NID for ISDN Subscriber Access
TR-INS-000342 High Capacity Digital Special Access Service
ST-TEC-000051 & 52 Telecommunications Transmission Engineering Handbooks Volumes 1 & 2

21.3.3 Loops

TR-NWT-000057 Functional Criteria for Digital Loop Carrier Systems Issue 2
TR-NWT-000393 Generic Requirements for ISDN Basic Access Digital Subscriber Lines
GR-253-CORE SONET Common Generic Criteria
TR-NWT-000303 Integrated Digital Loop Carrier System Generic Requirements
TR-TSY-000673 Operations Interface for an IDLC System
GR-303-CORE Issue 1 Integrated Digital Loop Carrier System Generic Requirements
TR-NWT-000393 Generic Requirements for ISDN Basic Access Digital Subscriber Lines
TR-TSY-000008 Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch
TR-NWT-008 and 303
TA-TSY-000120 Subscriber Premises or Network Ground Wire
GR-49-CORE Generic Requirements for Outdoor Telephone Network Interface Requirements
TR-NWT-000239 Indoor Telephone Network Interfaces
TR-NWT-000937 Generic Requirements for Outdoor and Indoor Building Entrance
TR-NWT-000133 Generic Requirements for Network Inside Wiring

21.4 The Parties will cooperate in the development of national standards for Interconnection elements as the competitive environment evolves. Recognizing that there are no current national standards for Interconnection network elements, U S WEST has developed its own standards for some network elements, including:

U S WEST Interconnection – Unbundled Loop #77384

Expanded Interconnection and Collocation for Private Line Transport and Switched Access Services - #77386

Unbundled Dedicated Interoffice Transport - #77389

Competitive Local Exchange Carrier Installation/Removal Guidelines - #77390

21.5 U S WEST Technical Publications have been developed to support service offerings, inform end users and suppliers, and promote engineering consistency and deployment of developing technologies. For a complete listing and to place orders for U S WEST Technical Publications, contact:

Faison Office Products Company
3251 Revere St., Suite 200
Aurora, CO 80011
800-777-3672
Fax – 303-340-1805

Section 22.0 - SIGNATURE PAGE

IN WITNESS WHEREOF, U S WEST has caused this SGAT to be executed by its respective duly authorized representatives as an offer to CLEC for terms and conditions regarding Interconnection, access to unbundled network elements, ancillary services, and/or wholesale telecommunications services available for resale pursuant to the terms, conditions, and prices set forth herein.

U S WEST Communications, Inc.

_____
Signature

_____
Name Printed/Typed

_____
Title

_____
Date

IN WITNESS WHEREOF, and in accordance with sections 1.2 and 3.1 of this SGAT, CLEC has caused this SGAT to be executed by its duly authorized representative as acceptance of U S WEST's offer for the terms and conditions regarding Interconnection, access to unbundled network elements, ancillary services, and/or Telecommunications Services available for resale pursuant to the terms, conditions, and prices set forth in this SGAT.

CLEC

_____
Signature

_____
Name Printed/Typed

_____
Title

_____
EFFECTIVE DATE

TABLE OF CONTENTS FOR EXHIBITS

EXHIBIT A - Price List

EXHIBIT B - Performance Measures

EXHIBIT C - Media for Billing Outputs and Reports

Exhibit A – ARIZONA RATES

ARIZONA RESALE RATES		
	Wholesale Discount Percentage Recurring Charges	Wholesale Discount Percentage Nonrecurring Charges
1.0 Resale **1.1 Wholesale Discount Rates** Except as qualified in Section 6.0 of this SGAT, all U S WEST Telecommunications Services shall be available for Resale at the following discounts:		
1.1.1 Basic Residential Line Service	12 %	
1.1.2 Basic Business Line Service	18 %	
1.1.3 All other U S WEST Telecommunication Services	18 %	
1.1.4 Product Specific Nonrecurring Charge		18 %
	Recurring	**Nonrecurring**
1.2 **Customer Transfer Charge (CTC)**		
1.2.1 CTC for POTS Service, per line		
Residence		$5.00
Business		$5.00
ISDN		$5.00
1.2.2 CTC for Private Line Transport Services		
First Circuit		$45.08 *1
Additional Circuit, per circuit, same CSR		$31.19 *1
1.2.3 CTC for Advanced Communications Services, per circuit		$50.48 *1

*1 Rates not in AZ cost docket U-3021-96-448 ET AL. (TELRIC based cost when required.)
*2 ICB, Individual Case Basis pricing until cost study completed and approved.
*3 When Unbundled loop and switching are ordered together, the nonrecurring charge does not apply.
*4 Actual Vendor Charge.
*5 Nonrecurring Charges for Shared Transport are included within the charge for the associated line-side switch port.
*6 Pricing for ancillary service under development, to be filed by 3rd quarter 1999.
*7 Proposed pricing pending promulgation by FCC of new UNE rules and Appellate Court Review of current FCC pricing rules.

EXHIBIT A - ARIZONA RATES

ARIZONA RATES			
		Recurring	Nonrecurring
2.0 Interconnection			
2.1 Entrance Facilities			
2.1.1 DS1		$89.42	$256.87
2.1.2 DS3		$357.16	$256.87
	Recurring Fixed	Recurring Per Mile	Nonrecurring
2.2 Direct Trunked Transport			
2.2.1 DS1			$0
DS1 0 to 8 Miles	$35.98	$0.65	
DS1 Over 8 to 25 Miles	$35.99	$0.94	
DS1 Over 25 to 50 Miles	$36.00	$1.75	
DS1 Over 50 Miles	$36.00	$1.59	
DS1 First Trunk			$323.03
DS1 Each Additional Trunk			$10.21
2.2.2 DS3			$0
DS3 0 to 8 Miles	$243.17	$13.32	
DS3 Over 8 to 25 Miles	$246.15	$15.90	
DS3 Over 25 to 50 Miles	$250.66	$22.91	
DS3 Over 50 Miles	$249.26	$22.49	
DS3 First Trunk			$331.71
DS3 Each Additional Trunk			$18.27
		Recurring	Nonrecurring
2.3 Multiplexing, DS3 to DS1		$196.85	$164.00
2.4 Local Traffic			
2.4.1 Call Termination			
End office call termination, per minute of use		$0.002800	
2.4.2 Tandem Switched Transport			
2.4.2.1 Tandem Switching, per MOU		$0.001400	
2.4.2.2 Tandem Transmission, per MOU, all mileage bands		$0.000880	
2.5 Expedite Charge (LIS Trunks)		Arizona State Switched Access Tariff	
2.6 Construction Charges		ICB	ICB
2.7 IntraLATA Toll		U S WEST's Arizona Switched Access Tariff	
2.8 Transit Traffic			
2.8.1 Local Transit		See Tandem Switching and Tandem Transmission rates above.	
2.8.2 IntraLATA Toll		U S WEST's Switched Access Tariff	
2.8.3 Jointly Provided Switched Access		U S WEST's Switched Access Tariff	

*1 Rates not in AZ cost docket U-3021-96-448 ET AL. (TELRIC based cost when required.)
*2 ICB, Individual Case Basis pricing until cost study completed and approved.
*3 When Unbundled loop and switching are ordered together, the nonrecurring charge does not apply.
*4 Actual Vendor Charge.
*5 Nonrecurring Charges for Shared Transport are included within the charge for the associated line-side switch port.
*6 Pricing for ancillary service under development, to be filed by 3rd quarter 1999.
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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	Nonrecurring
3.0 Collocation		
3.1 LIS Interconnection Tie Pairs (ITP)		
3.1.1 DS1	$4.28	$256.87
3.1.2 DS3	$14.98	$269.78
3.2 All Collocation		
3.2.1 Quote Preparation Fee		$1.381.54
3.2.2 Collocation Entrance Facility, per 2 fibers	$1.52	$1.184.74
3.2.3 Collocation Entrance		
Manhole, per month, per manhole	$13.81	
Handhole, per month, per handhole	$7.61	
3.2.4 Conduit/Innerduct POI to vault, per foot	$.21	
3.2.5 Core drill, per occurrence		$181.57
3.2.6 Riser, vault to equipment, per foot	$.24	
3.2.7 Fiber Optic cable, per 24., per foot	$.03	
3.2.8 Fiber placement in conduit and riser, per foot	$.83	
3.2.9 Copper 25 pair, per foot	$.006	
3.2.10 Copper splicing, per splice		$45.64
3.2.11 Copper placement conduit and riser, per foot		$.83
3.2.12 Coax placement, per foot	$.10	
3.2.13 Cable Splicing		
Per set-up		$375.40
Per fiber spliced		$15.79
3.2.14 -48 Volt DC power, per ampere	$12.89	
3.2.15 -48 Volt DC Power, per foot, per A and B feeder		
20 Amps	$.21	$59.14
40 Amps	$.29	$80.69
60 Amps	$.35	$95.34
100 Amps	$.22 *1	$133.28 *1
200 Amps	$.35 *1	$208.78 *1
300 Amps	$.48 *1	$288.33 *1
400 Amps	$.62 *1	$372.89 *1
3.2.16 AC Power, per Watt, per month	$.03	
3.2.17 Inspector Labor, per half hour, minimum 4 hours		
Regular Hour Rate		$24.49
After Hour Rate		$36.24
3.2.18 ICDF Frame, Block Terminations		
DS0	$1.29 *1	$636.68 *1
DS1	$.78 *1	$465.73 *1
DS3	$.43 *1	$254.90 *1
3.2.19 ICDF Frame, Per Termination		
DS0	$.01*1	$5.19 *1
DS1	$.02 *1	$12.29 *1
DS3	$.31 *1	$186.25 *1
3.2.20 Security, Per employee, Per C.O.	$6.40 *1	
3.2.21 Heating and Air Conditioning	ICB	ICB

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*4 Actual Vendor Charge.
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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	Nonrecurring
3.2.22 Cable Racking		
DS0		$.52 *1
DS1		$1.04 *1
DS3		$.67 *1
3.2.23 Channel Regeneration		
3.2.23.1 DS1 Regeneration	$6.30	0
3.2.23.2 DS3 Regeneration	$41.32	0
3.3 Virtual Collocation		
3.3.1 Maintenance Labor, per half hour		
Regular Hour Rate		$22.20
After Hour Rate		$31.57
3.3.2 Training Labor, per half hour		$23.95
3.3.3 Engineering, per half hour		
Regular Hour Rate		$24.55
After Hour Rate		$35.25
3.3.4 Installation, per half hour		
Regular Hour Rate		$23.73
After Hour Rate		$33.20
3.3.5 Equipment Bay -recurring, per shelf	$6.41	
3.4 Caged Physical Collocation		
3.4.1 Cage Enclosure	ICB	ICB
3.4.2 Floor Space Lease, per square foot		
Zone 1	$2.75	
Zone 2	$2.26	
Zone 3	$2.06	
3.4.3 Back up AC Power, per foot		
20 Amp, Single Phase	$.02 *1	$9.78 *1
20 Amp, Three Phase	$.02 *1	$11.08 *1
30 Amp, Single Phase	$.02 *1	$10.21 *1
30 Amp, Three Phase	$.02 *1	$12.38 *1
40 Amp, Single Phase	$.02 *1	$11.23 *1
40 Amp, Three Phase	$.02 *1	$13.82 *1
50 Amp, Single Phase	$.02 *1	$12.52 *1
50 Amp, Three Phase	$.03 *1	$15.74 *1
60 Amp, Single Phase	$.02 *1	$13.58 *1
60 Amp, Three Phase	$.03 *1	$17.46 *1
100 Amp, Single Phase	$.03 *1	$15.78 *1
100 Amp, Three Phase	$.04 *1	$22.18 *1
3.4.4 Grounding		
2/0 AWG	$.1194 *1	$5.97 *1
1/0 AWG	$.1763 *1	$8.82 *1
4/0 AWG	$.2096 *1	$10.48 *1
350 kcmil	$.3228 *1	$16.14 *1
500 kcmil	$.3765 *1	$18.83 *1
750 kcmil	$.4672 *1	$23.36 *1
3.4.5 Humidification, per leased physical space	$28.03	

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EXHIBIT A - ARIZONA RATES

ARIZONA RATES			
		Recurring	Nonrecurring
3.5 Cageless Physical Collocation		See the Physical Collocation rates above, without the cage Enclosure or Grounding rates.	
5.0 Interconnection Tie Pairs (ITP)			
5.1 ITP Per Termination			
DSO 2 wire		ICB [2]	ICB [2]
DSO 4 wire		ICB [2]	ICB [2]
DS1 Per each Termination		ICB [2]	ICB [2]
DS3 Per each Termination		ICB [2]	ICB [2]
6.0 Unbundled Dedicated Interoffice Transport (UDIT)	Recurring	Recurring	Nonrecurring
	Fixed	Per Mile	
6.1 DS1 UDIT			$302.91[1]
DS1 0 to 8 Miles	$35.98	$0.65	
DS1 Over 8 to 25 Miles	$35.99	$0.94	
DS1 Over 25 to 50 Miles	$36.00	$1.75	
DS1 Over 50 Miles	$36.00	$1.59	
6.2 DS3 UDIT			$302.91[1]
DS3 0 to 8 Miles	$243.17	$13.32	
DS3 Over 8 to 25 Miles	$246.15	$15.90	
DS3 Over 25 to 50 Miles	$250.66	$22.91	
DS3 Over 50 Miles	$249.26	$22.49	
6.3 DS0 UDIT			ICB [2]
DS0 0 to 8 Miles	ICB [2]	ICB [2]	
DS0 Over 8 to 25 Miles	ICB [2]	ICB [2]	
DS0 Over 25 to 50 Miles	ICB [2]	ICB [2]	
DS0 Over 50 Miles	ICB [2]	ICB [2]	
6.4 Entrance Facilities			
DS1		$89.42	$256.87
DS3		$357.16	$256.87
6.5 DS0 UDIT Low Side Channelization		ICB [2]	
6.6 Multiplexing			
DS3 to DS1		$196.85	$2,281.44 [1]
DS1 to DS0		$200.08	$230.93 [1]
6.7 DS1/DS0 Low Side Channelization		$6.08 [1]	$231.47 [1]
7.0 Shared Transport			
7.1 Per Minute of Use		$.018[1]	N/A[5]
8.0 Unbundled Customer Controlled Rearrangement Element (UCCRE)			
8.1 DS1 Port		ICB [2]	ICB [2]
8.2 DS3 Port		ICB [2]	ICB [2]
8.3 Network Controller		ICB [2]	ICB [2]

[1] Rates not in AZ cost docket U-3021-96-448 ET AL. (TELRIC based cost when required.)
[2] ICB, Individual Case Basis pricing until cost study completed and approved.
[3] When Unbundled loop and switching are ordered together, the nonrecurring charge does not apply.
[4] Actual Vendor Charge.
[5] Nonrecurring Charges for Shared Transport are included within the charge for the associated line-side switch port.
[6] Pricing for ancillary service under development, to be filed by 3rd quarter 1999.
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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	**Nonrecurring**
8.4 Dial Up Access	ICB *2	ICB *2
8.5 Attendant Access	ICB *2	ICB *2
8.6 DS1	ICB *2	ICB *2
8.7 DS3	ICB *2	ICB *2
8.8 Virtual Ports	ICB *2	ICB *2
8.9 Basic Installation		ICB *2
9.0 Unbundled Network Elements (UNEs)		
9.1 Unbundled Loops		
9.1.1 Analog Loops		
9.1.1.1 2-wire voice grade	$21.98	See Installation options, Section 9.2.1
9.1.1.2 4-wire voice grade	$22.90	See Installation options, Section 9.2.1
9.1.2 Non-loaded Loops		
9.1.2.1 2-wire Non-loaded Loop	$21.98	See Installation options, Section 9.2.1
9.1.2.2 4wire Non-loaded Loop	$22.90	See Installation options, Section 9.2.1
9.1.2.3 Unloading/Conditioning Charge		$114.80
9.1.3 Digital Capable Loops		
9.1.3.1 Basic rate ISDN capable Loop	$21.98	See Installation options, Section 9.2.1
9.1.3.2 DS1 capable Loop	$89.42	See Installation options, Section 9.2.1
9.1.3.3 Regeneration		
DS1	$12.60 *1	
DS3	$82.63 *1	
9.1.3.4 Extension Technology	$6.75 *1	
9.2.1 Loop Installation Charges	See related monthly recurring charges in Sections 9.1.1 - 9.1.3 above	
9.2.1.1 Basic Installation		
First DS1 Installation		$482.00 *1
First Analog Installation		$45.92 *1
Each Additional Analog Installation		$40.92 *1
Residence 2-wire		$40.92
Business - 2-wire		$45.92
Residence 4-wire		$41.81
Business 4-wire		$46.92
9.2.1.2 Coordinated Installation Without Cooperative Testing		
First Analog Loop		$118.05 *1
Each Additional Analog Loop		$59.75 *1
9.2.1.3 Basic Installation With Performance Testing		
First Analog Loop		$146.06 *1
Each Additional Analog Loop		$89.26 *1

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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	Nonrecurring
9.2.1.4 Coordinated Installation With Cooperative Testing		
First Analog Loop		$194.22 *1
Each Additional Analog Loop		$137.93 *1
9.3 Network Interface Device (NID)	$0.58	$30.00
10.0 Switching		
10.1 Tandem Switching		
DS1 Local Message Trunk Port		$337.96 *1
Trunk Group-First Trunk		$278.91 *1
Message Trunk Group – Each Additional Trunk		$8.64 *1
Per minute of Use	$0.0014	
10.2 Local Switching		
10.2.1 Analog Line Side Port	$6.34 *1	$42.58*1 *3
10.2.1.1 Vertical Features		
Call Hold	$0.0568 *1	
Call Transfer	$0.2166 *1	
Three Way Calling	$0.0963 *1	
Call Pickup	$0.0577 *1	
Call Waiting/Cancel Call Waiting	$0.1330 *1	
Distinctive Ringing	$0.0797 *1	
Speed Call Long – Customer Change	$0.0654 *1	
Station Dial Conferencing (6-way)	$1.0508 *1	
Call Forwarding Busy Line	$0.1386 *1	
Call Forwarding Don't Answer	$0.1696 *1	
Call Forwarding Variable	$0.1414 *1	
Call Forwarding Variable Remote	$0.1128 *1	
CLASS – Call Waiting ID	$0.0519 *1	
CLASS – Calling Name & Number	$0.1915 *1	
CLASS – Calling Number Delivery	$0.0808 *1	
CLASS – Calling Number Delivery – Block	$0.3822 *1	
CLASS – Continuous Redial	$0.5008 *1	
CLASS – Last Call Return	$0.4258 *1	
CLASS – Priority Calling	$1.0829 *1	
CLASS – Selective Call Forwarding	$0.9206 *1	
CLASS – Selective Call Rejection	$1.7651 *1	
CLASS – Anonymous Call Rejection	$0.3937 *1	
Call Park (Store & Retrieve)	$0.1289 *1	
Message Waiting Indication A/V	$0.0662 *1	
10.2.1.2 Subsequent Order Charge		$12.75 *1
10.2.2 Digital Line Side Port (Supporting BRI ISDN)	$17.13 *1	
10.2.2.1 Nonrecurring, first Port		$277.13 *1
10.2.2.2 Nonrecurring, each additional Port		$277.13 *1
10.2.3 Digital Trunk Ports		
10.2.3.1 DS1 Message Trunk Port (Supporting Local Message Traffic)		$337.96 *1
10.2.3.1.1 Message Trunk Group – First Trunk		$278.91 *1

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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	**Nonrecurring**
10.2.3.1.2 Message Trunk Group – Each Additional		$8.64 *1
10.2.3.2 DS1/DID/DOD/PBX Trunk Port	ICB *2	ICB *2
10.2.3.3 Digital PRI ISDN Trunk Port	ICB *2	ICB *2
10.2.4 DS0 Analog Trunk Port	ICB *2	ICB *2
10.2.5 Local usage, per minute of use	$.0071 *7	
10.2.6 Customized Routing		
10.2.6.1 Development of Custom Line Class Code		ICB *2
10.2.6.2 Installation Charge, per switch		ICB *2
11.0 Common Channel Signaling/SS7		
11.1 STP Port	See FCC Tariff #5	ICB *2
11.2 Options Activation Charge		
11.2.1 Basic Translations		
First Point Code		ICB *2
Each Additional Point Code		ICB *2
11.2.2 Database Translations		
First Point Code		ICB *2
Each Additional Point Code		ICB *2
11.3 Signal Formulation, per Signaling message	ICB *2	
11.4 Signal Transport, per Signaling message	ICB *2	
11.5 Signal Switching, per Signaling message	ICB *2	
12.0 Construction Charges	ICB	ICB
13.0 Interim Number Portability		
13.1 Number Ported	NA	$4.47
13.2 Additional Call Path	NA	
13.3 Service Establishment, per route, per switch		$20.65
13.3 Service Establishment, additional number ported or changes to existing numbers, per number ported		$3.32
13.4 Coordinated Out of Hours Cut Non Sunday/Holiday		$59.73 per hr. per person *1
13.5Coordinated Out of Hours Cut Sunday/Holiday		$73.74 per hr. per person *1
14.0 Local Number Portability		
14.1 LNP Queries	See FCC Tariff #5	
15.0 911/E911	No Charge	
16.0 Directory Assistance, Facility Based Providers		
16.1 Regional Directory Assistance, per call	$0.280	

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EXHIBIT A - ARIZONA RATES

ARIZONA RATES		
	Recurring	Nonrecurring
21.0 Line Information Database (LIDB)		
21.1 LIDB Storage		ICB *2
21.2 Line Validation Administration System Access (LVAS)		ICB *2
21.2.1 LIDB Line Record Initial Load		ICB *2
21.2.2 Mechanized Service Account Update, per addition or update processed	ICB *2	
21.2.3 Individual Line Record Audit		ICB *2
21.2.4 Account Group Audit		ICB *2
21.2.5 Expedited Request Charge for Manual Updates		ICB *2
21.3 LIDB Query Service, per query	ICB *2	
21.4 Fraud Alert Notification, per alert	ICB *2	
22.0 Access to Poles, Ducts, Conduits and Rights of Way		
22.1 Pole Inquiry Fee, per mile		$114.00*1
22.2 Innerduct Inquiry Fee, per mile		$171.00*1
22.3 Field Verification Fee		ICB
22.4 Make-Ready Work		ICB
22.5 Pole Attachment Fee, per foot, per year	$2.82*1	
22.6 Innerduct Occupancy Fee, per foot, per year	$0.48*1	
23.0 8XX Database Query Service		
23.1 Per Query	$0.00117966*1	
23.2 POTS Translation	$0.00005115*1	
23.3 Call Handling & Destination Feature	$0.00004194*1	
24.0 ICNAM, Per Query	$0.016*1	
25.0 Bona Fide Request Process		
25.1 Processing Fee		$2,128.00*1
26.0 Daily Usage Record File, per record	$.0011*1	
27.0 Category 11 Mechanized Record Charge, per record	$.0025*1	

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Exhibit B – PERFORMANCE MEASURES

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Exhibit B – PERFORMANCE MEASURES

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Exhibit B – PERFORMANCE MEASURES

U S WEST's Service Performance Indicators

Introduction

U S WEST (USW) will provide comparative reports for the performance indicators defined herein that reflect the results, in percentages and/or averages, for USW and CLECs (Competitive Local Exchange Carriers) in aggregate (except as noted herein). All reports provided hereunder will be subject to agreements of confidentiality and / or nondisclosure. (References to order types, e.g., "C" or "N" orders, are defined at the end of this exhibit under "Types of Orders.")

CORE INDICATORS

Core Gateway Availability Indicators

Indicator Number: GA-1
Category: **Gateway Availability**
Measure: **Gateway Availability – via Human-to-Computer Interface**

Purpose:
To evaluate the quality of CLEC access to the specified electronic gateway, focusing on the extent to which the gateway is actually available to CLECs.

Description:
Measures the availability of the IMA (Interconnect Mediated Access) interface, reports the percentage of scheduled time the IMA Interface is available for view and/or input.

Indicator Number: GA-2
Category: **Gateway Availability**
Measure: **Gateway Availability – via Computer-to-Computer Interface**

Purpose:
To evaluate the quality of CLEC access to the specified electronic gateway, focusing on the extent to which the gateway is actually available to CLECs.

***Note**: Currently, no CLECs are using the EDI interface. Results for this indicator will be reported beginning three months following the month in which combined CLEC activity exceeds 1,000 local service requests submitted through the interface.*

Description:
Measures the availability of EDI (Electronic Data Interchange) interface, reports the percentage of scheduled time the EDI Interface is available for view and/or input.

Core Pre-Order/Order Indicators

Indicator Number: PO-1
Category: **Pre-Order/Order**
Measure: **Pre-Order / Order Response Times – via Human-to-Computer Interface**

Purpose:
To evaluate the timeliness of CLEC access to USW's operational support systems in carrying out pre-ordering and ordering functions, focusing on specific transaction types through the specified gateway interface.

Description:
Measures the time interval between query and response for specified pre-order/order transactions through IMA. Results are reported separately for the following transaction types:

1. Appointment Scheduling (Due Date Reservation, where appointment is required)
2. Feature Function and Service Availability Information
3. Facility Availability
4. Street Address Validation
5. Customer Service Records
6. Telephone Number

Exclusions:
- None

Indicator Number: PO-2
Category: **Pre-Order/Order**
Measure: **Pre-Order / Order Response Times via Computer-to-Computer Interface**

Purpose:
To evaluate the timeliness of CLEC access to USW's operational support systems in carrying out pre-ordering and ordering functions, focusing on specific transaction types through the specified gateway interface.

Note: *Currently, no CLECs are using the EDI interface. Results for this indicator will be reported beginning three months following the month in which combined CLEC activity exceeds 1,000 local service requests submitted through the interface.*

Description:
Measures the time interval between query and response for specified pre-order/order transactions through EDI. Results are reported separately for the following transaction types:

1. Appointment Scheduling (Due Date Reservation, where appointment is required)
2. Feature Function and Service Availability Information
3. Facility Availability
4. Street Address Validation
5. Customer Service Records
6. Telephone Number

Exclusions:
- None

Exhibit B – PERFORMANCE MEASURES

Core Ordering and Provisioning Indicators

With the exception of OP-1 and OP2, results for the following performance indicators will be provided for each standard service grouping, as defined in the list at the end of this exhibit..

Indicator Number: OP-1
Category: **Ordering and Provisioning**
Measure: **Speed of Answer - Interconnect Provisioning Center**

Purpose:
To evaluate the timeliness of CLEC access to USW's interconnection provisioning center(s), focusing on how long it takes for calls to be answered.

Description:
Measures the average time following the first ring to answer calls in the Interconnection Provisioning Center, which handles Wholesale calls only. Results are provided at a USW level of reporting; neither CLEC- nor state-specific results are available.

Exclusions:
- None

Indicator Number: OP-2
Category: **Ordering and Provisioning**
Measure: Calls Answered within twenty seconds - Interconnect Provisioning Center

Purpose:
To evaluate the timeliness of CLEC access to USW's interconnection provisioning center(s), focusing on the extent to which calls are answered within twenty seconds.

Description:
Measures the percent of Interconnection Provisioning Center calls answered within twenty seconds of the first ring. (Interconnect Provisioning Centers handle Wholesale calls only.) Results are provided at a USW level of reporting; neither CLEC- nor state-specific results are available.

Exclusions:
- None

Indicator Number: OP-3
Category: **Ordering and Provisioning**
Measure: **Installation Commitments Met**

Purpose:
To evaluate the extent to which USW installs services for CLECs as scheduled or promised.

Description:
Measures the percentage of orders for which the committed due date is met. Includes (inward) C, N, and T order types.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Orders issued pending: Right of Way; facilities; or customer deposit.

Indicator Number: OP-4
Category: **Ordering and Provisioning**
Measure: **Installation Interval**

Purpose:
To evaluate the timeliness of USW's installation of services for CLECs, focusing on the average time to install service.

Description:
Measures the average interval (in business days) between the application date and the completion date for service. (Must have verified facilities in place at the time of the request.) Includes only (inward) C, N, and T orders dispatched to a field technician.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Orders with customer requested due dates and intervals increased due to customer-caused delays

Exhibit B – PERFORMANCE MEASURES

Indicator Number: OP-5
Category: **Ordering and Provisioning**
Measure: **Installation Trouble Reports**

Purpose:
To evaluate accuracy of ordering and installation of services, focusing on the extent to which trouble reports related to new installations are generated.

Description:
Measures Maintenance/Repair requests received within thirty (30) calendar days of a completed service provisioning order (N, C and T orders only) as a percentage of the related new installation total orders.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Maintenance/repair of service reports coded to: customer education; CPE trouble; customer action; and referred to another company (including CLEC).

Indicator Number: OP-6
Category: **Ordering and Provisioning**
Measure: **Delayed Days**

Purpose:
To evaluate the extent to which USW is late in installing services for CLECs, focusing on the average number of days late orders are completed beyond the committed due date.

Description:
Measures the average number of days service is delayed beyond the original due date for reasons attributed to USW.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Orders delayed due to Customer reasons are excluded.

Exhibit B – PERFORMANCE MEASURES

Indicator Number: OP-7
Category: **Ordering and Provisioning**
Measure: **Coordinated Cutover Interval - Unbundled Loop**

Purpose:
To evaluate the timeliness and convenience of coordinated cutovers of unbundled loops, focusing on time from start of cutover to completion of cutover, including those with and without interim number portability.

Description:
Measures the average time to complete the cutover of an unbundled loop. Separate results are provided as follows:

1. OP-7A Loop cutover coordinated with Interim Number Portability (INP).
2. OP-7B Loop cutover not associated with INP.

Exclusions:
- None

Indicator Number: OP-8
Category: **Ordering and Provisioning**
Measure: **Coordinated Cutover Interval - INP**

Purpose:
To evaluate the timeliness and convenience of coordinated cutovers of interim number portability, focusing on time from start of cutover to completion of cutover, including those with and without unbundled loops.

Description:
Measures the average time to complete an Interim Number Portability cutover. Separate results are provided as follows:

1. OP-8A INP cutover coordinated with an Unbundled Loop.
2. OP-8B INP cutover not associated with INP.

Exclusions:
- None

Indicator Number: OP-9
Category: **Ordering and Provisioning**
Measure: Coordinated Cutover Combined Interval – Unbundled Loop and INP Combined

Purpose:
To evaluate the combined effect of the timeliness and convenience of coordinated cutovers involving both unbundled loops and interim number portability.

Description:
Measures the Average time (beginning to end) to complete a coordinated cutover of an unbundled loop combined with Interim Number Portability (i.e., OP-7A + OP-8A).

Exclusions:
- None

Core Maintenance and Repair Indicators

With the exception of MR-1 and MR-2, results for the following performance indicators will be provided for each standard service grouping, as defined in the list at the end of this exhibit.

Indicator Number: MR-1
Category: **Maintenance and Repair**
Measure: **Speed of Answer – Interconnect Repair Center**

Purpose:
To evaluate timeliness of CLEC access to USW's interconnection repair center(s), focusing on how long it takes for calls to be answered.

Description:
Measures the average time following the first ring to answer calls in the Interconnection Repair Center, which handles Wholesale calls only. Results are provided at a USW level of reporting; neither CLEC- nor state-specific results are available.

Exclusions:
- None

Indicator Number: MR-2
Category: **Maintenance and Repair**
Measure: **Calls Answered with 20 seconds – Interconnect Repair Center**

Purpose:
To evaluate of CLEC access to USW's interconnection repair center(s), focusing on the number of calls answered within twenty seconds.

Description:
Measures the percentage of Interconnection Repair Center calls answered within twenty seconds of the first ring. (Interconnect Repair Centers handle Wholesale calls only.) Results are provided at a USW level of reporting; neither CLEC- nor state-specific results are available.

Exclusions:
- None

Indicator Number: MR-3
Category: **Maintenance and Repair**
Measure: **Out of Service Cleared within 24 hours – Non-designed Repair Process**

Purpose:
To evaluate timeliness of repair for non-designed services, focusing on cases where the trouble has rendered the service unusable and on the number of such cases resolved within the standard estimate for non-designed services (i.e., 24 hours for out-of-service conditions).

Description:
Measures the percent of Non-designed service trouble reports cleared within 24 hours of a call from a CLEC, or from a USW end user retail customer, to USW. This measurement includes only out of service (OOS) trouble reports, which are defined as the inability to initiate or receive calls.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

Exclusions:

- Trouble reports found to be related to customer equipment, customer education, inside wire, and subsequent reports.

Indicator Number: MR-4
Category: **Maintenance and Repair**
Measure: **All Troubles cleared within 48 hours – Non-Designed Repair Process**

Purpose:
To evaluate timeliness of repair for non-designed services, focusing on trouble cases of all types (both out of service and service affecting) and on the number of such cases resolved within the standard estimate for non-designed services (i.e., 48 hours for service-affecting conditions).

Description:
Measures the percent of Non-designed service trouble reports cleared within 48 hours of a call from a CLEC, or from a USW end user retail customer, to USW. This measurement includes all applicable trouble reports, including those that are out of service and those that are only service-affecting.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

Exclusions:

- Trouble reports found to be related to customer equipment, customer education, inside wire, and subsequent reports.

Indicator Number: MR-5
Category: **Maintenance and Repair**
Measure: **All Troubles Cleared within 4 hours – Designed Repair Process**

Purpose:
To evaluate timeliness of repair for designed services, focusing on trouble cases of all types (both out of service and service-affecting) and on the number of such cases resolved within the standard estimate for designed services (i.e., 4 hours).

Description:
Measures the percentage of trouble reports for designed services that are cleared within four hours of a call from a CLEC, or from a USW end user retail customer, to USW. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Trouble reports found to be related to customer equipment, customer education, inside wire, and subsequent reports.

Indicator Number: MR-6
Category: **Maintenance and Repair**
Measure: **Mean Time to Restore**

Purpose:
To evaluate timeliness of repair, focusing how long it takes to restore services to proper operation.

Description:
Measures the average time to resolve requests for repair. All USW and customer-caused delays (no access, no available work force, etc.) are included.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Trouble reports found to be related to customer equipment, customer education, inside wire, and subsequent reports.

Indicator Number: MR-7
Category: **Maintenance and Repair**
Measure: **Repair Repeat Report Rate**

Purpose:
To evaluate the accuracy of repair actions, focusing on the number of repeated trouble reports received for the same trouble within a specified period (30 days).

Description:
Measures the percentage of repair reports that are repeated within 30 days. Includes USW network or system caused reports

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services (DS0, DS1, DS3, and LIS trunks) will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Trouble reports due to end user customer or CLEC action, end user or CLEC equipment failures, and/or customer education are excluded.

Indicator Number: MR-8
Category: Maintenance and Repair
Measure: Trouble Rate

Purpose:
To evaluate the overall rate of trouble reports as a percentage of the total installed base of the service or element.

Description:
Measures CLEC-specific trouble report rate of occurrences per 100 lines in service. Provided on a CLEC-specific basis, CLEC must have a minimum of 100 lines in service. Measures U S WEST network or system causes, excludes reports due to end user customer or CLEC action, end user or CLEC equipment failures, and/or customer education.

First results for this indicator for designed services (DS0, DS1, DS3, and LIS trunks) will be gathered for the month of April 1999, and will be reported in June 1999.

By June 1999, results for non-designed services (Residence POTS and Business POTS) will be disaggregated according to installations involving:

A. Dispatches within MSAs;
B. Dispatches outside MSAs; and
C. No dispatches.

By June 1999, results for designed services will be disaggregated according to installations:

A. In High Density areas; and
B. In Low Density areas.

Exclusions:

- Trouble reports found to be related to customer equipment, customer education, inside wire, and subsequent reports.

Exhibit B – PERFORMANCE MEASURES

Core Billing Indicators

Indicator Number: BI-1
Category: **Billing**
Measure: Mean Time to Provide USW Recorded Usage Records

Purpose:
To evaluate the timeliness with which USW provides recorded usage records to CLECs.

Description:
This measures the timing of USW delivery of billing records to CLECs.

Exclusions:
- None.

Indicator Number: BI-2
Category: **Billing**
Measure: **Mean Time to Deliver Invoices**

Purpose:
To evaluate the timeliness with which USW delivers EDI-formatted bills to CLECs.

Description:
This measures the number of days between the bill date and bill delivery. CLEC-specific and USW results available.

Exclusions:
- None.

Core Emergency Services/9-1-1. Directory Assistance & Operator Services Indicators

Indicator Number: ES-1
Category: **Emergency Services**
Measure: **ALI Data Base Updates Completed within 24 hours**

Purpose:
To evaluate the degree to which updates for the ALI database are transmitted for update within the prescribed interval (24 hours).

Description:
Measures the percentage of batch updates to the ALI Database accomplished within 24 hours of service order completion.

Exclusions:
- None.

Indicator Number: ES-2
Category: **Emergency Service**
Measure: **911/E911 ES Trunk Installation Interval**

Purpose:
To evaluate the timeliness of installation of emergency services trunks.

Description:
Measures the average time (in business days) between the application date and the completion date for the service ordered. Includes (inward) C, N, R, and T order types. Results for this indicator will be available for reporting by March 1999.

Exclusions:
- D, F, and X orders and orders with customer requested due date intervals.

Indicator Number: DA-1
Category: **Directory Assistance**
Measure: **Speed of Answer – Directory Assistance**

Purpose:
To evaluate timeliness of customer access to USW's Directory Assistance operators, focusing on how long it takes for calls to be answered.

Description:
Measures the average time following first ring when a call is first picked up by the (USW) agent to answer Directory Assistance calls. In order to receive individual CLEC results, the CLEC must make special trunking and workforce arrangements.

Exclusions:
- None.

Indicator Number: DA-2
Category: **Directory Assistance**
Measure: **Calls Answered within Ten Seconds – Directory Assistance**

Purpose:
To evaluate timeliness of customer access to USW's Directory Assistance Operators, focusing on the number of calls answered within ten seconds.

Description:
Measures the percent of Directory Assistance calls that are answered within ten seconds of the first ring by the (USW) agent. In order to receive individual CLEC results, the CLEC must make special trunking and workforce arrangements.

Exclusions:
- None.

Indicator Number: OS-1
Category: Operator Services
Measure: Speed of Answer – Operator Services

Purpose:
To evaluate timeliness of customer access to USW's operators, focusing on how long it takes for calls to be answered.

Description:
Measures the average time following first ring when a call is first picked up by the (USW) agent to answer Operator Assisted calls. In order to receive individual CLEC results, the CLEC must make special trunking and workforce arrangements.

Exclusions:
- None.

Indicator Number: OS-2
Category: Operator Services
Measure: Calls Answered within ten seconds – Operator Services

Purpose:
To evaluate timeliness of customer access to USW's operators, focusing on the number of calls answered within ten seconds.

Description:
Measures the percent of Operator Assisted calls answered within ten seconds of the first ring by the (USW) agent. In order to receive individual CLEC results, the CLEC must make special trunking and workforce arrangements.

Exclusions:
- None.

Core Network Interconnection Indicators

Indicator Number: NI-1
Category: Network Interconnection
Measure: Trunk Blocking – Interconnection Trunks

Purpose:
To evaluate factors affecting completion of calls from USW end offices to CLEC end offices, focusing on busy-hour blocking percentages in interconnection final trunks.

Description:
Measures the percentage of trunks blocking in interconnection final trunks, reported by:
NI-1A Interconnection (LIS) trunks to USW tandem offices;
NI-1B Interconnection (LIS) trunks to USW end offices.

Exclusions:
- Toll trunks, non-final trunks, dedicated trunks, and other trunks that are not connected to the public switched network.

Indicator Number: NI-2
Category: **Network Interconnection**
Measure: **Trunk Blocking – Local Interoffice ("Common") Trunks**

Purpose:
To evaluate factors affecting completion of calls from USW end offices to other USW end offices, focusing on busy-hour blocking percentages in local interoffice final trunks.

Description:
Measures the percentage of trunks blocking in local interoffice final trunks, reported by:
NI-2A Trunks connecting USW end offices to USW tandem offices;
NI-2B Trunks connecting USW end offices to other USW end offices.

Exclusions:
- Toll trunks, non-final trunks, dedicated trunks, and other trunks that are not connected to the public switched network.

Core Collocation Indicators

Indicator Number: CP-1
Category: **Collocation Provisioning**
Measure: **Installation Commitments Met**

Purpose:
To evaluate the extent to which USW completes collocation arrangements for CLECs as scheduled or promised.

Description:
Measures the percentage of collocation orders for which the committed due date is met.

Effective May 1999 this data will be disaggregated as follows:
A. Physical Collocation
B. Virtual Collocation

Exclusions:
- CLEC orders involving requests for due dates beyond the standard interval; CLEC-caused due date misses.

Indicator Number: CP-2
Category: **Collocation Provisioning**
Measure: **Installation Interval**

Purpose:
To evaluate the timeliness of USW's installation of collocation for CLECs, focusing on the average time to install channel terminations to collocation locations.

Description:
Measures the interval between the receipt of a deposit from the CLEC and the completion of the collocation installation in business days. The result is reported in average days.

Effective May 1999 this data will be disaggregated as follows:
A. Physical Channel Termination
B. Virtual Channel Termination

Exclusions:
- CLEC orders involving requests for due dates beyond the standard interval; CLEC-caused due date misses.

DIAGNOSTIC INDICATORS

Diagnostic Pre-order/Order Indicators

Indicator Number: DPO-1
Category: **Pre-Order/Order**
Measure: Electronic Flow-through of Local Service Requests (LSRs) to the Service Order Processor

Purpose:
To monitor the extent to which USW's processing of CLEC LSRs is completely electronic, focusing on the degree to which electronically-transmitted LSRs flow directly to the service order processor without human intervention or without manual retyping. To make available diagnostic information to help address potential issues that might be raised by the core performance indicators of commitments met and installation intervals.

Description:
Measures the percentage of all electronic LSRs that flow to the Service Order Processor (SOP) without rejection or error.

Results will be reported according to:
A. DPO-1A Orders that flow through without human intervention
B. DPO-1B Orders that flow though without manual retyping. (Results for DPO-1B will be available for reporting by May 1999 for designed services and by June 1999 for non-designed services.)

Exclusions:
- Rejected LSRs, non-electronic LSRs (e.g., via fax or courier).

Indicator Number: DPO-2
Category: **Pre-Order/Order**
Measure: LSR Rejection Notice Interval

Purpose:
To monitor the timeliness with which USW notifies CLECs that electronic LSRs have been rejected, to make available diagnostic information to help address potential issues that might be raised by the core pre-order/order performance indicators.

Description:
Measures the interval (in business days) between the receipt of an electronic Local Service Request (LSR) and the rejection of the LSR for standard categories of errors/reasons. Standard reasons for rejection include: missing/incomplete information; duplicate LSR; no valid contract; no valid end user verification; and miscellaneous CLEC data provisioning process errors. CLEC, USW, and state specific results are available. Included in the interval is time required for efforts by USW to work with the CLEC to avoid the necessity of rejecting the LSR.

Exclusions:
- Non-electronic LSRs.

Indicator Number: DPO-3
Category: **Pre-Order/Order**
Measure: LSRs Rejected

Purpose:
To monitor the extent to which electronic LSRs are rejected, as a percentage of all electronic LSRs to make available diagnostic information to help address potential issues that might be raised by the diagnostic indicator of LSR rejection notice intervals.

Description:
Measures the percentage of electronic LSRs rejected (returned to the CLEC) for standard categories of errors/reasons. Reasons for rejection include: missing/incomplete information; duplicate ASR/LSR; no valid contract; no valid end user verification; and miscellaneous CLEC data provisioning process errors.

Exclusions:
- Non-electronic LSRs.

Indicator Number: DPO-4
Category: **Pre-Order/Order**
Measure: Firm Order Confirmation (FOC) Interval

Purpose:
To monitor the timeliness with which U S WEST returns FOCs to CLECs, to make available diagnostic information to help address potential issues that might be raised by the core performance indicators of commitments met and installation intervals.

Description:
Measures the average time for USW to provide a Firm Order Confirmation (FOC) in response to a customer LSR received from the CLEC. The interval measured is the period between USW's receipt of the LSR and USW's response with a FOC.

Exclusions:
- None.

Diagnostic Ordering and Provisioning Indicators

Indicator Number: DOP-1
Category: **Ordering and Provisioning**
Measure: CLEC or CLEC's Customer-caused Installation Misses

Purpose:
To evaluate the extent to which installation misses were caused by CLEC or CLEC's Customer, to make available diagnostic information to help address potential issues that might be raised by the core performance indicators of commitments met and installation intervals.

Description:
Measures the percentage of installation commitments missed for CLEC or CLEC's customer's reasons. Orders issued with a due date are included. CLEC, and aggregate CLEC state specific results are available.

Exclusions:
- USW-caused misses (which are reflected in commitments met indicators), orders issued pending: Right of Way; facilities; or customer deposit are excluded.

Indicator Number: DOP-2
Category: **Ordering and Provisioning**
Measure: **Percent Delayed Orders Completed more than 15 days past the commitment date**

Purpose:
To evaluate the extent to which delayed order completions exceed a specified interval (15 days), to make available diagnostic information to help address potential issues that might be raised by the core performance indicators of delayed days.

Description:
Measures the percentage of orders for which service is delayed more than fifteen days beyond the original due date for reasons attributed to USW.

Exclusions:
- CLEC or CLEC's Customer-caused delays. Orders issued pending: Right of Way; facilities; or customer deposit are excluded.

Indicator Number: DOP-3
Category: **Ordering and Provisioning**
Measure: **Percent Delayed Orders Completed more than 90 days past the commitment date**

Purpose:
To evaluate the extent to which delayed order completions exceed a specified interval (90 days), to make available diagnostic information to help address potential issues that might be raised by the core performance indicators of delayed days.

Description:
Measures the percentage of orders for which service is delayed more than ninety days beyond the original due date for reasons attributed to USW.

Exclusions:
- CLEC or CLEC's Customer-caused delays, Orders issued pending: Right of Way; facilities; or customer deposit are excluded.

Indicator Number: DOP-4
Category: Ordering and Provisioning
Measure: CLEC or CLEC's Customer-caused Coordinated Cutover Misses.

Purpose:
To evaluate the extent to which coordinated cutover misses were caused by CLEC or CLEC's Customer, to make available diagnostic information to help address potential issues that might be raised by the core performance indicators of commitments met and installation intervals.

Description:
Measures the percentage of installation commitments missed for CLEC or CLEC's customer's reasons. Orders issued with a due date are included. CLEC, and aggregate CLEC state specific results are available.

Exclusions:
- Orders issued pending: Right of Way; facilities; or customer deposit are excluded.

Diagnostic Maintenance and Repair Indicator

Indicator Number: DMR-1
Category: Maintenance and Repair
Measure: CLEC or CLEC's Customer-caused Trouble Reports

Purpose:
To evaluate the extent to which trouble reports were caused by CLEC or CLEC's Customer, to make available diagnostic information to help address potential issues that might be raised by the core maintenance and repair performance indicators.

Description:
Measures the percentage of all trouble reports that occur due to CLEC or CLEC end user customer action. CLEC, USW, and state specific results are available.

Exclusions:
- Third party reports and reports assigned to outside causes (i.e.: non-USW pole damage).

Diagnostic Collocation Provisioning Indicators

Indicator Number: DCP-1
Category: **Collocation Provisioning**
Measure: **CLEC or CLEC's Customer-caused Collocation Misses**

Purpose:
To evaluate the extent to which collocation installation due date misses were caused by CLEC or CLEC's Customer, to make available diagnostic information to help address potential issues that might be raised by the core collocation provisioning performance indicators.

Description:
Measures the percentage of CLEC-caused installation commitment misses. Includes orders issued with a due date. CLEC, USW, and state specific results are available.

Results are provided as follows:
A. DCP-1A Physical Collocation
B. DCP1-B Virtual Collocation

Exclusions:
- Orders issued pending: Right of Way; facilities; or customer deposit.

Indicator Number: DCP-2
Category: **Collocation Provisioning**
Measure: **Average Collocation Feasibility Study Interval**

Purpose:
To evaluate the timeliness of the USW sub-process function of providing a collocation feasibility study to the CLEC, to make available diagnostic information for use in conjunction with the core collocation provisioning performance indicators.

Description:
Measures average interval to respond to Central Office collocation studies for feasibility of installation. CLEC, US WEST, and state specific results available.

Results are provided as follows:
A. DCP-2A Physical Collocation
B. DCP-2B Virtual Collocation

Exclusions:
- Studies delayed for customer reasons are excluded.

Indicator Number: DCP-3
Category: **Collocation Provisioning**
Measure: **Collocation Feasibility Study Commitments Met**

Purpose:
To evaluate the degree to which USW met its stated commitment in the sub-process function of providing a collocation feasibility study to the CLEC, to make available diagnostic information for use in conjunction with the core collocation provisioning performance indicators.

Description:
Measures the percentage of Central Office collocation studies for feasibility of installation that are completed within the allotted time frame for such studies. CLEC, US WEST, and state specific results available.

Results are provided as follows:
A. DCP-3A Physical Collocation
B. DCP-3B Virtual Collocation

Exclusions:
- Studies delayed for customer reasons are counted as met for company reasons.

Indicator Number: DCP-4
Category: **Collocation Provisioning**
Measure: **Average Collocation Quote Interval**

Purpose:
To evaluate the timeliness of the USW sub-process function of providing a collocation quote commitment to the CLEC, to make available diagnostic information for use in conjunction with the core collocation provisioning performance indicators.

Description:
Measures the average interval to respond to Central Office collocation studies with quote commitments.

Results are provided as follows:
A. DCP-4A Physical Collocation
B. DCP-4B Virtual Collocation

Exclusions:
- Quotes delayed for customer reasons are excluded.

Diagnostic Network Interconnection Indicators

Indicator Number: DNI-1
Category: **Network Interconnection**
Measure: **Provisioning Interval – USW Interoffice Trunks**

Purpose:
To monitor installation intervals of USW local interoffice trunks, to make available comparative diagnostic information for use in conjunction with core network interconnection performance indicators.

Description:
Measures the interval between the completion of a USW internal provisioning request for trunk augmentation/installation and completion of the installation. The result is reported as an average based on the number of days required to complete the request for service.

Note: By July 1999, results for this indicator will be first reported.

Exclusions:
- Toll trunks, non-final trunks, dedicated trunks, and other trunks that are not connected to the public switched network.

Indicator Number: DNI-2
Category: **Network Interconnection**
Measure: **Local Interconnection Final Trunk Group Utilization**

Purpose:
To monitor utilization levels on interconnection final trunks, to make available diagnostic information for use in conjunction with core network interconnection performance indicators.

Description:
Measures the interconnection trunks in use as a percentage of total interconnection trunks installed.

Exclusions:
- Toll trunks, non-final trunks, dedicated trunks, and other trunks that are not connected to the public switched network.

Exhibit B – PERFORMANCE MEASURES

Standard Service Groupings

Resale

- Residence POTS
- Business POTS
- Centrex
- ISDN
- Digital Switched Service (DSS)
- Direct Inward Dialing (DID)
- PBX Trunks
- DS0
- DS1
- DS3

Interconnection and Other Services

- Local Interconnection Trunks (LIS Trunks)
- Number Portability

Unbundled Network Elements

- Unbundled Loop:
- Analog (2-wire)
- Digital-capable (2-wire, 4-wire and other)
- Unbundled Dedicated Interoffice Transport (UDIT)
- Unbundled Switch

Types of Orders

C = Change in existing service or billing number.
D = Total disconnect of service.
F = From the outward service associated with a transfer (To or "T") of service from one address to another.
N = New connection for service.
R = Record order; record change only. (For Resale services, service migrations without changes for non- designed services are record orders.)
T = To or transfer of service from one address to another.
X = USW initiated internal work order

Exhibit C – MEDIA FOR BILLING OUTPUTS AND REPORTS

Media Type Outputs/Report. The following table is a list of Media Types that are available to receive billing outputs and reports. Additional information about technical requirements to support this media can be provided by the account manager. See Section 12 of this SGAT.

Report Name	Source	Transmission method/Media Type
CRIS Summary Bill	CRIS Billing	Western Region: • Paper • EDI via NDM (direct or dial up) • EDI via Value Added Network (VAN) • Tape Central Region: • Paper • EDI via NDM (direct or dial up) • EDI via Value Added Network (VAN) Eastern Region: • Paper • EDI via NDM (direct or dial up) • EDI via Value Added Network (VAN)
IABS Summary Bill	IABS	• Paper
IABS Sub Account Bill Detail	IABS	• Paper detail • Abbreviated Paper Bill • Bellcore's Billing Output Specifications (BOS) format on mag tape • BOS format NDM • BOS format on diskette
Loss Report	Service Order Extract	• CONNECT: Direct (NDM) • FTP • Paper • Electronic Fax
Completion Report	Service Order Extract	• CONNECT: Direct (NDM) • FTP Paper • Electronic Fax

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238 AFFIDAVIT OF WAYNE G. ALLCOTT**
STATE OF ARIZONA	)	
	:	**SS**
COUNTY OF MARICOPA	)	

Wayne G. Allcott, of lawful age being first duly sworn, deposes and states:

1. My name is Wayne G. Allcott. I am the Arizona Vice President of U S WEST Communications in Phoenix, Arizona.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibits are true and correct to the best of my knowledge and belief.

Wayne G. Allcott

SUBSCRIBED AND SWORN to before me this 17th day of March, 1999.

Josie Maldonado
Notary Public

My Commission Expires:

9-21-00

OFFICIAL SEAL
Josie Maldonado
Notary Public-Arizona
Maricopa County
My Commission Expires: 9-21-00

AFFIDAVIT OF HARRIS

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

DR. ROBERT G. HARRIS

U S WEST COMMUNICATIONS

MARCH 25, 1999

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I. INTRODUCTION

A. Qualifications

My name is Robert G. Harris. I am a Principal at LECG, Inc., and Professor Emeritus of Business and Public Policy at the Haas School of Business, University of California, Berkeley. My business address is 2000 Powell Street, Suite 600, Emeryville, CA 94608. I earned Bachelor of Arts and Master of Arts degrees in Social Science from Michigan State University and Master of Arts and Doctor of Philosophy degrees in Economics from the University of California, Berkeley. I have taught courses at the undergraduate, MBA and Ph.D. levels, in antitrust and economic regulation, managerial economics, business and public policy, competitive strategy, transportation, corporate governance, and telecommunications. For several years, I taught a course on telecommunications economics and public policy to the staff of the California Public Utilities Commission. I have also taught competitive strategy and telecommunications in executive education programs for business managers and public officials from the United States at UC Berkeley and the University of Southern California, and abroad.

My academic research has analyzed the effects of economic regulation and antitrust policy on industry performance, and the implication of changing economics and technology for public policies in transportation and telecommunications. I have published many academic articles on antitrust policy, regulatory policy, telecommunications policy, technological innovation, the economics of telecommunications and transportation, and the development of competition and

1 interconnection policies in local access and exchange services. Over the past decade,
2 I have testified before the relevant committees of the House of Representatives and
3 U.S. Senate on proposed legislation, and before the Federal Communications
4 Commission and state regulatory commissions around the country on key
5 telecommunications issues such as incentive regulation, rate design, costing and
6 pricing principals, and competition policy. My professional qualifications are detailed in
7 my curriculum vitae, which is attached as Exhibit RGH-1.

8 ***B. Purpose and Organization of Testimony***

9 This testimony is submitted on behalf of U S WEST in support of its Section 271
10 application filing in Arizona. I provide an economic assessment of three areas
11 associated with U S WEST's entry into long distance: competition, public interest, and
12 regulatory safeguards. I conclude that (1) U S WEST's local exchange markets in
13 Arizona are open to competitive entry; (2) allowing U S WEST to provide interLATA
14 services is in the public interest; and (3) U S WEST does not have the ability or
15 incentive to harm competition if allowed to participate in both local and interLATA
16 markets.

17 U S WEST is filing this application to enter the long distance market under Section 271
18 of the Telecommunications Act of 1996. The primary objective of the Act is to open <u>all</u>
19 telecommunications markets to competition so that consumers can reap the benefits of
20 increased competition across the range of telecommunications services. Promoting
21 competition in all telecommunications services will generate significant benefits by

increasing consumer choices, stimulating investment in Arizona's information infrastructure, and providing incentives for innovation and new services.

A primary focus of the Act is to create and enhance competition in local and long distance telecommunications markets. Regional Bell Operating Companies (RBOCs), such as U S WEST, must meet terms and conditions for local interconnection and checklist requirements to ensure that local exchange markets are open to competition before they are allowed to enter the long distance market. With this approach, Congress seeks to place all competitors on the same field of play and promote the cross-entry of local exchange carriers into long distance and other carriers into the local exchange. Cross-entry is expected to provide consumers with multiple sources for a wide range of services and the convenience of this kind of "one-stop shopping." Cross-entry is also expected to allow service providers to take advantage of marketing economies of scale and scope when entering new markets and translate these economies into lower, quality-adjusted prices for consumers. As the Senate Conference Report states, the intent of the Act is "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."[1]

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[1] Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 1 (1996).

1 State commissions play a key role in the review and approval of a 271 application.
2 They ensure that terms and conditions negotiated or determined through arbitration
3 comply with the standards of the Act.[2] This role is necessary for successfully promoting
4 competition through efficient entry into local exchange markets. Moreover, the Act
5 specifies that the FCC must consult with the appropriate state commission to verify that
6 the RBOC complies with the competition requirements of Section 271.[3] Thus, state
7 commissions are active participants in the evaluation of competitive conditions within
8 the state. It is clear from these responsibilities that Congress intended issues
9 associated with competitive local exchange entry to be evaluated on a state-specific
10 basis.

11 The following testimony is organized into four sections. In Section II, I provide an
12 economic assessment of local exchange competition. This assessment shows that
13 local exchange markets in Arizona are open to competition today and will remain open.
14 Section III analyzes the expected benefits to consumers in Arizona when U S WEST
15 enters as a long distance competitor. Arizona consumers will benefit from additional
16 competition in long distance service and the ability to purchase integrated services. In
17 addition, U S WEST entry into long distance will accelerate competition by other
18 competitors, such as long distance companies, in local exchange markets. In Section

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[2] This was affirmed by the Eighth Circuit District Court, which stated that state commissions have the authority to "determine prices an incumbent LEC may charge for fulfilling its duties under the Act." See, *Iowa Utilities Board v. FCC,* 120 F.3d 791, 793-96 (8th Cir 1997).

[3] 47 U.S.C. §271(d)(2)(B).

IV, I address concerns that U S WEST's entry into long distance services could harm competition. I explain that current regulations and growing competition provide strong safeguards against any potential anticompetitive behavior. I also provide several examples of situations where an incumbent local exchange carrier (ILEC) theoretically had an opportunity to leverage its position in local exchange and access into related markets, showing in each case, that there is no evidence of anticompetitive behavior by the incumbent. Section V provides a brief summary of my findings.

C. Executive Summary

This Affidavit is submitted on behalf of U S WEST in support of its Section 271 application filing in Arizona. I provide an economic assessment of three areas associated with U S WEST's entry into long distance: competition in local exchange markets, the impact on the public interest of U S WEST's entry into Arizona's interLATA markets, and regulatory and competitive safeguards in access markets. I conclude that (1) U S WEST's local exchange markets in Arizona are open to competitive entry; (2) allowing U S WEST to provide interLATA services is in the public interest; and (3) U S WEST does not have the ability or incentive to harm competition if allowed to participate in both local and interLATA markets.

In Section II, I provide an economic assessment of local exchange competition. The appropriate criterion for assessing competition for a Section 271 filing is whether local exchange markets are <u>open to</u> competition. This means that avenues must exist for competitors to enter and exit in response to changing market conditions; it does not

1 necessarily mean that competitors will enter. In Arizona there is strong empirical
2 evidence that entry into local markets has occurred and is accelerating via a large
3 number of strategies and technologies resulting in U S WEST having lost more than
4 35,000 access lines to resale and facilities-based competitors.[4] The competitors in
5 Arizona have demonstrated the openness of all three avenues envisioned by the Act,
6 by successfully competing through resale, the purchase of unbundled loops, and many
7 types of facilities-based bypass: traditional wireline CAP-CLECs (MCI-World Com,
8 AT&T-TCG, e*spire, ELI, GST) fixed wireless CLECs (Winstar, Teligent, ART), cable
9 network upgrades (Cox Communications), mobile wireless networks, private networks
10 (VSATs, PBXs) and shared tenant service providers in commercial buildings and
11 multiple dwelling units. Competitors in Arizona have demonstrated that there are viable
12 ways to enter local exchange markets in Arizona and that U S WEST's markets are
13 open to competition.

14 Section III analyzes the expected benefits to consumers in Arizona when U S WEST
15 enters as a long distance competitor. Arizona consumers will benefit from additional
16 competition in long distance service and the ability to purchase integrated service
17 packages. U S WEST's entry into interLATA services will generate significant benefits
18 to Arizona consumers emanating from four main factors. First, the interLATA market
19 currently is not fully competitive. For example, the three large IXC's currently control 89

---

[4] As explained in my affidavit text, this number understates U S WEST's competitive loss for several reasons. It

1 percent of Arizona's intrastate residential long distance market. Moreover, the IXC's
2 failure to reduce their rates in proportion to the large decreases in the access charges
3 demonstrates that the market is far from perfectly competitive. Second, U S WEST is
4 prepared to offer competitively priced packages of a wide range of telecommunications
5 services to a broad group of Arizona consumers. Because U S WEST offers ubiquitous
6 local service throughout much of Arizona, the provider can offer the benefits of
7 packaged services to a broad range of customers, especially the residential, rural, and
8 small business customers who are often ignored by the IXCs and other competitors.
9 Third, U S WEST will be an efficient and effective competitor in interLATA services
10 markets. With strong brand recognition and the ability to take advantage of economies
11 of scale and scope in marketing, U S WEST is in a position to provide meaningful,
12 additional competition in Arizona's long distance market. Finally, U S WEST's entry into
13 interLATA services will accelerate competitive entry in local markets. Experience has
14 shown, particularly in Connecticut, that the IXCs have little interest in providing local
15 services to a broad range consumers unless they are at risk of losing existing long
16 distance customers. U S WEST's entry, into Arizona's long distance market, will force
17 the major IXCs to quickly expand their local service offerings in order to protect their
18 long distance business.

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does not consider the fact that U S WEST has lost higher than average revenue and profit access lines. It excludes losses to mobile wireless networks, cable modems and private networks with VSATs and PBXs.

1 In Section IV, I address concerns that U S WEST's entry into long distance services
2 could harm competition through predatory pricing, access discrimination or cost shifting
3 by U S WEST. I explain that current regulations, including the threat of antitrust policy
4 and the rules in Section 271 of the Telecommunications Act, along with growing
5 competition, all provide strong safeguards against any potential anticompetitive
6 behavior. I also provide several examples of situations where an incumbent local
7 exchange carrier (ILEC) theoretically had an opportunity to leverage its position in local
8 exchange and access to related markets, showing in each case, that there is no
9 evidence of anticompetitive behavior by the incumbent. For example, U S WEST's
10 behavior in the intraLATA toll and wireless markets, which have the same kind of
11 vertical relationship to access services as interLATA service, show no signs of
12 discrimination, cross-subsidies or other anticompetitive conduct. Additionally, GTE and
13 Sprint both provide interLATA services as well as operate incumbent local exchange
14 carriers without anticompetitive effect. The combination of competition in access
15 services and regulatory oversight has prevented vertical leveraging. For the same
16 reasons – access competition plus regulatory safeguards – there will be no
17 discrimination or anticompetitive conduct if U S WEST is allowed to offer interLATA
18 services.

19 In conclusion, I recommend that the Arizona Public Service Commission support
20 U S WEST's request to enter the interexchange market. U S WEST's entry into the
21 long distance market is an important step toward promoting competition in all

1 telecommunications markets and will bring the benefits of a wider range of

2 communications and information services to the consumers and businesses of Arizona.

II. U S WEST'S MARKETS ARE OPEN TO COMPETITION IN ARIZONA

A. The Role of Competition in Assessing Openness

The appropriate criterion for assessing competition for a Section 271 filing is whether local exchange markets are open to competition. This means that avenues must exist for competitors to enter and exit in response to changing market conditions; it does not necessarily mean that competitors will enter. The distinction between open to entry and actual entry is important because once it is established that local exchange markets are open, regardless of the extent of actual entry, granting interLATA relief will pave the way for full competition across both local and long distance markets as cross-entry occurs. Delaying interLATA entry would serve only to delay the benefits of full competition to consumers.

The criterion that stresses that markets be open to competition is consistent with the views of key decision-makers at the FCC and Department of Justice (DOJ). As Mr. William Kennard, Chairman of the FCC states,

> The law makes clear that the door to competition must be open, and Section 271 approval can be granted regardless of whether competitors have walked through the open door.[5]

Similarly, in the words of Mr. Joel Klein, Assistant Attorney General of the Antitrust Division of the DOJ:

> [I]f the local market is irreversibly opened, but the long distance companies have not entered – for whatever reason – then the Act properly contemplates that the Bell Companies should be allowed into long distance, both to give consumers the benefit of at least one provider who can offer one-stop shopping as well as to pressure the long distance companies to enter the local market in order to match the one-stop shopping options offered by the local Bell.[6]

Thus, an assessment of local competition for the purposes of a 271 evaluation must focus on the dynamics of competitive entry. Empirical evidence of competition is important largely for its demonstrative effect. In Arizona, competitors are entering local exchange markets through a number of different facilities-based and retail avenues. The existence of one or more successful competitors for any given entry path demonstrates that that path is open to competition.

B. Demonstration that U S WEST's Local Exchange Markets in Arizona are Open to Competition

There is considerable and increasing competitive local entry in Arizona. To date, new entrants have captured over 35,000 access lines in U S WEST's Arizona markets, up from less than 8,300 a year ago.[7] (See Figure 1)

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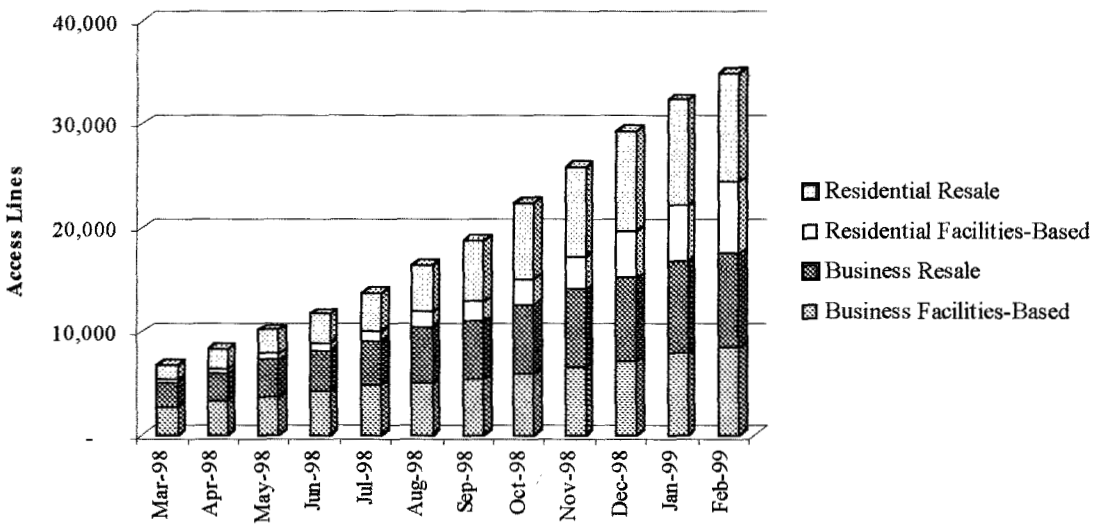
5 Remarks by William E. Kennard Chairman Federal Communications Commission to Legg Mason, "Telecom Investment Precursors," Washington DC, March 12, 1998.

6 Remarks of Joel Klein, Assistant Attorney General Antitrust Division Department of Justice, before the Senate Judiciary Committee, Antitrust, Business Rights and Competition Subcommittee, March 4, 1998.

7 U S WEST Internal Data.

Figure 1
U S WEST Competitive Loss in Arizona



Source:U S WEST Internal Data

The data on facilities-based business access lines in Figure 1, which include complete bypass and unbundled loops, were based on U S WEST's disconnect service orders and data on business resale access lines were taken from U S WEST's billing databases.[8] The residential access lines in Figure 1, both facilities-based and resale, were based on the residential main line white pages listings. Note that from an economic perspective, the competitive loss data in Figure 1 are highly conservative and understate the size and impact of U S WEST's losses for three main reasons. First, not

[8] In U S WEST's billing data, several resale accounts were incorrectly classified as "retail" prior to 1998. In December 1998, these lines were reclassified as resale. In order to adjust for the error in classification, I estimated the number of misclassified lines prior to December 1998 on a monthly basis and added them back into the original resale data.

all lines served by competitors were captured.[9] Second, by using access line counts, U S WEST's competitive loss data does not capture the effect of high revenue concentrations. U S WEST loses a higher proportion of revenues than access lines because revenues tend to be concentrated in a relatively small number of access lines. Profits are even more concentrated than revenues because high revenue lines tend to be located in higher density areas and, therefore, cost less to serve. These high profit access lines are the ones most likely to switch to competitors. For this reason, any market share, revenue or profit analysis based on access lines, such as Figure 1, will underestimate U S WEST's competitive losses.

Third, these line loss figures also do not account for the lines and revenues U S WEST has lost to certain other competing technologies such as private networks constructed with PBXs (an estimated loss of more than 600,000 access lines in Arizona), VSATs (an estimated loss of between 2,000 and 12,000 access lines in Arizona), or microwave transmission stations (See Exhibit RGH-2 for more details). Additionally, conservative forecasts predict that U S WEST will have lost more than 25,000 access lines by 1999 to mobile wireless competitors.[10] (See Exhibit RGH-3 for more details). These line

---

[9] Facilities-based business losses are identified based on service disconnection orders. If disconnecting customers declined to list the reason for disconnecting or listed a different reason than "switching to competitor" these losses might not be counted. Also, new business lines which were never served by U S WEST are likely to be undercounted.

[10] Based on year-end number of access lines in 1997 and TFI's forecast of 1% and 2% of total access line loss in 1999 and 2000 respectively, due to wireless competition. See *1997 Statistics of Communications Common Carriers*, FCC, November 1998, Table 2.3. See also Lawrence K. Vanston

losses to mobile wireless services are also not included in Figure 1. Finally, Figure 1 does not include the loss of access line and DSL sales to Cox's cable modem services.

Despite its limitations, the competitive loss summarized in Figure 1 is attributable to a large and diverse group of competitors including: traditional CLECs, long distance companies, cable companies, fixed wireless companies, and resellers. This diversity and the absolute size and growth curve of the loss demonstrates that numerous entry paths are open and economically viable. Different competitors have chosen different paths according to their distinct assets and competitive strengths. For example, Cox entered by upgrading its cable network, while XXX is using a combination of unbundled loops and its own fiber optic networks to provide local services.

The following section describes various entry paths and how they are being used by local service competitors. From an economic perspective, the existence of many successful competitors entering through multiple paths demonstrates that U S WEST's local markets in Arizona are currently open and will remain open. Specifically, competitors are successfully: (1) raising the capital necessary to compete in local service, (2) building and operating competitive networks, (3) interconnecting with U S WEST, (4) reselling U S WEST's local services and leasing U S WEST's unbundled loops, and (5) selling their services and signing up customers.

& Ray L. Hodges, "Wireless vs. Wireline for Voice Services: Forecasts and Impacts," *Technology Futures Inc.,* Third Edition, July 1998, Exhibit 3.10, p.28. (Hereinafter, "Vanston").

1. Entry Via Fiber Optic Network Buildout

Before passage of the Telecommunications Act, many competitive access providers (CAPs) had built fiber optic networks in cities around the country including Phoenix and Tucson. In many cases, these CAPs provided business customers with direct access to long distance carriers, allowing them to bypass the access charges imposed by the incumbent local exchange carrier. With networks already in place, the CAPs were ideally positioned from the beginning to take advantage of new opportunities created by the Act to expand into local exchange service markets and become competitive local service providers (CLECs). Although CAP networks usually cover relatively small geographic areas, they are located in dense business corridors and have access to a large percentage of an ILEC's high volume, low cost customers.

CAPs have employed multiple strategies for becoming local exchange providers. Most have expanded their networks and added switching capability to support local services. Some are connecting customers to their networks directly with fiber optic cable or wireless transmission. Others are leasing unbundled loops from the ILECs. All are collocating in the largest central offices to interconnect with ILECs and are thus gaining access to the customers served through those offices.

In mid-1997, several CAPs began providing competitive local exchange service in Arizona. To date, seven traditional wireline CAP-CLECs have entered Arizona's local

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Futures Inc., Third Edition, July 1998, Exhibit 3.10, p.28. (Hereinafter, "Vanston").

1 exchange markets.[11] These CAP-CLECs operate seven networks in Arizona (four in
2 Phoenix and three in Tucson) with at least 13 operating central office voice switches
3 installed.[12] Their operations are summarized in Figure 2.[13] For more detailed
4 information on the networks, business strategies and service offerings of these
5 companies see Exhibit RGH-4.

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[11] Subsequently, three of these CLECs, MCI Metro, Brooks Fiber, and MFS, have been acquired by WorldCom and now operate as one company.

[12] According to the LERG database, these five CAP-CLECs plus Cox Communications, Geotek Communications, Mountain Telecommunications, WinStar Telecommunications, and Westlink, have installed a total of 23 switches in the Phoenix and Tucson MSAs. According to U S WEST Internal Data, 13 of these switches have interconnection trunks with U S WEST. See Exhibits WGA-1, WGA-2 and WGA-3 for maps of these switch locations.

[13] Maps of CLEC networks in Phoenix and Tucson are shown in Affidavit of Wayne G. Allcott, Exhibits WGA-4 and WGA-5.

Figure 2

Wireline CAP-CLECs Operating in Arizona

Company Name (network name)	**Phoenix**	**Tucson**
AT&T (TCG)	TCG has a 280-mile network with 11 SONET rings connecting 180 downtown buildings; with about 300 customers; voice switch installed.	
MCI WorldCom (MCI Metro, MFS And Brooks Fiber)	MCI Metro has a limited 20-40 mile network covering downtown Phoenix. MFS has a 95-mile network connecting 70-100 buildings. Voice switch installed.	Brooks has a 74-mile SONET network; connected to over 40 buildings; voice switch installed.
GST	GST has a 29-mile network; $11 million invested; 15-25 buildings on-net; voice switch.	GST has a 41.6-mile network; 2 switches installed – one data one voice switch; 200-mile long haul fiber linking Phoenix and Tucson networks; $13 million invested.
ELI	ELI has a 550-mile network with fiber obtained from electric utility - SRP; switch installed; 30-45 buildings on-net; $37 million invested; voice switch installed.	
e*spire		e*spire has 109-mile network; with voice switch installed.

See Exhibit RGH-4 for Sources.

By targeting Phoenix and Tucson, these CLECs have direct access to the majority of U S WEST's customers and revenue, either through their own facilities or via U S WEST. By collocating in a U S WEST central office and leasing unbundled loops, a CLEC could offer service to every customer connected to that office. Currently CLECs in Arizona are leasing a total of 1,546 unbundled loops and have completed 127

1 collocation arrangements in 33 of U S WEST's wire centers.[14] While that represents
2 only a quarter of all U S WEST Arizona wire centers, these collocation arrangements
3 give CLECs access to almost three-quarters of U S WEST's Arizona business lines and
4 over half of all U S WEST Arizona residential lines.[15]

5 The CAP-CLECs are responsible for the majority of U S WEST's facilities-based
6 business losses in Arizona, which so far total over 1,300 customers and 8,400 access
7 lines in Phoenix and Tucson, including some of the largest business customers.[16] For
8 example, TCG provides services to Motorola's North American Telecom Group and
9 Phoenix's Crown Plaza Hotel. GST is providing telecommunications services to Intuit
10 Inc., in Tucson,[17] and to Coldwell Banker and GE Capital in Phoenix.[18] ELI's customers
11 include Insight Enterprises, CyberHighway, Arizona and OrthoLogic Corp,[19] and the
12 Murphy School District.[20]

13 The economic viability of the CAP-CLECs is further demonstrated by their success in
14 the capital markets. Together the five competitors mentioned in Figure 2 have raised

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[14] Unbundled loop data from the Affidavit of Wayne G. Allcott, Exhibit WGA-8. Collocation statistics from U S WEST Internal Data. See Exhibits WGA 1, WGA-2 and WGA-3 in Affidavit of Wayne G. Allcott for maps of U S WEST's wirecenters with collocation in Phoenix, Tucson and other parts of Arizona.

[15] U S WEST Internal Data.

[16] U S WEST Internal Data. See also the Affidavit of Wayne G. Allcott, Exhibit WGA-8.

[17] GST provides inbound calling services to Intuit Inc.'s technical support line. "GST Lands Major Software Operation As Customer in Arizona," *CLEC News*, February 2, 1998.

[18] Conversation with sales representative, March 5, 1999.

[19] "Speeding Business Access; Washington Firm Piggybacks on SRP Fiber-Optic Network," *Arizona Business Gazette*, June 4, 1998.

1 hundreds of millions of dollars from investors who implicitly believed it would be
2 profitable for the CLECs to enter local exchange markets. The current market
3 capitalization of these companies today provides additional evidence of the confidence
4 of investors that local markets are open to competition. As of year-end 1998, investors
5 valued these companies at over $265 billion.[21] This high valuation reflects the
6 investment community's view that these companies will be successful in selling their
7 services, including local services.

8 2. Entry Via Cable Networks

9 Upgrading cable networks is another method for entering local exchange markets that
10 is open to competitors in Arizona. Cox Communications is the cable service provider in
11 much of the Phoenix and Tucson Metropolitan Statistical Areas (MSAs). Its cable
12 network passes 1.1 million homes in Phoenix, and 250,000 in Tucson.[22] In September
13 1998, Cox began providing local exchange service in Chandler, Arizona, initially to
14 customers in multiple dwelling units (MDUs) such as apartment buildings and
15 condominiums (see discussion of the MDU market below). Cox has since expanded its
16 service offering to single family homes. By the end of the year, Cox expects to make its
17 digital phone service available to 200,000 homes in parts of Phoenix and Mesa, and

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20 "Telephone Service To Lease SRP Network," *The Arizona Republic*, June 18, 1997.
21 Market capitalization data provided by CompuStat.
22 "Cox's 4th Quarter 1998 Financial Results," *Cox*. <www.cox.com>

1 high-speed Internet service available to 550,000.[23] Cox plans to complete the more
2 than $300 million upgrade of its Phoenix network so that it can offer local telephone
3 service, as well as high-speed Internet access, to all its customers in its Phoenix
4 service area by 2002.[24]

5 Three years ago, it was unclear if cable companies could economically upgrade their
6 networks to provide two-way telephony. Today, cable operators, equipment vendors
7 and market analysts are optimistic about cable telephony and encouraged by the
8 successful deployment and penetration rates of circuit-switched cable telephony
9 systems. Chuck McElroy, Residential Broadband Services VP at Cox, was recently
10 quoted as saying, "We're bullish on telephony...we think it's a good business to be in."[25]
11 According to the industry journal, *Telephony,*

12 Those operations that have bucked the industry trend and continued on their
13 path toward voice deployments – namely Cablevision Systems, Cox
14 Communications and MediaOne – are being rewarded with returns that are
15 '*absolutely blowing away all the spreadsheet assumptions,*' according to one
16 vendor... The success that people are seeing in terms of penetration rates *is*
17 *phenomenal.*[26] [emphasis added]

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[23] Rebecca Rolwing, "Cox Communications Expands Phone Service in Phoenix Area," *The Arizona Republic,* January 11, 1999. See also Max Jarman, "Business News," *The Arizona Republic,* March 2, 1999. (Hereinafter, "Jarman Article.")

[24] "Cox Communications' Fiber-Optic Upgrade FAQs," *Cox.* <www.phx.cox.com> See also Jarman Article.

[25] Jim Barthold, "Cable Telephony Alive and Well and Growing," *Cable World*, March 31, 1998.

[26] Vince Vittore, "Rebirth of Cable Telephony," *Telephony*, July 6, 1998.

1 Cox has stated that it needs only 9 percent penetration to be profitable.[27] In parts of
2 Orange County, Cox achieved 20 percent penetration in just six months of offering
3 service.[28] Cox's success is largely a result of competitively priced attractive service
4 offerings, including cable TV, local service, discounted long distance service and high
5 speed Internet access. In Arizona, Cox is offering basic residential service, as well as
6 packages including enhanced features such as call waiting and Caller ID, at prices 10
7 percent below U S WEST.[29] Cox offers second line service for half the price of a
8 second line from U S WEST.[30] Furthermore, Cox offers 10¢ per minute long distance
9 and high-speed Internet access via cable modem.

10 As a result, Cox has been extremely successful in the six months that it has been
11 competing for residential local exchange customers in Chandler. Including both MDUs
12 and single-family homes, Cox is already serving XXX customers in Phoenix, achieving
13 almost a XXX percent penetration rate in the 60,000 residences in the area to which it
14 offers service.[31] In addition, Cox's penetration rate in terms of total access lines in the
15 area is likely much higher since Cox sells an average of 1.7 access lines per customer

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27 "Cox Expands Local and Long Distance to East County, CA and Chandler, AZ," *Cable Carrier News,* September 17, 1998. <www.catv.org>

28 "Cox Achieving Near 20% Penetration," *CATV Archives,* April 20, 1998.

29 "Phoenix: Cox Digital Telephone," *Cox.* <www.phx.cox.com> See also, "Products and Services Catalog," *U S WEST.* <www.uswest.com>

30 "Cox Expands Local and Long Distance to East County, CA and Chandler, AZ."

31 According to U S WEST data, as of March 1, 1999, Cox was serving 5,870 [[Proprietary]] U S WEST customers in Arizona. At that time, Cox had service available to 60,000 homes in Phoenix. See, "U S WEST Goes With Net TV; Latest Volley in Telecom War With Cox," *The Arizona Republic,* March 2, 1999.

1 account in other markets in which it provides local exchange service, such as Orange
2 County.[32]

3 Figure 3 below shows U S WEST's residential access lines lost to facilities based
4 competitors. Given that Cox currently accounts for an estimated XXX percent of all of
5 U S WEST's facilities-based residential losses this figure illustrates just how successful
6 Cox has been in competing for these customers.[33] Cox's success in Phoenix
7 demonstrates that local exchange entry via cable is open and is a viable entry
8 strategy.[34]

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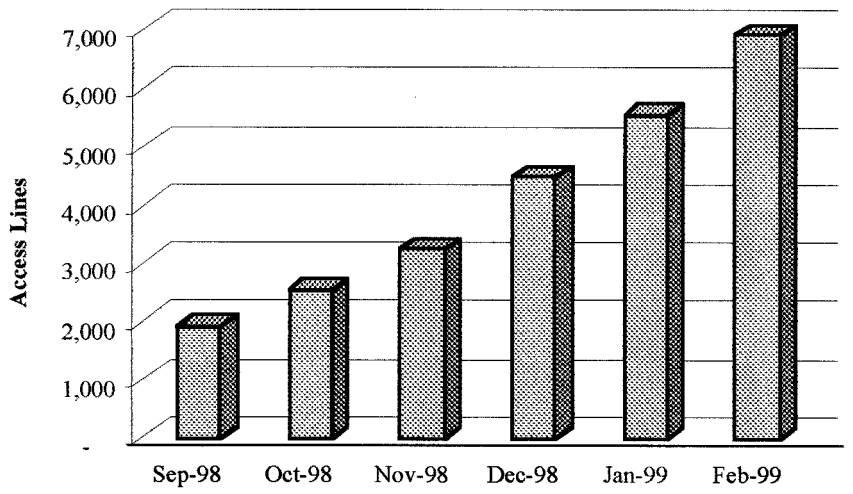
32 "Cox Expands Local & Long Distance to East County, CA and Chandler, AZ."

33 U S WEST Internal Data. Both GST and Mountain Telecom are also providing local exchange service to residential customers over their own facilities. [[Proprietary]]

34 While TCI is not a major cable supplier in Arizona, AT&T's recent purchase of TCI for $48 billion and plans to spend another $1.8 billion upgrading its cable systems to provide telephony is a further endorsement of the viability of cable entry into local exchange markets. Paula Bernier, Ken Branson, "IP Telephony Key to AT&T/TCI Plan," *Sounding Board Magazine,* July 1, 1998.

Figure 3
U S WEST Residential Facilities-Based Competitive Loss[35] in Phoenix



Source: U S WEST Internal Data

Cox's cable modem service (Cox@Home) is also a formidable competitor to U S WEST, competing directly for second lines (and digital subscriber line (DSL) and integrated services digital network (ISDN) services) used for Internet access.[36] Using a cable modem to access the Internet is much faster than dial-up connections, and in some instances, more economical as well.[37] In Phoenix, Cox charges $29.95 per

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35 Access line losses are estimated as customer account losses times U S WEST's average of 1.17 access lines per customer in Arizona. Reported losses in this figure are all full bypass because there were no competitors using unbundled loops to serve residential customers in Phoenix. Losses include customers who ported their numbers and customers who did not.

36 According to a Cox representative, there has been such a high demand for cable modem service in the Phoenix area, that there is a waiting period of a few weeks before a subscriber is connected. Conversation with Cox Phoenix representative, March 5, 1999.

37 The fastest dial-up modem available is 56 kbps; DSL speeds range from 384 kbps to 1.5 mbps; cable modem speeds range from 1.5 to 3 mbps. For a comparison of rates among different data services

1 month for its Cox@Home cable modem services to customers who currently have Cox
2 cable service, and $39.95 to non-Cox cable subscribers.[38] U S WEST offers bandwidth
3 ranges from 256 kbps for $40 per month under the MegaLine option, to 7mbps
4 downstream/1mbps upstream for $875 per month under the MegaBit option.[39]

5 In the Phoenix metropolitan area, Cox cable modem service is available in a growing
6 number of neighborhoods and should be available to Cox's entire service area by
7 2002.[40] Cox plans to offer cable modem service in Tucson starting next year, when
8 upgrades to the cable system acquired from TCI are completed.[41] Cable modems are
9 an important competitor to U S WEST's local exchange services.

10 3. Entry Into MDUs

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see David Einstein, "Balance Speed, Cost When Choosing Your Net Connection," *The Gate,* October 27, 1998. <www.sfgate.com>

38 These rates are with purchase of the cable modem for $399. With modem rental, cable modem monthly service rates increase by $15 to both customers. There is also a one-time installation charge of $149.95 assessed, but this is significantly discounted from the retail value of $406.95. ("Cox@Home Pricing," *Cox.* <www.ph.cox.com>)

39 Prices exclude the one-time installation fee and modem. "MegaBit Services – FAQs," *U S WEST,* downloaded March 10, 1999. <www.uswest.com> U S WEST also offers ISDN services.

40 The service is currently available in Chandler, East and South Phoenix, Ahwatukee, Paradise Valley, West Mesa; and in the neighborhoods of Wyndhaven in East Mesa, Grayhawk and Gainey Ranch in Scottsdale, and San Palmilla in Tempe. (See "Cox@Home Availability," *Cox.* <www.ph.cox.com>). The service should be available to 550,000 homes by the end of this year. (See Rebecca Rolwing, "Cox Communications Expands Phone Service in Phoenix Area," *The Arizona Republic,* January 11, 1999. See also Max Jarman, "Business News," *The Arizona Republic,* March 2, 1999).

41 Conversation with Cox representative in Tucson, March 5, 1999.

Cox acquired cable systems from TCIC in Tucson, Sierra Vista, and portions of Pima County in June 1998. At the time, the three systems served about 115,000 customers. ("Cox Completes Purchase of TCIC Systems in Tucson and Sierra Vista, Ariz." *Cox Press Release,* June 16, 1998. <www.cox.com>)

1 Because of the economies of density in telecommunications services, one of the first
2 groups of residential customers to have competitive facilities-based alternatives in
3 Arizona are those living in MDUs. The high revenue concentration relative to the cost
4 of network construction in these buildings results in profitable opportunities for
5 competitors. Competitors are targeting both existing and new complexes for entry and
6 using both complete bypass of U S WEST's network and shared tenant services.

7 Competitors are making particularly quick in-roads in new complexes because they can
8 inexpensively construct their networks, including inside wiring, while the complex is
9 under construction. Entry in new buildings is also facilitated by the ability of competitors
10 to offer financial inducements and contracts to developers, owners, and managers of
11 these buildings before they have signed up for U S WEST service.

12 Over the last decade Arizona has seen a remarkable amount of construction in both
13 housing developments and business complexes. A comparison of overall residential
14 construction completed in the United States reveals that both Phoenix and Tucson have
15 experienced substantially more growth in residential construction than the United States
16 as a whole. Figure 4 represents the total number of housing units in 1990 and 1997, as
17 well as the growth rate over that period. Phoenix and Tucson experienced 20 percent
18 and 13 percent growth respectively, while the United States experienced 9 percent
19 growth during that period. Much of this growth occurred in upscale MDUs. For

example, in the first half of 1998, nearly 10,000 MDUs were under construction in the Phoenix area, a 32 percent increase over the previous year.[42]

Figure 4

Total Housing Units – Actual (in thousands)			
	1990	**1997**	**Annual Growth**
Phoenix/ Mesa	952	1,144	20%
Tucson	298	335	13%
U.S.	102,263	111,174	9%

Source: U.S. Department of Commerce and the U.S. Department of Housing and Urban Development: New Residential Construction In Selected Metropolitan Areas, Third Quarter 1992, Fourth Quarter 1995, and Third Quarter 1998; Housing Completions, December 1998, Table 1; 1990 U.S. Census Data.

As a result of the tremendous growth in the Phoenix and Tucson areas, the opportunity for U S WEST's competitors to develop telephone networks and to provide competing telephone services has greatly increased.

Figure 5 provides an illustrative list of U S WEST's competitors in the Arizona MDU market. Each of the competitors listed below, except for Cox Communications, started off as a shared tenant service provider.

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[42] U S WEST Internal Data.

Figure 5

Competitors Targeting MDUs in Arizona

Competitor	City
Cox Communications	Phoenix
Telephone Plus/Cable Plus	Phoenix
OpTel	Phoenix
GST	Phoenix
Shared Technologies Communications (Was GE Capital Rescom)	Phoenix
MTS (Now Cable Plus)	Phoenix
OnePoint	Phoenix
Telephone Plus/Cable Plus	Tucson
Interactive Cable Systems (ITS)	Tucson

Source: U S WEST INTERNAL DATA

a) Competitive In-Roads Made By Cox in MDUs

Cox Communications is U S WEST's strongest competitor for MDUs in Arizona. U S WEST and Cox Communications are competing to sign contracts with MDU property owners and developers that grant them "preferred provider" status in new and existing buildings for packages of local telephone, video, and high speed Internet services. Cox Communications earns these contracts by offering financial incentives to property owners and developers such as revenue sharing and paying a larger portion of

1 infrastructure costs than U S WEST does.[43] As of October 1997, Cox Communications
2 was the "preferred provider" at eleven complexes representing a total of 4,152 units[44]
3 and by February 1999 it had nineteen new housing complexes in the Phoenix area
4 under contract.[45]

5 These contracts offer carriers a strategic advantage in winning new customers because
6 complex managers will automatically promote the company's services to new tenants.
7 Evidence suggests that 95% of tenants use the preferred provider for their local phone
8 service.[46]

9 b) Competitive In-Roads Made By STS Providers

10 Apart from Cox, Shared Tenant Service (STS) providers such as OpTel, OnePoint, and
11 Telephone Plus/Cable Plus are also competing in the Arizona MDU market.[47] These
12 companies locate PBXs on complexes' premises and aggregate individual customers'
13 traffic onto shared trunks, reducing dependence on U S WEST (see the private network
14 section and Exhibit RGH-2 for more details on how PBXs compete with U S WEST's
15 local exchange service). Importantly, these companies are beginning to build their own
16 free standing local exchange networks, including central office switches. This means
17 that competitors can migrate their traffic off of U S WEST's network and onto their new

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43 U S WEST Internal Data.
44 Residential MDU Market Loss – Arizona. March 11, 1999.
45 U S WEST Internal Data.
46 "Cox Expands Local & Long Distance to East County, CA and Chandler, AZ."

1 networks. OpTel successfully installed its first switch in Houston and is planning to do
2 the same in Phoenix.[48]

3 OnePoint provides local, long distance and cellular telephone service, cable and direct
4 broadcast satellite television, and Internet access. OnePoint recently signed an
5 agreement with Equity Residential Properties Trust to offer Equity's apartment residents
6 a single source for telecommunications services. Equity is the largest real estate
7 investment trust (REIT) focusing on apartment buildings.[49] The firm's portfolio consists
8 of more than 525 properties containing more than 190,000 units in 35 states,[50] and
9 currently serves 26 complexes in the Phoenix area.[51] OnePoint has secured
10 agreements with property owners such as Equity through revenue sharing plans.

11 Telephone Plus/Cable Plus is another shared tenant MDU competitor in the Phoenix
12 area, with contracts covering over 2,000 new units and 150 existing units. This
13 company provides a turnkey operation for voice and video. Telephone Plus builds the
14 infrastructure at no cost to the developer and offers endorsement fees and revenue

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47 U S WEST Internal Data.
48 U S WEST Internal Data
49 "Equity Properties Residential Trust Page," *Hoover's Online*. <www.hoovers.com>.
50 "Equity Properties Residential Trust Page."
51 Arizona Competitive Overview, *U S WEST.*

1 sharing as part of its package.[52] Telephone Plus/Cable Plus is building its first central
2 office switch in Tucson.[53]

3 4. Entry Via Wireless Networks

4 Another viable path of entry into U S WEST's local exchange markets in Arizona is
5 through fixed and mobile wireless services.

6 a) Fixed Wireless Entry Into Business Markets

7 Fixed wireless networks are quick and inexpensive to deploy compared to landline
8 networks and can provide competitive access services to businesses which are not
9 located along CLEC fiber routes. This greatly expands the number of businesses in
10 Phoenix and Tucson, that are addressable by competing carriers.

11 In May 1998, WinStar, a fixed wireless local competitor, installed a Lucent switch and
12 began competing for local exchange customers in Phoenix. WinStar provides business
13 customers with voice, data, and video services over high-speed wireless transmission
14 links using point-to-multipoint technology. Given its relatively flat geography and mild
15 weather, Phoenix is a perfect market for this technology. Across the U.S., WinStar
16 serves 30 major markets,[54] with plans to expand to 110 domestic and international
17 markets by 2004.[55] WinStar's stock performance indicates that the firms' strategy has

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52 Arizona Competitive Overview, *U S WEST*.
53 BODM Residential MDU Market Plan, *U S WEST*, p 77.
54 "Winstar Reports Fourth Quarter and Year End Results," *Business Wire*, March 4, 1999.
55 "Winstar Reports Fourth Quarter and Year End Results," *Business Wire*, March 4, 1999.

1 been well received by the investment community. The company went public in April
2 1991 and currently has a $1.3 billion market capitalization.[56] WinStar's entry and
3 success demonstrates that this avenue into Arizona's local exchange markets is open
4 and available for other competitors to enter.

5 Teligent is another broadband, fixed wireless local competitor in Arizona. Teligent has
6 launched competitive local service in 25 markets, including Phoenix,[57] and expects to
7 offer service in 40 markets, by the end of the year.[58] The Phoenix switch is still under
8 construction, but is expected to be operational in four to six weeks.[59] Teligent's entry
9 confirms both the viability of fixed wireless as an entry strategy into local exchange
10 markets and that those markets are open to competition.

11 Another fixed wireless competitor is Advanced Radio Telecommunications (ART). ART
12 uses its fixed wireless network to deliver competitive facilities-based broadband
13 dedicated access and Internet services to small and medium-sized businesses. ART
14 eliminates the need for businesses to deal with two separate vendors – an ISP and a
15 dedicated access provider. According to marketing materials, "With ART's network, you
16 don't have to go to your local phone company for a connection or an upgrade. ART
17 delivers the capacity and communications services you need to stay on top of your

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[56] Initial Public Offering and market cap information was obtained from *Bloomberg; Financial Markets, Commodities, News*, November 17, 1998.

[57] Teligent Marketing Materials faxed March 16, 1999.

[58] "Our Network," *Teligent*. <www.teligent.com>

[59] Conversation with Teligent customer representative, March 19, 1998.

1 business game."[60] ART began offering service to businesses in Phoenix in December
2 1998,[61] and serves about 65 customers in the area.[62] ART plans to expand its network
3 to about 100 markets in five years,[63] and plans to be in Tucson by June 1999.[64] For
4 more detailed information on network, business strategy and services of Winstar, ART
5 and Teligent, see Exhibit RGH-4.

6 b) Fixed-Wireless Entry Into Residential Markets

7 Another fixed wireless carrier is Mountain Telecommunications, which uses an
8 experimental license to serve the 56,000-acre Salt River Maricopa-Pima Reservation
9 east of Phoenix. Notably, this carrier's strategy includes serving rural residential
10 customers. The technology, developed about two years ago by Nortel Wireless, uses
11 small dish antennae which are attached to homes or businesses to receive radio
12 transmissions from a 163-foot tower located at a base station. Users need to be within
13 15 miles of the tower.[65] The company intends to roll the service out to other
14 reservations such as White Mountain Apache in northeastern Arizona and the Navajo
15 Reservation in the far northern part of the state.[66] Using this technology, the company

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60 "ART Internet Access," *Advanced Radio Telecom (ART) Marketing Materials,* faxed March 5, 1999.

61 "Fast Internet Provider," *The Arizona Republic,* December 24, 1998.

62 Conversation with ART representative, March 10, 1999.

63 *ART Marketing Materials,* faxed March 5, 1999.

64 "Fast Internet Provider," December 24, 1998.

65 "High-Tech Phones For Tribe: Salt River Reservation 1st To Use Small Dish," *The Arizona Republic,* December 12, 1998.

66 "High-Tech Phones For Tribe: Salt River Reservation 1st To Use Small Dish," *The Arizona Republic,* December 12, 1998.

could serve other rural parts of Arizona as well. In addition, Mountain Telecommunications is currently reselling U S WEST services to businesses and residents in XXX, XXX, XXX, XXX, XXX, XXX and XXX.[67] It is likely that the company will migrate these customers to its own network at a later date.

c) Entry Via Mobile Wireless

As detailed in Exhibit RGH-3, there is also growing evidence that as prices fall and quality improves, mobile wireless services (cellular, PCS and enhanced special mobile radio) are becoming increasingly competitive with traditional local wireline services, particularly second lines and intraLATA toll and long distance calling. Mobile wireless subscriptions have been growing tremendously across the U.S. From 1992 to March 1999, the number of wireless subscribers grew by almost 700 percent.[68] In just more than three years since the first commercial PCS system launched in the U.S, it is now estimated that nearly 90 percent of the U.S. population has access to at least one competitive PCS service offering and 60 percent has access to at least two PCS

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[67] U S WEST Internal Data

[68] Data sourced from CTIA website, which displays the "Wireless Subscribership: June 1985-June 1998" and conveys that there are 69,265,922 U.S wireless subscribers as of March 11, 1999. <www.wow-com.com>

1 offerings.[69] In Arizona, for example, seven main wireless providers offer mobile
2 wireless service.[70]

3 This increased competition is driving prices down dramatically. The Yankee Group's
4 Wireless Price Index reveals that wireless rates have dropped by an average of 40%
5 between early 1995 and the third quarter of 1998. This has also triggered average
6 usage levels of 300-400 minutes of use per month for digital cellular and PCS
7 customers, which is more than triple the historic industry average of 100 MOU.[71] As
8 prices fall, mobile wireless services are increasingly becoming a viable alternative to
9 wireline service. Numerous examples have been reported recently of consumers and
10 businesses substituting cellular phones for landline service.[72]

11 The consulting firm Technology Future Inc. (TFI) has estimated the impact of wireless
12 competition on wireline market share and revenues for voice markets for a number of
13 years. The company recently released an updated national report.[73] Based on TFI's

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69 "PCS Competition In 87% of U.S.," *Paul Kagan News, Wireless Market Stats. #113*, February 26, 1999.

70 AT&T Wireless, VoiceStream, AirTouch, Cellular One, Nextel, Sprint PCS, and U S WEST Advanced PCS.

71 "Yankee Group Pricing Study: All-inclusive Wireless Rates Usher in The Era of Landline Displacement," *The Yankee Group Media Release*, January 4, 1999. <www.yankeegroup.com>

72 See Exhibit RGH-3 for more details.

73 For a recent article regarding TFI's President, Lawrence Vanston, see "Consultant's Call: Lawrence Vanston makes some pretty good predictions for the future of telecommunications; he has been right before," *The Wall Street Journal,* September 21, 1998.

This report, "Wireless vs. Wireline for Voice Services: Forecasts and Impacts," is an update of TFI's 1995 report.

1 forecast, U S WEST Arizona could lose more than 25,000 access lines by 1999 and
2 50,000 by 2000 to mobile wireless services.[74]

3 In Arizona, it is easy to see how this could happen. Most mobile wireless plans include
4 several advanced features in the price of the basic package. In addition, wireless local
5 calling areas are generally much larger than those of U S WEST, thus reducing
6 intraLATA toll charges. Cellular One, for example, offers a $29.99 package of 250
7 wireless minutes, which includes voice mail, call waiting, call forwarding, three-way
8 calling, caller ID, and first incoming minute free. In comparison, U S WEST's wireline
9 "Custom Choice" plan, which includes basic local service plus 16 enhanced features
10 such as caller ID, call waiting, 3-way calling, call forwarding, also costs $29.95.[75]
11 Adding voicemail, that package is $34.90.

12 AT&T has recognized mobile wireless as a means to compete for local exchange
13 customers through its Digital One Rate wireless plan which it claims "could make your
14 wireless phone become your only phone."[76] The Digital One Rate plan offers 200
15 wireless minutes and additional calling features such wireless messaging, voice mail, e-
16 mail, caller ID, call waiting, call forwarding and three-way calling for $39.99 a month.[77]
17 Other wireless companies are introducing similar pricing options. For example, GTE

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[74] Based on year-end number of access lines in 1997 and TFI's forecast of 1% and 2% of total access line loss in 1999 and 2000 respectively, due to wireless competition. See *1997 Statistics of Communications Common Carriers*, Table 2.3. See also Vanston, Exhibit 3.10, p.28.

[75] "Product Catalog," *U S WEST*. <www.uswest.com>

[76] AT&T Digital One Rate, *AT&T Wireless Services*, as of 12/2/1998. <www.attws.com>

1 Wireless recently introduced its AmericaChoice Plan that is very similar to AT&T's
2 Digital One Rate Plan.[78]

3 Additionally, AT&T is test marketing a "Wireless Home Phone Option" in Plano, Texas.
4 This program is designed to compete directly with the incumbent's local exchange
5 service. The plan offers unlimited airtime within the fixed local calling area (i.e. the
6 home cell site) at a comparable price to wireline incumbent GTE's basic service. This
7 service is competing for voice minutes of use formerly reserved for wireline local
8 service, second local exchange lines, and some primary lines.[79] AT&T is considering
9 rolling out this pricing plan on a national basis.

10 As prices continue to fall, wireless services will increasingly compete with U S WEST's
11 basic local exchange services. The growth and success of both fixed and mobile
12 wireless providers in Arizona demonstrates that this entry path is open to competition.
13 For more detail about how mobile wireless services are competing with local exchange
14 services see Exhibit RGH-3.

15 5. Entry Via Resale

16 There is overwhelming evidence that U S WEST's local exchange markets in Arizona
17 are open to competition through resale. Currently, 30 resellers have entered

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[77] *AT&T Wireless Services.* <www.attws.com>

[78] "Products and Services—Wireless", *GTE.* <www.gte.com>

U S WEST's local exchange markets and are actively providing resold competitive local exchange service in Arizona, 20 of which are serving residential customers.[80] In fact, with resellers serving residential customers in 120 out of 123 wire centers in U S WEST's Arizona territory, it is safe to say that the majority, if not all, of Arizona's residential consumers have access to an alternative provider of local exchange service.[81] The same is true for business customers. Frontier, for example, has stated that it offers competitive local service to business customers throughout U S WEST's entire service territory in Arizona.[82]

Resale competition in Arizona has been accelerating. In the past year, resold residential lines have increased by 800 percent, growing at a very rapid compound rate of 22 percent per month.[83] Similarly, business resale has grown by almost 300 percent. (See Figure 6) Combined, resellers now serve close to 20,000 business and residential lines in Arizona.[84] Together, these resellers have not only entered local exchange markets in Arizona successfully, but have demonstrated unequivocally that this path of entry is wide open.

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79 "Wireless offered for secondary home lines in Plano," Dallas Morning News, November 12, 1998 and "AT&T Wireless Home Phone Option," *AT&T Promotional Materials*, September 1998.

80 See Executive Summary in Affidavit of Wayne G. Allcott.

81 U S WEST Internal Data

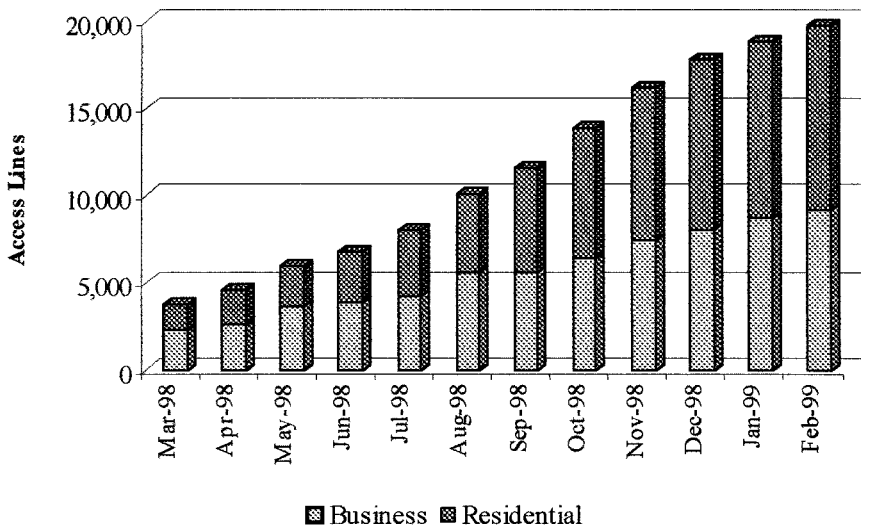
82 "Frontier Enters Arizona With Phone Service," *The Phoenix Business Journal*, August 19, 1998.

83 U S WEST Internal Data

84 See the Affidavit of Wayne G Allcott, Exhibit WGA-8. Note: In U S WEST's billing data, several resale accounts were incorrectly classified as "retail" prior to 1998. In December 1998, these lines were reclassified as resale. In order to adjust for the error in classification, I estimated the number of

Figure 6

Resold U S WEST Access Lines in Arizona



Source: U S WEST Internal Data

1. Entry Via Acquisition

Another avenue into the local exchange market is through acquisition, a path that has been aggressively pursued by the largest long distance carriers. In less than two years, WorldCom gained a presence in over 100 local exchange markets, including Phoenix and Tucson, through acquisitions of MFS, MCI Metro, and Brooks Fiber. WorldCom paid $17 billion for MFS and Brooks Fiber alone.[85] Soon after, AT&T announced its $11 billion acquisition of TCG, the largest CLEC in the country at the time, with networks in

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misclassified lines prior to December 1998 on a monthly basis and added them back into the original resale data.

[85] MCI WorldCom website, "Corporate History," *MCI WorldCom.* <www.wcom.com>; MCI WorldCom 1997 Annual Report.

66 markets, including Phoenix.[86] These acquisitions not only provided a way for WorldCom (now MCI WorldCom) and AT&T to enter local markets but confirmed the openness of those markets as well. Clearly, the two largest IXCs, AT&T and MCI WorldCom, would not spend billions of dollars to enter markets if they believed these markets were closed to competition. With numerous other CLECs, resellers, and cable companies operating in Arizona, the path of acquisition remains another viable path of entry.

7. Private Networks

Companies are increasingly using private networks, constructed with competing technologies, to self-supply services previously provided on incumbent's local exchange networks. For example, private branch exchanges (PBXs), very small aperture terminal (VSAT's) and private microwave transmission stations all allow business customers to buy or lease premise equipment which lets them bypass local exchange networks.

a) Entry Via PBX Networks

PBXs represent one way private networks compete with local exchange service. A PBX is a small, local telephone switch installed at a business premise that self-supplies switching and enhanced services for intra-company calls. Many large businesses have private networks that provide all local exchange services for intra-firm calls. In addition

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[86] "AT&T Completes TCG Merger; TCG Now Core of AT&T Local Services Network Unit," *AT&T Press Release*, July 23, 1998. See also, "AT&T and TCG To Merge; TCG To Become Core of AT&T's

1 to reducing the need for switching from a local exchange carrier, PBXs also reduce the
2 need for access lines because they aggregate calls from multiple users over shared
3 lines. As explained above, PBXs can also be shared by a number of smaller
4 businesses located in the same office building or by residential customers living in MDU
5 buildings through shared tenant services.

6 The PBX was a key development leading to the entry of companies such as MFS and
7 TCG, who built networks to provide local and long distance access to business users
8 because programmable PBXs make it easy to route calls to different carriers depending
9 on the type of call.

10 Ultimately, if PBXs did not exist, companies would be purchasing more Centrex and
11 business access lines instead of sharing outside trunks among multiple PBX
12 extensions. Exhibit RGH-2 shows that by 1999, U S WEST will have lost an estimated
13 602 thousand business and residential access line sales (net of PBX trunks) due to
14 PBX usage in Arizona.

15 b) Entry Via VSAT Networks

16 VSAT technology is used for satellite-based private networks. VSAT terminals transmit
17 information to and from a central orbiting satellite base station. Since they use wireless
18 transmission, these networks serve low-density locations in rural areas nearly as
19 efficiently as they serve urban sites. The number of VSAT systems has increased

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Local Services Unit," *AT&T Press Release*, January 8, 1998.

1 markedly in recent years, and recent innovations in satellite technology – in the areas of
2 digitalization, data compression, miniaturization and improvements in signaling
3 processing capabilities – will generate huge increases in transmission capacity and
4 large decreases in costs and prices.

5 VSATs compete effectively with terrestrial communications systems, including local
6 exchange lines for dial-up credit card transactions and reservation processing. VSATs
7 are used widely in regional and nationwide corporate private telecommunications
8 networks for communications such as data, voice and fax. For example, Toyota Motor
9 Sales USA uses VSATs for communicating among offices and dealers around the
10 country. VSATs are also commonly used in the wholesale and retail oil industry,
11 grocery and other retail store chains, government, banking and financial services, car
12 dealerships, drug stores, electrical utilities and hotel reservation systems. Without
13 VSATs, most of these calls would likely be carried on the publicly switched telephone
14 networks of incumbent local exchange carriers. In Exhibit RGH-2, I estimate that by
15 1999, U S WEST will have lost between three and 16 thousand business access line
16 due to VSAT usage in Arizona.

17 c) Entry Via Microwave Transmission Networks

18 Microwave systems have become an economical alternative to leased landlines for
19 transmitting data, voice, and video to remote locations in a local area network (LAN)

1 such as the one in Scottsdale Plaza in Scottsdale Arizona.[87] Microwave radios have
2 traditionally been considered reliable and fast, but also difficult to maintain and install.
3 Technological advances, however, have made newer microwave systems light weight,
4 compact and easy to install and maintain.[88] Microwave systems can connect remote
5 locations up to 20 miles or more, but most applications are under four miles.[89]
6 Furthermore, microwave provides high bandwidth and is capable of sending data as
7 fast as 10 Mbps.[90] For more details on how private networks replace local exchange
8 services see Exhibit RGH-2
9

10 ***C. Summary of Competitive Alternatives And Market Openness***

11 The competitors in Arizona have demonstrated the openness and viability of multiple
12 entry paths into Arizona's local exchange markets. In addition, competitors in Arizona
13 have demonstrated the openness of all three avenues envisioned by the Act, by
14 successfully competing through resale, the purchase of unbundled loops, and several
15 types of facilities-based bypass.

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87 "About SMI Communications," *Southwest Microwave, Inc. (SMI)*.; also Mort Cohen, "Cost-Effective Microwave Solutions for Short and Medium Haul Networks," *Harris Corporation*, Redwood Shores, CA. <www.harris.com/harris> (Hereinafter, "Mort Cohen Paper")..

88 "Wireless LAN Over Microwave—A Tutorial," *SMI*. <www.southwestmicrowave.com> (Hereinafter, "Wireless LAN tutorial").

89 Wireless LAN tutorial.

90 "Connecting Remote LANs—Wireless WAN Links Reduce Telephone Cost to Zero!" *Data Comm for Business*. <www.dcbnet.com> (Hereinafter "Connecting Remote LANs").

Although all three types of entry are not occurring in all parts of Arizona, the patterns of competitive entry make economic sense given the significant differences in economic and demographic conditions across the state. Economic and demographic factors have powerful implications for both the costs incurred and potential revenues derived from serving a local exchange market and thus, to a large degree, determine the rate and pattern of local exchange entry. Local exchange networks exhibit significant economies of scale, meaning that as more subscribers are connected to the network, the average cost of serving a single subscriber declines. In high-density areas, such as Phoenix, a single switch can serve tens of thousands of access lines, and a five-mile fiber ring can carry the traffic for hundreds of thousands of end-users. Thus, facilities-based CLECs are channeling their investments into areas with high population density where it is possible to capture substantial and growing amounts of local revenues in relatively small geographic areas.

This pattern of targeting large urban markets with high population density is common across the country. Exhibit RGH-5 shows a map of population density and local networks being deployed by the largest CLECs throughout the country. The correlation between population density and CLEC network deployment is evident. Given that legal and regulatory barriers to entry have been removed throughout the state, the lack of facilities-based entry in rural areas is due to powerful economic forces driven by density and demography.

Even though the larger, more densely populated local exchange markets tend to attract the first waves of facilities-based investment, entrants are currently entering smaller markets, such as parts of Arizona outside Phoenix and Tucson, through resale. Ultimately, carriers are likely to use wireless services and upgraded cable networks to provide facilities-based service in many smaller markets as well. In sum, competitors in Arizona have demonstrated that there are viable ways to enter all local exchange markets in Arizona and that U S WEST's markets are open to competition.

1 **III. BENEFITS**

2 U S WEST's entry into interLATA services will generate significant benefits to Arizona
3 consumers. These benefits stem from four factors: (1) the interLATA market currently
4 is not fully competitive; (2) U S WEST is prepared to offer competitively priced
5 packages of a wide range of telecommunications services to a broad group of Arizona
6 consumers; (3) U S WEST will be an efficient and effective competitor of interLATA
7 services; and (4) U S WEST entry into interLATA services will accelerate competitive
8 entry in local markets.

9 ***A. The Market for InterLATA Services is Not Fully Competitive***

10 The interLATA market remains highly concentrated and, except for the highest volume
11 customers, interLATA prices exceed competitive levels. In the words of the Department
12 of Justice, "interLATA markets remain highly concentrated and imperfectly
13 competitive."[91] Market data support this conclusion. Nationally, AT&T, MCI WorldCom
14 and Sprint still serve over 80 percent of the residential long distance market.[92] In
15 Arizona, 89 percent of residential customers obtain long distance service from one of

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[91] Department of Justice Evaluation in Application of SBC Communications Inc. et al. Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in the State of Oklahoma, CC Docket No. 97-121, May 16, 1997, p. 4.

[92] Based on 1997 revenue. See *Long Distance Market Shares: Third Quarter 1998*, FCC Common Carrier Bureau, Industry Analysis Division, December 1998, Table 3.2.

these three interexchange carriers (IXCs).[93] Exhibit RGH-6 explains that market concentration is quite high both nationally and in Arizona.

Second, the basic tariffed interstate prices of AT&T, MCI WorldCom and Sprint have increased steadily over the last several years, despite decreases in access charges and an increase in the number of long distance competitors. Over the last six years, basic interstate rates, for a call from Phoenix to Denver, for the three largest IXCs increased between 13 and 31 percent,[94] depending on the carrier. During the same time period, access charges, a major component of IXC costs, declined significantly. Figure 7 illustrates these trends.

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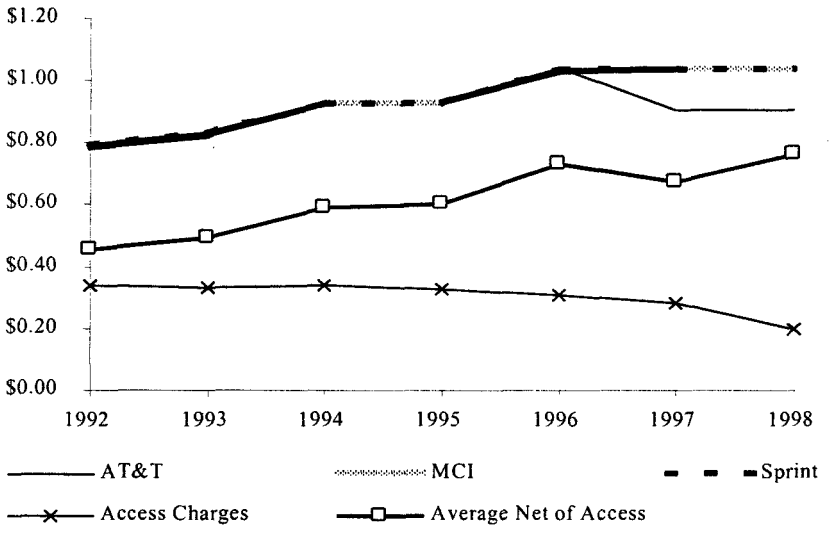
[93] "U S WEST Customer Value Analysis Residential," *U S WEST*, December 1998, Table 001.

[94] These data are weighted by the time of day as explained in Figure 7.

Figure 7
Price of a 5-Minute Call from Phoenix to Denver[95]



Sources: Statistics of Communications Common Carriers, Tables 1.4 and 7.4, FCC, 1997/98 Edition; Trends in Telephone Service, Table 1.2, FCC, February 1999; AT&T, MCI & Sprint Interstate Residential tariffs for 1998.

This pattern—of increasing prices despite significant cost reductions—is consistent with oligopolistic markets and can stem from behavior known as *conscious parallelism.* Conscious parallelism occurs when no firm communicates directly with another, but each firm expects that its competitors are following the same unstated, common policy. When one competitor increases prices, rivals have an incentive to raise their prices because doing so allows them to increase profits while maintaining market share. There is also a strong disincentive to lower prices because if one competitor lowers its

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[95] Prices are a weighted average of time-of-day use according to the following formula based on "Average Daily Use" patterns as reported by the Telecommunications Research & Action Center (TRAC): 25 percent day; 45 percent evening; 30 percent night/weekend. See, "Tele-Tips," *TRAC,* December 1998, p. 2. (Hereinafter, "Tele-Tips"). Note that the weighted average does not adjust for the effect on peak time usage of AT&T's 1997 increase in the number weekday daytime hours.

1 prices in an attempt to gain market share, rivals follow suit, resulting in reduced margins
2 for all competitors. The end result of this oligopolistic behavior is prices above
3 competitive levels.

4 The relationship between basic tariffed prices and access charges over time clearly
5 shows that long distance prices are above competitive levels. Per minute access
6 charges have historically represented nearly half of long distance rates. In 1992, for
7 example, access charges represented approximately 43 percent of the per-minute
8 price. As Figure 7 shows, since 1992, access charges have declined 43 percent (from
9 7 cents to 4 cents per minute). During the same time, basic tariffed rates have
10 increased, for a call from Phoenix to Denver, between 13 and 31 percent, resulting in a
11 56 to 88 percent increase in margins. That basic tariffed rates are increasing in the
12 face of substantial cost reductions is strong evidence that the long distance market is
13 not fully competitive.[96]

14 Although IXCs frequently argue that tariffed prices are not relevant because they offer
15 discount-pricing plans, this assertion is not correct because most consumers are not on
16 a discount plan. A recent survey by the Yankee Group shows that only 36 percent of
17 consumers subscribe to a discount plan, and the remaining 64 percent are paying

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Average Net of Access Charges rates are weighted according to market share for AT&T, MCI, and Sprint.

96 Given this pricing pattern, it is not surprising that the FCC questioned the pricing behavior of these IXCs last year in letters sent to the chief executive offices of AT&T, MCI, and Sprint. Letters to the CEOs of AT&T, MCI, and Sprint from FCC Chairman William E. Kennard, February 26, 1998.

1 tariffed rates. AT&T admits that 60 percent of its customers are not on a discount
2 plan.[97] In Arizona, even more customers are paying tariffed rates; a U S WEST study
3 shows that only 29 percent of customers are on a calling plan while 71 percent are
4 paying increasing tariffed rates.[98]

5 Third, even the majority of customers who are on discount plans are not benefiting from
6 truly competitive prices. Despite the steady decline in access charges over the last few
7 years, long distance discount prices, especially those paid by low and medium volume
8 customers,[99] have remained fairly constant. While the highest volume customers may
9 be experiencing significant cost savings,[100] low and medium-volume users, which make
10 up about three quarters of the nation's households,[101] have not experienced price
11 reductions commensurate with the concurrent decline in access charges. Figure 8
12 shows that over the last six years, AT&T has passed through only a fraction of the
13 access charge cost savings to its medium-volume customers. In 1992, AT&T's flagship
14 calling plan, Reach Out America, provided medium-volume customers an estimated

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97 Jennifer Files, "People fail to get best phone rate," *The Philadelphia Inquirer*, Feb. 16, 1999.

98 "U S WEST Customer Value Analysis Residential," *U S WEST*, April 1998, Table 138.

99 According to AT&T, the consumers' average long-distance bill is about $17 per month. See, Louis Trager, "Look Out Below: Long-Distance Pricing Drops," *Inter@ctive Week*, November 16, 1998.

100 AT&T's recent increase in prices of 15 services, including calling card and operator assisted calls, is further evidence that the company is increasing prices for most customers. Gene Kimmelman, co-director of the Washington office of Consumers Union, commented that, "This is part of an overall trend of raising fee, and nickel and diming low-volume customers to focus all discounting on the high end of the market." See Rebecca Blumenstein, "AT&T Lifts Its Rates on 15 Services In Bid to Promote Telecom Bundles," *The Wall Street Journal*, March 9, 1999.

1 price of 15 cents per minute. Access charges were about 7 cents per minute. Today,
2 AT&T's One Rate Plus plan gives the same medium-volume customer a price of 14
3 cents per minute, but access charges are only 4 cents per minute. AT&T has benefited
4 from a 3 cent per minute reduction in access charges, but is passing only 1 cent of this
5 reduction to its medium-volume customers on discount plans. MCI WorldCom's and
6 Sprint's long distance pricing over the last six years follow a similar pattern.[102]

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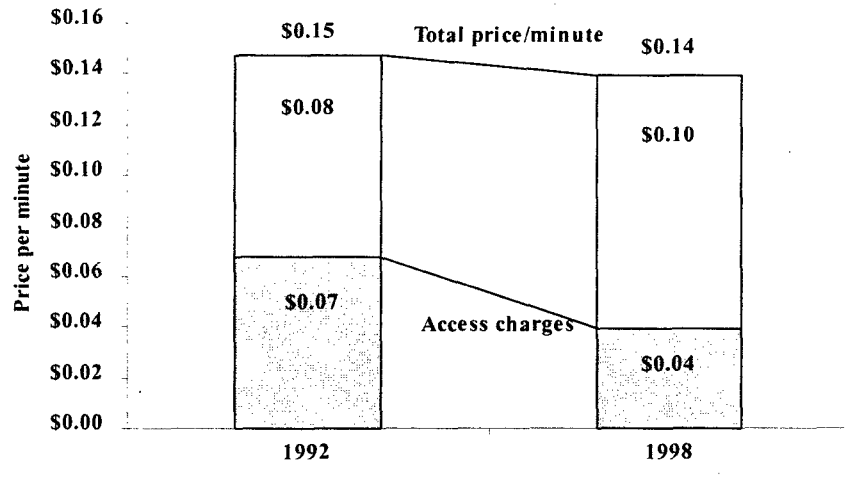
[101] Estimate is provided by the Consumers Union and the Consumer Federation of America. See Jennifer Heldt Powell, "This act gets panned: Many have hang-ups with telecom law; Telecom Act gets panned," *Boston Herald*, February 8, 1999.

[102] Based on a similar analysis. MCI WorldCom's 1992 and 1998 prices are calculated using MCI's Prime Time plan and MCI WorldCom's MCI One plan, respectively. Sprint's 1992 and 1998 prices are calculated using the Sprint Select and the Sprint Sense Anytime plans, respectively.

Figure 8

AT&T's Discount Prices For Medium-Volume Customers (125 minutes of interstate calls per month)[103]



Sources: Statistics of Communications Common Carriers, Table 1.4, FCC, 1997/98 Edition; Trends in Telephone Service, Table 1.2, FCC, February 1999; AT&T Interstate Residential tariffs for 1998; "Which long-distance service for you? Telephone service plans; Buyers Guide," Consumers' Research Magazine, December 1992; "Tele-Tips," TRAC, December 1998, pages 9-11.

In summary, there is strong evidence that the interLATA market in Arizona is not fully competitive.

- Nationally, the lack of extensive competition has been recognized by the DOJ.
- Prices for tariffed rates have increased, resulting in price increases to the majority of Arizona consumers who cannot or do not take advantage of discount plans.

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[103] 125 minutes of calling is divided equally among three mileage bands and weighted by time of day according to average daily use patterns as reported by TRAC. See Tele-Tips. 1992 and 1998 prices are calculated using AT&T's Reach Out America Half Hour plan and AT&T's One Rate Plus plan, respectively.

- Discount prices remain relatively flat while access charges are decreasing, indicating that profit margins are higher than they would be in a fully competitive market.

B. U S WEST Will Increase Competition Across a Range of Services to All Customers in Its Service Area

U S WEST's entry will benefit consumers through a reduction of quality-adjusted prices and new service offerings. U S WEST plans to compete for interLATA business and residential customers in its service areas with a range of telecommunications service packages. The strong consumer demand for service packages is well established. For example, a Yankee Group report shows that two-thirds of all U.S. households would prefer having only one company provide all of their telecommunications services.[104] Through these packages, customers are seeking access to a wider range of communications services, simplicity in obtaining these services, and lower prices. While IXCs and other competitors are responding to this demand by offering packaged services to high volume business customers and residences in urban areas, many residential and small business customers, outside of urban areas, are being ignored. Because U S WEST offers ubiquitous service throughout its Arizona service territory, U S WEST is in a position to market packaged services to a much broader range of consumers within its region. U S WEST has indicated that it intends to compete aggressively for long distance customers within its service area, offering prices up to 60

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[104] See, "Yankee Group Survey Finds AT&T Is Top Choice for Consumers Interested in Single Communications Provider," *Yankee Group Press Release,* January 20, 1998. See also Daniel Kadlec, "One-Stop Shopping for Communications," *Time.com*, February 15, 1999.

1 percent below the tariffed rates of the major long distance carriers.[105] U S WEST's
2 entry into Arizona's long distance market would therefore put pressure on the largest
3 IXCs, driving innovation and lower quality-adjusted prices.

4 Recognizing that companies such as Qwest, IXC Communications, and Level 3 are
5 beginning to offer facilities-based long distance services, I believe that U S WEST's
6 entry in the interLATA market will still have a strong competitive effect. Of these new
7 competitors, IXC and Level 3 are focused primarily on servicing business and
8 wholesale customers. Qwest is offering service to residential customers but, as shown
9 above, has had little competitive impact.

10 While it is difficult to quantify the price benefits of U S WEST's long distance entry, the
11 experience of SNET's entry into long distance in Connecticut demonstrates that the
12 effect can be significant. SNET began providing long distance service packaged with
13 local and other services in 1994. At that time, SNET's prices were, on average, 24
14 percent below AT&T's basic prices, and 11 percent below AT&T's discount plans.[106] As
15 of 1997, SNET offered a discount of 10 to 15 percent off the 15¢ per minute price
16 offered by most IXCs. Furthermore, SNET billed customers in one-second increments
17 while AT&T billed using per minute increments. Combining these two factors, Dr. Jerry

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[105] "U S WEST Now Ready to Offer Long Distance Service Giving Customers Benefit of One-Stop Shopping and Below-Market Prices Up to 60 percent Less then Competition," *U S WEST Press Release,* February 13, 1998.

1 Hausman estimated that SNET's one-rate prices were 17.5 percent lower than AT&T's
2 one-rate prices.[107] The IXCs' response to SNET's pricing provides further evidence of
3 the competitive effect of SNET's long distance entry. In 1996, both AT&T and MCI
4 petitioned the FCC to allow them to reduce their interstate long distance rates in
5 Connecticut, arguing that they needed to respond to "the rapidly emerging competition
6 from SNET in Connecticut."[108] The SNET experience provides a framework for
7 analyzing the impact that an RBOC, such as U S WEST, would make when entering the
8 long-distance market.

9 Using the Connecticut experience as an example, a conservative estimate of an
10 average interLATA price reduction in Arizona would be in the range of 15 to 20 percent.
11 With this level of price reduction, U S WEST's entry into the long distance market would
12 result in benefits to consumers in the range of $109 to $147 million, or $60 to $81 per
13 access line, per year.[109]

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[106] Affidavit of Jerry Hausman in Support of Application by BellSouth for Provision of In-Region, InterLATA Services in Louisiana, *Before the Federal Communications Commission*, November 6, 1997, pp. 11-12.

[107] Affidavit of Jerry Hausman in Support of Application by BellSouth for Provision of In-Region, InterLATA Services in Louisiana, *Before the Federal Communications Commission*, November 6, 1997, p. 13.

[108] Peter Huber, "Local Exchange Competition under the 1996 Telecom Act: Red-lining the Local Residential Customer," November 4, 1997, p. 48. Huber is citing AT&T Corporation's Petition for Reconsideration at 2, Policy and Rules Concerning the Interstate, Interexchange Marketplace, CC Docket No. 96-61, Filed with the FCC April 19, 1996.

[109] The estimate is based on a market size of $688 million in U S WEST's Arizona service area. This assumes Arizona accounts for a proportionate share (1.6 percent) of the national residential market size of $42 billion. This proportion is based on U S WEST Residential lines and average interLATA per capita minutes of use for Arizona. Note that the estimate does not account for variations in interLATA prices across states. See *1997 Statistics of Communications Common Carriers*, Tables

1 ***C. U S WEST Will Be an Efficient Competitor***

2 U S WEST's history of providing ubiquitous service and its strong brand recognition
3 place the company in a unique position to compete vigorously with the major IXCs,
4 initially as a reseller, and in time, using its own facilities. Whether as a reseller or
5 facilities-based carrier, U S WEST can realize legitimate economies of scale and scope
6 in serving the interLATA market. I use the word "legitimate" to emphasize the fact that
7 U S WEST's relatively low-cost position in the interLATA market is not based on cross-
8 subsidies from local exchange or access services, nor on any discriminatory treatment
9 of IXCs. Rather, this position is based on U S WEST's ability to serve interLATA
10 customers at a low incremental cost that reflects true economies of scale and scope.

11 As a reseller, U S WEST will be able to take advantage of economies of scope
12 associated with marketing and billing functions. Because U S WEST already serves
13 residential and business customers and sends them a bill, the incremental cost of
14 providing additional services is much smaller than it would be for an entrant with no
15 existing presence in Arizona. In addition, U S WEST's well-known brand name
16 throughout its service area in Arizona will reduce marketing costs. The early success of
17 the U S WEST-Qwest alliance indicates that U S WEST's brand name is one factor that
18 will enable it to compete effectively. Through this alliance, U S WEST and Qwest

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2.3, 2.5; *Long Distance Market Shares: Third Quarter 1998*, Tables 4.2, 4.3. See also, Debra Beachy, "Long-Distance Firms Look to Hispanic Market, *The Arizona Republic*, April 14, 1998. See also, "1999 MultiMedia Telecommunications Market Review and Forecast," *MultiMedia Telecommunications Association*, p. 54.

1 offered a program called Buyer's Advantage, which was designed to provide consumers
2 with convenience and attractive long distance pricing. In the first three weeks of the
3 program, 100,000 new customers signed up for Qwest service.[110] With Section 271
4 approval, the benefits of "one-stop shopping" and competitive prices will extend to all of
5 U S WEST's customers.

6 U S WEST could also potentially achieve significant physical network economies
7 between intraLATA and interLATA calling. For example, given the high fixed cost of a
8 telecommunications network, increasing traffic volumes on an existing network reduces
9 unit costs. Section 272 (b) of the Telecommunications Act and the FCC rules
10 implementing the Act stipulate that U S WEST's long distance business be operated
11 largely as a separate, arms-length, subsidiary for at least three years subsequent to
12 interLATA relief. While U S WEST will not be able to take advantage of economies of
13 scale and scope for three years, timely approval of this application will not only promote
14 competition in the near term by allowing U S WEST to compete as a reseller but it also
15 will spur IXCs to become more efficient in anticipation of U S WEST becoming facilities-
16 based within a few years.

17 ***D. U S WEST's Entry Will Increase Competition for Local Services***

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[110] "Customer Demand Reaches 100,000 Mark for Buyer's Advantage Program; Offering U S WEST Local and Qwest Long Distance Service," *Business Wire,* May 27, 1998.

1 An important effect of U S WEST's entry into the interLATA market is the increased
2 incentive, particularly for the IXCs, to compete in Arizona's local markets. In the past,
3 IXCs in Arizona faced limited competitive pressure in the provision of long distance
4 service, particularly for residential customers. U S WEST's ability to offer a full range of
5 telecommunications services, however, will create a strong incentive for the major IXCs
6 to respond with comparable service offerings, or lower prices, to avoid losing their long
7 distance customers. This is a healthy competitive activity that is beneficial to
8 consumers.

9 Once again, the Connecticut experience provides valuable insight and reveals that the
10 results of this incentive can be dramatic. Full competition in Connecticut began in mid-
11 1993. At that time, IXCs began providing intrastate toll service and, perhaps more
12 significantly, SNET America, a subsidiary of the incumbent LEC in Connecticut, was
13 allowed to provide interstate long distance service.[111] One year later, SNET America
14 began jointly marketing its long distance services with the local services of its parent
15 company, Southern New England Telephone Company, and added attractive packages
16 including, multimedia, wireless, and Internet services.

17 SNET's packages of bundled services were so popular that the company captured a
18 large share of the long distance market,[112] taking away a significant amount of business

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[111] 1993 Annual Report of The Southern New England Telephone Company, p. 3.

[112] By the end of 1996, SNET had captured 35 percent of the long distance market in Connecticut. See "Telecom Services -- RBOCs & GTE. Fourth Quarter Review: Defying the Bears Once Again,

1 from the IXCs, especially AT&T.[113] SNET's successful pursuit of the long distance
2 market, caused the IXCs to launch an attack of their own. In particular, AT&T and MCI
3 began offering local service throughout Connecticut in 1996.

4 AT&T's historical pattern of limited local entry suggests that its entry in Connecticut was
5 a competitive response to SNET's long distance entry. In 1996, AT&T filed for authority
6 to provide local service in all 50 states. By 1997, however, AT&T actually provided
7 local service statewide in only one state – Connecticut. As discussed in Peter Huber's
8 "Telecommunications Competition in Connecticut: A Case Study in Getting it Right,"[114]
9 there is a strong link between AT&T's entry into the local exchange market and the
10 entry or threat of entry of the local provider into long distance. Authorizing U S WEST
11 to offer interLATA services in Arizona would give AT&T and the other IXCs a strong
12 incentive to make local entry in the state a high priority.

13 ***E. Summary Of The Benefits To Arizona Consumers From U S WEST's***
14 ***InterLATA Entry***

15 Arizona consumers stand to benefit significantly from the introduction of competition to
16 the interLATA market. U S WEST's entry into the long distance market will:

Reported Robust EPS Growth; Regulatory Cloud Beginning to Lift," *Merrill Lynch*, February 19, 1997, p. 8.

113 At the time that SNET was granted permission to offer bundled services, AT&T controlled 85 percent of the long distance market in Connecticut. As of the end of 1996, AT&T's share of residential access lines in Connecticut was 45 percent. See Peter Huber, "Local Exchange Competition under the 1996 Telecom Act: Red-lining the Local Residential Customer," November 4, 1997, p. 46. See also *Long Distance Market Shares: Third Quarter 1997*, FCC Common Carrier Bureau, Industry Analysis Division, January 1998, p. 20.

- **Introduce competition to a market that is highly concentrated and not fully competitive.** The three large IXC's currently control 89 percent of Arizona's residential market. Moreover, the IXC's failure to significantly reduce their rates, despite large decreases in the access charges, demonstrates that the market is far from competitive.

- **Provide Arizona consumers with lower quality-adjusted prices and new service offerings.** Because U S WEST offers ubiquitous service throughout Arizona, it can offer the benefits of packaged services to a broad range of customers, especially the residential, rural, and small business customers who are often ignored by the IXCs and other competitors.

- **Give the long distance market an efficient and effective competitor.** With strong brand recognition and the ability to take advantage of economies of scale and scope, U S WEST is in the unique position of being able to provide meaningful competition in Arizona's long distance market.

- **Accelerate the growth of competition in Arizona's local telephone market.** Experience has shown, particularly in Connecticut, that the IXCs have little interest in providing local services to a broad range consumers unless they are at risk of losing existing customers. U S WEST's entry into Arizona's long distance market will force the major IXCs to expand their local service offerings in order to protect their long distance business.

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[114] Peter Huber, "Telecommunications Competition in Connecticut: A Case Study in Getting it Right," March 27, 1998.

1 **IV. REGULATORY SAFEGUARDS**

2 ***A. Regulatory Safeguards Prevent Anticompetitive Behavior***

3 I do not believe U S WEST would or could engage in anticompetitive behavior if allowed
4 to participate in both local and interLATA markets. The competitive environment, along
5 with the federal and state regulatory safeguards in place are sufficient to ensure that
6 U S WEST cannot engage in anticompetitive behavior. Moreover, U S WEST's
7 behavior in the intraLATA toll and wireless markets, which have the same kind of
8 vertical relationship to access services as interLATA service, show no signs of
9 discrimination, cross-subsidies or other anticompetitive conduct. The combination of
10 competition in access services and regulatory oversight has prevented vertical
11 leveraging. For the same reasons – access competition plus regulatory safeguards –
12 there will be no discrimination or anticompetitive conduct if U S WEST is allowed to
13 offer interLATA services.

14 In general, the only time economic behavior is anticompetitive is if it results in
15 consumers paying higher prices or obtaining lower quality service. It is important to
16 make the distinction between business conduct that harms competition and conduct
17 that might harm competitors. In a competitive market, some firms suffer while others
18 gain competitive advantages and prosper. This is not anticompetitive behavior. More
19 specifically, entry into a geographic market by a highly efficient telecommunications firm
20 is likely to allow them to take market share from incumbents. This may harm existing
21 competitors, but enhances the positive attributes of competition. Similarly, expansion of

1 a highly efficient incumbent may enhance economic welfare even if it prevents entry of
2 new competitors. Classic strategies that are likely to promote economic welfare include
3 producing a superior product, providing superior information or service to customers,
4 and offering a better price. These strategies clearly advance social welfare, as well as
5 private interests by increasing the value to consumers of the product relative to its price.
6 Therefore, to assess whether U S WEST's proposed entry is, on balance,
7 anti-competitive or pro-competitive, we must focus on the likely impact of entry on
8 *consumers* in terms of economics and quality-adjusted price competition.

9 Given the definition of anti-competitive behavior above, it is not likely that U S WEST
10 could harm competition in the interLATA market. A key reason is that U S WEST's
11 entry into long distance represents *de novo* expansion. This means that even though
12 U S WEST would be a major supplier to its long distance competitors, providing them
13 with access to the local network, U S WEST would have zero interLATA market share
14 and, therefore, no market power in the long distance market. It is uncommon for
15 antitrust authorities to challenge the *de novo* expansion of a firm into a related market.

16 ***B. U S WEST's Entry Will Not Harm Competition for Long Distance Service***

17 It is recognized that an incumbent LEC, such as U S WEST, is the dominant supplier of
18 local exchange service and is the primary means of network access to local subscribers
19 which is used in the provision of long distance service. Opponents to RBOC long

1 distance entry claim that U S WEST could exploit its position in the local market to
2 impede competition.[115] The response to this concern is found in the answers to the
3 following questions about anti-competitive behavior. Could U S WEST force its long
4 distance competitors to exit the market through predatory pricing? Can U S WEST use
5 its position as the leading supplier of access services to disadvantage its long distance
6 competitors relative to its own long distance affiliate by providing inferior services?
7 And, can U S WEST shift interLATA costs to its regulated services to cross-subsidize its
8 interLATA subsidiary?

9 I discuss the prospects for each of these types of anti-competitive behavior in turn. I
10 conclude that the risk of U S WEST engaging in anti-competitive behavior is negligible.
11 This conclusion is based on current and anticipated marketplace conditions, lack of
12 evidence of such behavior by U S WEST in analogous circumstances, and the
13 existence of regulatory safeguards.

14 1. Predatory Pricing Is Impracticable

15 In theory a firm could price below cost and successfully force its competitors to exit the
16 market, and then subsequently raise its price to a supracompetitive level, achieving
17 monopoly profits. Such a strategy entails foregoing near-certain profits in the short run

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[115] See, for example, B. Douglas Bernheim and Robert D. Willig, "Appropriate Preconditions for Removal of the InterLATA Restrictions on the RBOCs," *Affidavit filed with the United States Department of Justice in support of AT&T's Opposition to U S WEST's Motions for "Permanent" and "Temporary" Waivers from the Interexchange Restriction of the Decree (D.D.C.)* Case No. 82-0192 (Feb. 15, 1994). (Hereinafter, "Bernheim and Willig").

1 in the uncertain hope of increasing future profits. Although there are various forms of
2 predatory strategies,[116] for a strategy to be successful, the predator must be large
3 enough or have sufficient financial backing to withstand losses for a longer period of
4 time than its competitors. Reentry must also be sufficiently costly that the predator can
5 price high enough in the future to recoup its losses without attracting its competitors
6 back into the market.

7 Court cases and economic analysis have made clear it that predatory pricing seldom
8 makes economic sense. The Supreme Court observed in the case of *Matsushita*
9 *Electric* that "there is a consensus among commentators that predatory pricing
10 schemes are rarely tried, and even more rarely successful."[117] The Court took the
11 position that, "[f]or the investment to be rational, the [predator] must have a reasonable
12 expectation of recovering, in the form of later monopoly profits, more than the losses
13 suffered."[118]

14 It is highly unlikely that U S WEST can force all facilities-based and resale competitors
15 to exit the long distance market. As Figure 9 shows, the leading IXCs are not small,
16 vulnerable companies, but major firms, such as AT&T and MCI WorldCom, whose

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[116] For a more detailed discussion of predatory pricing strategies, see the Affidavit of D. John Roberts in Support of Application by BellSouth for Provision of In-Region, InterLATA Services in Louisiana, *Before the Federal Communications Commission*, November 6, 1997.

[117] Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986). (Hereinafter, "Matsushita"). Also see Kenneth Elzinga & David Mills, *The Recoupment Standard in Brooke Group,* 62 ANTITRUST L.J. 562 (1994).

[118] Matsushita, pp. 588-589.

assets and revenues exceed those of U S WEST. In addition, the assets involved in the provision of long distance service are largely sunk, making it exceedingly unlikely that U S WEST could force these competitors to exit the market. Moreover, even if a long distance supplier did exit the market, its network assets would be available to a new competitor. Thus, any attempted predation by U S WEST would incur large costs with little prospect of success.

Figure 9

Market Capitalization and Total Revenue for U S WEST and the Largest IXCs In 1998

Company	Market Capitalization	Total Revenue[119]
AT&T	$132.8 billion	$ 53.2 billion
MCI WorldCom	$131.3 billion	$ 30.4 billion
Sprint	$ 36.2 billion	$16.0 billion
U S WEST	$ 32.4 billion	$12.4 billion

Source: CompuStat Financial Data, March 15, 1999.

2. Discrimination Against Long Distance Competitors Is Implausible

U S WEST is a supplier of inputs used in the provision of long distance service. Challengers to U S WEST charge that harm might result, therefore, if U S WEST were interested in and able to discriminate in favor of its long distance subsidiary in supplying these inputs. Opponents to RBOC entry[120] point to the potential for an RBOC to

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[119] These numbers are 1998 sales for the 12 month period ending December 31, 1998 from company Income Statements.

[120] See, for example, Bernheim and Willig.

1 foreclose access services to long distance rivals or, more generally, to decrease the
2 quality of the services provided to IXCs.

3 I believe that it is highly unlikely that U S WEST would or could engage in this type of
4 discrimination, because U S WEST cannot foreclose access service to rivals and
5 because the Telecommunications Act of 1996 prevents price or quality discriminations
6 against rivals. Further, even if U S WEST did have such an incentive or ability, it is
7 unlikely that it could engage in this type of behavior without detection and punishment
8 by regulatory and antitrust authorities.

9 First, U S WEST cannot foreclose access services to long distance rivals since
10 foreclosure would involve preventing long distance carriers from having access to
11 customers. Regulation prohibits discrimination in providing access services. In
12 particular, under the Telecommunications Act of 1996 and other FCC regulations,
13 U S WEST is required to provide non-discriminatory access to all IXCs. If U S WEST
14 attempted foreclosure, it would be immediately obvious to regulators. Foreclosure is,
15 therefore, not viable, and only the potential for less drastic forms of anti-competitive
16 discrimination needs to be considered.

17 Second, there is minimal potential for U S WEST to engage in price or quality
18 discrimination against its rivals. Exhibit RGH-7 lists the key safeguards of the Telecom
19 Act that ensure that RBOC interexchange entry will not result in discrimination. Section
20 272 of the Act prohibits discrimination by U S WEST against unaffiliated long distance

1 providers in the provision of services, facilities, and information; establishes standards;
2 and requires these services to be rendered in a timely manner. According to the Act,
3 U S WEST must offer IXC competitors, on the same terms and conditions, any
4 intraLATA facilities used by U S WEST's interLATA affiliate, and U S WEST must
5 charge its long distance affiliates the same amount it charges other providers for access
6 to its telephone exchange services.

7 Furthermore, discrimination in the quality of access services through manipulation of
8 the switch processor, switched transport, dedicated transport, traffic routing, or other
9 physical facilities is not technically feasible. Such discrimination would require
10 herculean coordination efforts because it would involve modifications of internal
11 software and systems and would require the near-conspiratorial cooperation of vendors
12 and U S WEST's own workers, coordinated across several departments. These types
13 of internal modifications are not only near impossible to coordinate without affecting the
14 quality of U S WEST's own services, but they also would be easily detectable and
15 stopped by regulatory safeguards.

16 Finally, if U S WEST deviated from its own past performance in the provision of access
17 services or the performance of the other four RBOCs, IXCs and the FCC could easily
18 identify the aberrant behavior and issue the appropriate punishment, which could
19 include withdrawal of interLATA authority. The idea that discriminatory behavior on the
20 part of a single or multiple RBOCs, would go unnoticed by the FCC and nationwide
21 purchasers of access is implausible. The long distance carriers have been receiving

1 exchange access from the RBOCs for well over a decade. During this time, these IXCs
2 have closely monitored the quality of the access services they receive. For example,
3 AT&T issues quality report cards to U S WEST in all of its states, tracking service
4 quality performance of access as well as other services. Any consistent pattern of
5 deviation in access quality from the last fourteen years of receiving access services
6 from the RBOCs would be immediately recognized by the IXCs, and used to bring
7 about action by regulators.

8 3. Regulation and Competition Prevent Cost Shifting

9 It would be extremely difficult for U S WEST to successfully shift interLATA costs into
10 other jurisdictions, for three main reasons. First, U S WEST is price-cap regulated on a
11 federal level so increasing costs in this jurisdiction (interstate access services for
12 example) will not allow it to increase prices and recover the extra costs. Second, in
13 states where U S WEST is rate of return regulated, such as Arizona, state regulators
14 have experience monitoring and approving U S WEST's rate base and could detect
15 anomalous increases in costs and disallow U S WEST from recovering them. Third,
16 U S WEST's local exchange and access markets are increasingly competitive, so any
17 attempt by U S WEST to shift costs will increasingly lead to revenue and profit losses in
18 the service which would be the recipients of the extra costs.

19 4. FCC Can Punish an RBOC by Revoking its interLATA Authority

1 Finally, I would point out, as cited in Exhibit RGH-7, that the Telecom Act allows the
2 FCC to revoke U S WEST's interLATA authority if the company engages in
3 anticompetitive acts.

4 ***C. Evidence from Other Downstream Markets that LEC InterLATA Entry Will***
5 ***Not be Anti-Competitive***

6 There are several parallel situations to RBOC entry into interLATA markets which
7 demonstrate that vertical supplier and horizontal competitor relationships do not lead to
8 anti-competitive behavior. These situations include: intraLATA toll markets,
9 independent LEC participation in interLATA markets, and incumbent LEC participation
10 in cellular markets. These parallel situations are instructive because the absence of
11 anti-competitive behavior in these markets suggests that there will not be anti-
12 competitive behavior as U S WEST seeks to enter the interLATA arena.

13 First, Arizona has witnessed increasing competition in its intraLATA markets, largely
14 from the IXCs. Other carriers have been competing with U S WEST for intraLATA toll
15 through dial-around for a number of years and through presubscription since April 1996.
16 The provision of intraLATA interexchange service is essentially the same as the
17 provision of interLATA interexchange service in terms of competitiveness. If U S WEST
18 has the incentive and the ability to discriminate against competitors in the provision of
19 interLATA access services, evidence of this discrimination would be visible in the
20 provision of intraLATA access services. However, this is not the case. I am not aware
21 of any complaints to the Arizona Commission about anticompetitive behavior by

1 U S WEST in intraLATA toll markets. In fact U S WEST has lost market share rapidly in
2 intraLATA toll markets since intraLATA presubscription was implemented in April 1996.
3 As of October 1998, competitors had secured XXX of the measurable intraLATA
4 switched long distance minutes-of-use in Arizona.[121] This consistent growth of
5 competitors' intraLATA toll minutes-of-use is difficult to reconcile with hypotheses of
6 discrimination. I would point out that U S WEST is not even required to provide
7 intraLATA service through a separate subsidiary in Arizona.

8 A second example where the lack of discrimination between an ILEC and competitors
9 can be analyzed is independent LECs in interLATA markets. There are several
10 independent local exchange providers in the US, most notably GTE, Sprint, and SNET,
11 that are currently providing interLATA service. The behavior of these LECs indicates no
12 pattern of discrimination. For example, GTE owned Sprint between 1983 and 1986.
13 Then a diversified local exchange company and the third largest IXC, GTE gradually
14 divested its ownership of Sprint, selling shares to United Telecom in 1986, 1988, and
15 1992. During this period, GTE would have had the same kind of incentives to
16 discriminate against the other IXCs that it is argued that RBOCs would have if allowed
17 to enter long distance now. An empirical examination of interstate long distance

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[121] Testimony of David L. Teitzel On Behalf of U S WEST Communications, Inc., *In The Matter of the Application Of U S WEST Communications Inc., a Colorado Corporation, For A Hearing To Determine The Earnings Of The Company, The Fair Value of The Company For Rate Making Purposes, To Fix A Just and Reasonable Rate of Return Thereon And to Approve Rate Schedules Designed to Develop Such Return,* Docket No., T-01051B-99-0105, January 8, 1999. Note that

1 quantities and prices by Fred McChesney, however, does not find any evidence of
2 discrimination effects caused by GTE's ownership of Sprint.[122] Specifically, McChesney
3 found that GTE's ownership of Sprint did not lead to a statistically significant increase in
4 the price of interstate long distance, as measured by the Message Telephone Service
5 Consumer Price Index, nor did it lead to a statistically significant decrease in the
6 quantity of interstate long distance, as measured by the total quarterly interstate
7 switched access minutes.

8 From a competition policy viewpoint, U S WEST would be identical to Sprint in the
9 areas where Sprint provides local service if U S WEST was allowed to provide in-region
10 interLATA service. Consequently, if quality discrimination were possible, I would expect
11 it to appear in those areas where Sprint is an integrated provider of access and
12 interexchange services. Based on a limited survey of state commissions in Sprint's 19
13 state service areas, LECG found no indication that complaints of discrimination have
14 been raised by the other IXCs against Sprint.

15 In addition to Sprint, at least two other large local exchange companies, GTE and
16 SNET, have expanded *de novo* into long distance service. I have found no evidence to

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these numbers do not include losses of intraLATA traffic carried over private networks or through direct access to competitors.

[122] Fred S. McChesney, "Empirical Tests of the Cross-subsidy and Discriminatory-access Hypotheses in Vertically Integrated Telephony," *Managerial and Decision Economics*, Vol. 16, 493-505, 1995. See also *Affidavit of Fred S. McChesney in Support of the Motion of Bell Atlantic Corp., BellSouth Corp., Nynex Corp., and Southwestern Bell Corp., to Vacate the Decree*, Civil Action No. 82-0192 (HHG), July 6, 1994.

1 date that indicates that these LECs have acted to manipulate quality or to reduce
2 competition in the long distance market. Proving the non-existence of a phenomenon is
3 all but impossible. Sample data is instructive. LECG conducted a limited survey of the
4 Connecticut Public Utility Commission and various other PUCs and found no pattern of
5 discriminatory or anticompetitive behavior on the part of SNET or GTE.[123]

6 Finally, the provision of cellular service is another situation in which the potential exists
7 for quality discrimination by an ILEC in favor of its separate cellular affiliate. Wireless
8 competitors are dependent on the ILEC to provide interconnection to the LEC's local
9 exchange network and to provide transport to and from cell sites, switches, and IXC
10 points of presence.

11 Documentation of ILECs' behavior in the provision of cellular service through an affiliate
12 is available. A 1994 study by Dr. Richard Schmalensee examined the impact of LEC
13 affiliation on the wireline cellular operator's market share.[124] His results indicate that the
14 wireline cellular operator's market share is not affected by whether that operator is
15 owned or affiliated with the incumbent LEC in that market. This provides further

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[123] Out of the fifteen states responding to the survey, I found one instance of discriminatory behavior on the part of GTE. See Order on Rehearing, PUC Docket No. 15711, June 24, 1997. In that decision, the Texas Commission found that pricing practices on the part of GTE's long distance subsidiary violated arm's length regulations, allowing its long distance subsidiary to offer discounted intraLATA toll service as part of a bundled package, without attributing these discounts for the purpose of establishing wholesale rates.

[124] Affidavit of Richard Schmalensee, *Motion of Bell Atlantic Corp., BellSouth Corp., Nynex Corp., and Southwestern Bell Corp., to Vacate the Decree.* Civil Action No. 82-0192 (HHG), July 6, 1994, pp. 20-23.

1 evidence of the lack of discrimination in cellular by LECs. In 1997, Drs. John C. Panzar
2 and Richard J. Gilbert confirmed those results through a similar study.[125]

3 Furthermore, evidence that U S WEST is unlikely to be in a position to abuse its control
4 of the access network by discriminating in the provision of a related service can be
5 found in the FCC's recent elimination of the separate affiliate requirements for RBOC
6 provision of wireless services. The FCC relaxed its affiliate rules upon finding that any
7 potential for discrimination could be dealt with through "less stringent" regulatory
8 requirements.[126] If the RBOCs had consistently exhibited a pattern of anticompetitive or
9 discriminatory behavior in the provision of access to competitive wireless service
10 providers, it is unlikely that the FCC would have reached this conclusion.

11 ***D. Summary of Regulatory Safeguards***

12 Regulatory and competitive forces would prevent U S WEST from engaging in anti-
13 competitive behavior if allowed into in-region interLATA markets. Additionally, in
14 parallel circumstances, (cellular, intraLATA toll, and interLATA markets served by
15 independent LECs) incumbent LECs have not engaged in anti-competitive behavior.

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[125] Joint Affidavit of Richard J. Gilbert and John C. Panzar on behalf of Ameritech, *In the Application of Ameritech Michigan Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide InterLATA Service Originating in Michigan, CC Docket No. 97-137*, May 21, 1997, p. 21.

[126] Order *In the Matter of Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services*, WT Docket No. 96-162, October 3, 1997.

1 **V. CONCLUSION**

2 In conclusion, I recommend that the Arizona Public Service Commission support
3 U S WEST's request to enter the interexchange market. I base this recommendation
4 upon an economic assessment that demonstrates: (1) local exchange markets in
5 Arizona are open to competition; (2) U S WEST will inject valuable added competition
6 into the interLATA market – it will be an efficient provider of interLATA services, it will
7 offer a full range of toll services, and it will have a well-known brand name; and (3) it is
8 implausible that U S WEST's entry into the interLATA market will harm interLATA
9 competition. U S WEST's entry into the long distance market is an important step
10 toward promoting competition in all telecommunications markets and will bring the
11 benefits of a wider range of communications and information services to the consumers
12 and businesses of Arizona.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

DR. ROBERT G. HARRIS

U S WEST COMMUNICATIONS

MARCH 25, 1999

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
Dr. Robert G. Harris' CV	RGH-1
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Competitor Profiles	RGH-4
CLEC Population Density Map	RGH-5
Market Concentration	RGH-6
Regulatory Safeguards	RGH-7

EXHIBIT RGH-1

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Charles C. Slater Award (outstanding contribution to the Journal of Macromarketing, 1983 - 1986)

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TEACHING

Graduate Courses: Business and Public Policy (MBA Core Course), Competitive Strategies & Public Policies in Telecommunications, Microeconomic Analysis for Managerial Decisions, Industry Analysis and Competitive Strategy, Doctoral Research in Business & Public Policy, Antitrust Law (School of Law, with L. Sullivan), Antitrust Economics (Department of Economics).

Undergraduate Courses: Social and Political Environment of Business (Core Course), Economics of Regulated Industries, The Corporation and the Global Economy.

Executive Education: Competitive Strategy, Telecommunications Policy and Strategy, Public Policy Strategy, Managing Business-Government Relations.

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8) "The Effects of Public Policies on ISDN Deployment and Adoption in the U.S.," presented to International Telecommunications Society, Cannes, France, June 1992.

9) "Removing the MFJ Restriction on InterLATA Services," invited testimony, Subcommittee on Telecommunications & Finance, U.S. House of Representatives, Washington D.C., May 1992.

10)"The Implications of Telecommunications Infrastructure Investment for R&D, Innovation and Competitiveness," invited testimony, Subcommittee on Communications, U.S. Senate, Washington D.C., February 1992.

11)"Principles of Costing and Pricing for Telecommunications Regulatory Policy," invited testimony, Colorado Public Utilities Commission En Banc Hearing, Denver, February 1992.

12)"Deregulation and Interstate Bank Entry in California," with Lee Burke, Research Report of the California Policy Seminar, UC Berkeley, April 1991.

13)"Assessing the Future of Telecommunications in the Global Economy," invited address, California Telephone Association, Monterey, CA, February 1991.

14)"Economic Rationale for a National Fiber Optic Infrastructure," invited address, Congressional Staff Forum on Telecommunications (sponsored by Ameritech), Washington D.C., February 1991.

15)"Applications of Incentive Regulation: An International Comparison," invited presentation, Conference of California Public Utilities Counsel, Long Beach, CA, October 1990.

16)"The Role of Telecommunications in Regional Economic Development," invited address, Rocky Mountain State Leaders Conference, Billings, Montana, October 1990.

17)"Telecommunications and Public Policies in the Global Market," invited address, Carnegie Council, New York, NY, October 1990.

18)"Why We Need a National Telecommunications Policy: A Comparative Perspective," invited address, Policy Issues Management Conference, Bell Communications Research, Murray Hill, NJ, October 1990.

19)"Incentive Regulation for Telephone Utilities," invited presentation, Workshop of the Colorado Public Utilities Commission, Denver, September 1990.

20)"The Role of Telecommunications Policy," invited lecture, Conference on Economic Development in the Pacific Northwest, Portland, Oregon, September 1990.

21)"The Changing Economics of Telecommunications: Implications for U.S. Policy and Competitiveness," invited briefing of U.S. Congressional staff on telecommunications (sponsored by Pacific Telesis), San Francisco, August 1990.

22)"Communications Competitiveness and Infrastructure Modernization Act of 1990," invited testimony, Communications Subcommittee, U. S. Senate, Washington D.C., July 1990.

23)"Investing in America's Future," invited essay, 1989 Annual Report of Southwestern Bell Corporation, St. Louis, 1990.

24)"The Public Switched Telephone Network and Rural Economic Development," invited lecture, Montana State Leaders' Conference, Helena, April 1990.

25)"Is Public Policy Meeting the Needs of Consumers?" invited panelist, Conference on Telecommunications Technologies and Policies, Center for Communications and Information Science & Policy, University of Pennsylvania, March 1990.

26)"Telecommunications as a Strategic Industry," invited address, New England Council, Boston, February 1990.

27)"Fiber to the Customer: A Public Policy Perspective," invited paper, Western Communications Forum, San Diego, February 1990.

28)Session Chair and Moderator, "State Regulatory Reform: Recent and Future Trends," Fifth Conference on State Telecommunications Regulation, University of Utah, Salt Lake City, January 1990.

29)Invited Panelist, "Crossroads of Information Technology," Board on Telecommunications and Computer Applications, National Academy of Engineering, Washington D.C., October 1989.

30)Invited Panelist, "Industry Forum," Annual Meeting of the U.S. Telephone Association, San Francisco, October 1989.

31)"Strategic Lessons from Deregulated Industries," paper presented to Strategic Management Society, San Francisco, October 1989.

32)"Deregulation in the Transportation Industries: Lessons for Telecommunications Managers," invited paper, Center for Telecommunications Management, University of Southern California, October 1989.

33)"Price Cap Regulation and Economic Forecasting," invited presentation to 1989 National Forecasting Conference, Bell Communications Research, San Francisco, May 1989.

34)"The Strategic Implications of Telecommunications Deregulation in Europe," invited presentation, Strategic Management Society, Amsterdam, October 1988.

35)"Telecommunications Deregulation: Implications for the California Economy," invited presentation, California Foundation for the Environment and the Economy, Carmel, June 1988.

36)"A Comparison of U.S. and Japanese Policies toward Information Technologies," invited presentation, International Public Economics Association, Tokyo, May 1988.

37)"Information Technologies, Public Policy, and Regional Economic Development," invited address, Conference on Regional Development in Japan, Hokkaido University, Sapporo, Japan, May 1988.

38)"The Implications of Line-of-Business Regulation for Diversification Strategy & Enterprise Structure," presented to Strategic Management Society, Boston, October 1987.

39)"Alternative Regulatory Frameworks for Local Exchange Carriers," invited presentation, En Banc Hearing of the California Public Utility Commission, September 1987.

40)"Emerging Telecommunications Policies in Europe," Briefing of California Legislative Leaders, Los Angeles, September 1987.

41)"Japanese Corporate Philanthropy in the United States," presented to Academy of Management, New Orleans, August 1987; Center for Research in Management Working Paper BPP-23; published in summary form in *Strategic Directions*, with Barbara Lombardo and David Vogel, April 1989.

42)"The Effects of Deregulation on Competition and Competition Policy in Banking: A Review of the Literature," Working Paper No. 4, National Center for Financial Services, Berkeley, August 1987.

43)"Competitive Strategies under Regulatory Constraint: Implications of the AT&T Divestiture on Vertical Relations in Telecommunications," with David J. Teece, paper presented to Strategic Management Society, Singapore, 1986.

44)"The Economic Consequences of Deregulation," invited address, Emerging Issues Program, Conference of National State Legislative Leaders, Los Angeles, September 1986.

45)"Public Policies toward Utility Diversification: An Overview," invited presentation, California Policy Seminar/California Senate Office of Research, Berkeley, April 1986.

46)"New Technologies for Local Loop Access: An Economic and Regulatory Analysis," with Gary Pisano, Office of Technology Assessment, United States Congress, June 1985.

47)"Corporate Community Involvement in the Greater San Francisco Bay Area," with D. Vogel and J. Logsdon, Center for Research in Management, working paper, Berkeley, May 1985.

48)"The Future of Telecommunications Regulation," invited presentation, En Banc Hearing of the California Public Utilities Commission, San Francisco, November 1984.

49)"Testimony in Support of the Taxpayer Antitrust Enforcement Act," Judiciary Committee, U.S. Senate, May 1984.

ADMINISTRATIVE POSITIONS, UNIVERSITY OF CALIFORNIA

WALTER A. HAAS SCHOOL OF BUSINESS

Chair, Business and Public Policy Group (1983-84, 1986-93).
Policy and Planning Committee (1986-88; 1991-93); Chair (1987-88; 1992-93).
Chair, Program in Business and Social Policy (1986-90).
Business School Building Program Committee (1986-91).
Ph.D. Field Advisor, Business and Public Policy (1981-87; 1989-91).
Policy and Planning Committee (1991-3; Chair, 1992-93).
Member, Board of Directors, Washington Campus Program (1990-93).
Director, The Executive Program (1983-85).
Director, Executive Programs in Telecommunications (1989-92)
Chair, Executive Education Task Force (1991-93).

Member, Board of Directors, Berkeley Center for Executive Development.

UNIVERSITY OF CALIFORNIA, BERKELEY

Executive Committee, Center for Research in Management (1989-).
Advisory Board, Lester Center for Innovation and Entrepreneurship (1992-).
Chancellor's Advisory Committee on Parking (1988-89).
Executive Committee, National Financial Services Center (1986-88).
Executive Committee, Institute of Transportation Studies (1981-83).
Director, Center for Transportation Policy Research (1980-82).

UNIVERSITY OF CALIFORNIA, SYSTEMWIDE

Working Group on Technology Transfer (1988-90).
Task Force on Telecommunications and Information Policy Research (1984-85).

PROFESSIONAL AFFILIATIONS

American Economic Association

Academy of Management

Strategic Management Society

International Telecommunications Society

Association of Public Policy Analysis and Management

SERVICE TO PROFESSIONAL JOURNALS, SOCIETIES & PUBLIC AGENCIES

Governor's Ad Hoc Committee, Golden State Quality Awards (1991-92)

Chair, Ninth Annual International Conference of the Strategic Management Society, San Francisco (1989)

Associate Editor, California Management Review

Associate Editor, Logistics and Transportation Review

Editorial Advisory Board, Transportation Research

Session Organizer, Telecommunications Policy Research Conference (1988, 1989)

Session Organizer, Academy of Management (1991)

Reviewer/Referee: *Bell/RAND Journal of Economics; Industrial and Corporate Change; Journal of Asian Economics; Journal of Economics and Business; Journal of Public Policy Analysis & Management; Journal of Regulatory*

Economics; National Science Foundation; Quarterly Review of Economics and Business; Review of Economics and Statistics; Telecommunications Policy.

CONSULTING & TESTIMONY

ECONOMIC CONSULTING TO PUBLIC AGENCIES

California Department of Consumer Affairs (industry analysis; telecommunications policy); California Office of Attorney General (antitrust analysis in tire industry, merger analysis in food retailing industry, resale price maintenance in consumer electronics, infant formula pricing); California Public Utilities Commission (teach regulatory economics & policy to Commission staff); Interstate Commerce Commission (rate regulatory policy, merger policy, costing methodology); Office of Technology Assessment (telecommunications policy); U.S. Department of Transportation (railroad industry rationalization, merger policy); U.S. General Accounting Office (transportation policy).

REGULATORY EXPERT TESTIMONY

Pacific Bell (product pricing, competitive strategy, regulatory policy, broadband deployment, MFJ interLATA relief); US WEST (regulatory policy, costing and pricing principles, local competition and interconnection); Ameritech (price regulation; local competition policy); General Telephone (pricing, regulatory policy); Western Coal Traffic League (railroad pricing); Consolidated Freightways (motor carrier pricing); Southern Pacific Transportation Co. (route rationalization analysis; rail merger analysis; pricing of trackage rights); American Presidents Intermodal Co. (competition policy, merger analysis); Bell Communications Research (R&D policy analysis); Bell Atlantic (price regulation, cable rate regulation; cellular telephone joint venture); Southwestern Bell (price regulation, local competition policy); BellSouth (price regulation, local competition policy); NYNEX (FCC spectrum auction rules); United States Telephone Association (FCC price regulation); MFJ Task Force (MFJ manufacturing relief); AGT and Stentor Companies (Canadian interconnection and local competition policy); Iusacell (Mexican interconnection and local competition policy).

BUSINESS LITIGATION EXPERT WITNESS TESTIMONY

Electrical contracting; biotechnology manufacturing equipment; corrugated steel pipe products; pipe fabrication; vision care services; electronic lighting ballasts; motion picture production, distribution and exhibition; regional shopping center development; semiconductor manufacturing equipment; digital-analog converters; workmen's compensation insurance; semiconductor manufacturing; resale of telecommunications equipment and services; after-market servicing of telecommunications equipment; on-line information and transaction services; magazine publishing; telecommunications equipment; Internet services; citric acid.

July 1998

EXHIBIT RGH-2

PRIVATE NETWORKS

Companies are increasingly using private networks to obtain services they would have previously purchased from incumbent local exchange carriers. Increasingly, these private networks are constructed using technologies that provide an alternative to incumbent LECs' wireline networks. For example, private branch exchanges (PBXs), very small aperture terminal (VSATs), satellites and private microwave transmission stations all allow business customers to buy or lease premise-based equipment which lets them bypass local exchange networks.

I. PBXs

Private branch exchanges (PBXs) are one way that private networks compete with local exchange service. A PBX (also known as a PABX) is a small, local telephone switch installed at a business premises or residential multiple dwelling unit building. The vast majority of businesses use PBXs or key systems to self-supply switching and enhanced services for intra-company calls. In this case when an intrafirm call is made, the call never leaves the building, nor does it travel on the publicly switched telephone network. The number dialed typically uses less than the seven digits required for a normal local exchange call. In effect, companies with PBXs consume less switching capacity from their local exchange service provider than they otherwise would. PBXs can also be shared by a

number of smaller businesses located in the same office building or even by residential customers living in MDU buildings.

Even if users do not make many intrabuilding calls, PBXs still compete with local phone companies by reducing users need for access lines because they aggregate calls of multiple users over one line. Since there is a low probability that all users will use their phone at the same time, multiple users can cost-effectively share a high capacity (T-1) line to the outside local exchange network for incoming and outgoing calls. If PBXs did not exist, companies would be purchasing more Centrex and business access lines instead of sharing outside trunks among multiple PBX extensions. Figure 1 below makes a very rough estimate of the amount of business access lines U S WEST in Arizona has lost to competition from PBXs. The analysis below assumes that one PBX trunk is shared by seven PBX extensions (i.e. end users), an assumption based on average industry practice and the nationwide ratio of PBX extensions to trunks.[1] I estimate that U S WEST has lost about 602 thousand business and residential access line sales (net of PBX trunks) due to PBX usage in Arizona.

PBXs operate as stand-alone switching hubs or as remote switching nodes on private networks consisting of many switches and lines. The PBX was a key development leading to the entry of companies such as MFS and TCG, who built networks to provide local and long distance access to business users. PBXs can

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[1] The nationwide ratio of total PBX extensions to PBX trunks in 1997 was approximately 7.3 to 1. See "1999 MultiMedia Telecommunication Market Review and Forecast", *Multimedia Telecommunication Association with Telecommunications Industry Association*, 1999, Table III-2.5 and Table III-2.10.

easily be programmed to route long distance calls to competing networks while still using the incumbent's network to complete outside local calls.

Figure 1

Estimated Local Access Lines Replaced by PBXs In U S WEST's Arizona Territory

(Lines are in thousands)	1999	2000	2001	2002
Cumulative Total US PBX Extensions *(1)*	47,297	48,858	50,421	52,137
Total US Land Lines Replaced by PBXs *(2)* *(Assuming one trunk is purchased for every 7 PBX extensions)*	40,540	41,878	43,218	44,689
USW AZ Land Lines as Percentage of US Land Lines *(3)*	1.48%	1.48%	1.48%	1.48%
USW Land Lines Replaced by PBXs in AZ *(4)* *(Assuming one trunk is purchased for every 7 PBX extensions)*	602	621	641	663

Notes:

(1) Sourced from Table III - 2.5, "1999 MultiMedia Telecommunication Market Review and Forecast", Multimedia Telecommunication Association.

(2) This is the difference between the number of PBX extensions (i.e. the number of access lines that would have been ordered from ILECs) and the number of trunks connecting the PBX systems to the central offices (i.e. the number of lines ordered from ILECs). The underlying assumption that one trunk is purchased for every seven PBX extensions is based on the fact that the nationwide ratio of total PBX extensions to PBX trunks in 1997 was approximately 7.3 to 1. Sources: Table III-2.5 and Table III-2.10, "1999 Multimedia Telecommunication Market Review and Forecast", Multimedia Telecommunication Association.

(3) Calculated by using FCC's Statistics of Communications Common Carriers data. Table 2.3-Total USF Loops For All Local Exchange Companies As of December 31, 1997. Assume to remain constant over time.

(4) Calculated by multiplying (2)(3).*

II. VSATs

Very small aperture terminal (VSAT) technology is also used for satellite-based private networks. VSAT terminals transmit information to and from a central orbiting satellite base station. Since they use wireless transmission, these networks serve low density locations in rural areas nearly as efficiently as they serve urban sites. VSATs offer a viable solution for connecting multiple fixed

locations to a corporate network, effectively bypassing existing local exchange networks.

According to General Electric, a manufacturer of VSAT systems and end-user terminals, VSATs compete effectively with terrestrial communications systems including local exchange lines used for dial up credit card transactions and reservation processing centers.[2] GE explains some of the advantages VSATs have compared to traditional local exchange networks:

- VSAT costs have dropped significantly over the past few years, VSAT network prices compete very effectively against terrestrial alternatives, including dial-up. In addition, the costs are predictable and stable.[3]

- VSATs provide total independence from the telephone companies. For networks of more than 200 sites carrying on-line traffic, there could be significant cost savings over terrestrial alternatives. Sites can be installed and removed easily. A VSAT network anywhere in the world can grow at a rate of 300 to 500 sites per month. The service quality is superb: 99.9% of the time there is less than 1 error in 1,000,000 characters sent by satellite.[4]

VSATs are also used widely in regional and nationwide corporate private telecommunications networks for communications such as data, voice, and fax. For example, Toyota Motor Sales USA uses VSATs for communicating among offices and dealers around the country. VSATs are commonly used in the wholesale and retail oil industry, grocery and other retail store chains, government

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[2] "VSAT Answers to Your Questions," *General Electric*. <www.ge.com>

[3] "VSAT Answers to Your Questions."

offices, banks and financial services institutions, car dealerships, drug stores, electrical utilities, and hotel reservation systems.[5] Without VSATs, most of these calls would likely be carried on the publicly switched telephone networks of incumbent local exchange carriers.

The use of VSAT systems has increased markedly in recent years, and recent innovations in satellite technology – in the areas of digitalization, data compression, miniaturization and improvements in signaling processing capabilities – will generate huge increases in transmission capacity and large decreases in costs and prices. A number of national companies have installed VSAT systems that are explicitly designed to replace normal terrestrial local phone service that would otherwise have been purchased from the local phone companies who served the geographic area where their offices were located.[6] Specific examples utilizing VSAT technology in Arizona include:

- **Best Western**, "Among the initial applications supported by this network is a new reservation system that instantly will account for rooms as they are depleted or added. This system will replace the current one that uses phone lines to make a dial-up call each time a transaction is processed."[7]

- **Mail Boxes Etc (MBE)**, "MBE [intends] to maximize its VSAT network by using it in a number of proactive customer-service applications...credit-card verification, software downloads, database

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[4] "VSAT Primer," *General Electric.* <www.ge.com>

[5] "VSAT Primer," and "VSAT Answers to Your Questions."

[6] VSATs actually may replace both the local access line and long distance transmission service. Only the lost local revenues should be counted in market share analysis for local exchange companies.

[7] "Best Western Selects HNS For VSAT Services At 2,000 Locations," *HNS Press Release,* November 14, 1995. <www.hns.com>

updates, polling, and a franchisee intranet."[8] "[MBE's] franchises will [also] use VSATs to give walk-in customers Internet access...That [Internet] traffic will share the same two-way network with MBE's internal data – credit card purchases, marketing material, company email and the like."[9]

- **Enterprise Rent-A-Car**, "With offices on two continents, a satellite-based network offers Enterprise significant cost, availability, speed, and flexibility advantages over traditional land-based alternatives."[10]

- **Mobil,** "[Completed] the installation of 5,000 VSATs...[utilizing] the system for credit card authorizations, [with] plans to use the VSAT network to support marketing initiatives and manage gas tank monitors."[11]

Additionally, VSAT manufacturers and service providers also advertise their systems as substitutes for landline systems:

- **AT&T** "This new delivery service, which will be available later this year, will give oil wholesalers and retailers, known as "jobbers," the option of receiving daily petroleum price quotes via satellite. Currently, petroleum refiners send daily pricing notifications to their jobbers usually via fax, electronic mail or direct distance dialing to a computer terminal."[12]

- **MCI** "MCI Skyline Direct lets you bypass local infrastructures completely, and have your transmissions received directly at the

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[8] "HNS VSAT Satellite System Enables Mail Boxes Etc. to Provide High-Speed Internet Access for Consumers and Improved Communication Programs for Franchisees," *HNS Press Release,* August 25, 1998, <www.hns.com>

[9] Alex Lash, "Satellite Net Access Comes to Earth," *IDG*, February 2, 1999. <www.idg.com>

[10] "Enterprise Rent-A-Car Chooses HNS for New VSAT system," *HNS Press Release,* May 26, 1998, <www.hns.com>

[11] "Hughes Network Systems Reaches 5,000 VSAT Milestone with Mobil," *HNS Press Release,* September 15, 1997, <www.hns.com>

[12] AT&T EasyLink Services and Mainstream Data, Inc. provide new option for electronic mail messages using VSAT technology. "VSAT satellite delivery option available for AT&T customers," *AT&T Press Release*, June 10, 1991. <www.att.com>

intended location via an inexpensive VSAT satellite dish."[13]

Figure 2 below estimates how many local business lines VSATs have replaced in U S WEST's Arizona territory.

[13] MCI website, Products Page, <www.mci.com>

Figure 2

Estimated Local Business Lines Replaced by VSATs In U S WEST's Arizona Territory

	1997	1998	1999	2000	2001
Cumulative Total World VSAT Terminals *(1)*	297,635	342,280	393,622	452,666	520,565
Cumulative Total North America VSAT Terminals *(2)*	187,510	215,637	247,982	285,179	327,956
Cumulative Total US VSAT Terminals *(3)*	161,294	185,488	213,312	245,308	282,105
Total US Land Lines Replaced by VSATs *(Assuming each VSAT Terminal replaces 1 Business Line)*	161,294	185,488	213,312	245,308	282,105
Total US Land Lines Replaced by VSATs *(Assuming each VSAT Terminal replaces 5 Business Lines)*	806,471	927,442	1,066,558	1,226,542	1,410,523
USW AZ Land Lines as Percentage of US Land Lines *(4)*	1.48%	1.48%	1.48%	1.48%	1.48%
USW Land Lines Replaced by VSATs in AZ *(5)* *(Assuming each VSAT Terminal replaces 1 Business Line)*	2,393	2,752	3,165	3,640	4,186
USW Land Lines Replaced by VSATs in AZ *(6)* *(Assuming each VSAT Terminal replaces 5 Business Lines)*	11,966	13,761	15,825	18,199	20,929

Notes

(1) Estimated 1997 Total from Comsys web site. Totals for years 1998-2001 projected using a 15% growth rate estimated from CAGR for 1995-1997. <http://www.comsys.co.uk>

(2) Estimated using North American share (63%) of World VSAT Terminals from Comsys web site. Assumed to remain constant over time. <http://www.comsys.co.uk>

(3) Estimated using the US share (86%) of North America Telephone Lines from the ITU web site. Assumed to remain constant over time. <http://www.itu.org>

(4) Calculated using FCC's Statistics of Communications Common Carriers data. Table 2.3-Total USF Loops For All Local Exchange Companies As of December 31, 1997. Assumed to remain constant over time.

*(5) Calculated by multiplying Row (3)*Row (4)*1*

*(6) Calculated by multiplying Row (3)*Row (4)*5*

I estimate that, as of 1997, VSATs replaced between 2,000 and 12,000 local lines in U S WEST's Arizona territory, assuming that an average VSAT terminal replaces between one and five lines.[14]

[14] I assumed the minimum number of landlines a VSAT could replace is one. Some VSATs however replace multiple lines because they are shared by many businesses located in the same mall or shopping center.

III. Microwave

Microwave systems have become an economical alternative to leased landlines for transmitting data, voice, and video to remote locations in local area networks (LANs).[15] Microwave radios have traditionally been considered reliable and fast, but also difficult to maintain and install. Technological advances, however, have made newer microwave systems light weight, compact and easy to install and maintain.[16] Microwave systems can connect remote locations up to 20 miles or more, but most applications fall under four miles.[17] Furthermore, microwave provides high bandwidth and is capable of sending data as fast as 10 Mbps.[18]

Microwave communications are considered a competitive alternative to leased line services offered by the phone companies. According to Data Comm for Business, a manufacturer and distributor of communications and networking products, "[Microwave] communications technology can save hundreds of dollars per month by completely eliminating telephone company charges."[19] Although microwave systems have been relatively expensive, their prices have decreased significantly and are continuing to drop, even as the features that they provide have been

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[15] "About SMI Communications," *Southwest Microwave, Inc. (SMI)*. <www.southwestmicrowave.com> See also Mort Cohen, "Cost-Effective Microwave Solutions for Short and Medium Haul Networks," *Harris Corporation*, Redwood Shores, CA. <www.harris.com/harris> (Hereinafter, "Mort Cohen Paper").

[16] "Wireless LAN Over Microwave—A Tutorial," *SMI*. <www.southwestmicrowave.com> (Hereinafter, "Wireless LAN tutorial").

[17] Wireless LAN tutorial.

[18] "Connecting Remote LANs—Wireless WAN Links Reduce Telephone Cost to Zero!" *Data Comm for Business*. <www.dcbnet.com> (Hereinafter "Connecting Remote LANs").

[19] Connecting Remote LANs.

increasing.[20] Despite their high start-up cost, microwave systems, in most cases, offer a payback period of three months to one and half years, compared to leased line service payments that continue indefinitely.[21] In addition to their cost advantages over leased lines, microwave systems also give their owners the added benefits of network ownership, control, and rapid expandability.[22]

Most microwave LAN systems operate in the 23 GHz band of spectrum licensed by the FCC. This requires the owners of the microwave systems to perform a frequency search to prevent interference with other near-by users, fill out an FCC application, and pay a nominal licensing fee before they put their systems into operation.

Issues, such as the effects of particular weather conditions and the need for a clear line-of-site between the two locations, need to be addressed when designing a microwave system. Although the performance of microwave systems can be affected by environmental and atmospheric factors, proper planning and equipment choices can significantly reduce any problems caused by these conditions. According to a tutorial that is presented on Southwest Microwave's web site, "The most prevalent factor that affects microwave signals is rain... Other factors such as snow, fog, smog, and temperature inversions have minimal effects on microwave performance. Even with these environmental factors, microwave communications can offer greater than 99.995% availability. In order to assure

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[20] Mort Cohen Paper and Connecting Remote LANs.

[21] "Top 10 Questions for Microwaves," *SMI*. <www.southwestmicrowave.com> See also Mort Cohen Paper.

[22] Mort Cohen Paper.

reliable communications, microwave systems are designed to accommodate rain in several ways."[23] The tutorial also discusses methods that are sometimes employed if a clear line-of-site cannot be established between the two locations, "...systems are sometimes repeated over objects (i.e., other buildings) or reflected around an object using specific microwave passive repeaters. "[24] Arizona's desert climate provides advantageous weather conditions for the use of microwave radios.

In Arizona today, there are examples of microwave systems being used in place of land-line local exchange or private line service. Scottsdale Plaza, located in Scottsdale, Arizona, is a resort and office complex housing various businesses, which are all connected to a common LAN. In March of 1996, Scottsdale Plaza installed a microwave radio system to connect the firm's resort to its corporate headquarters, which are located a mile and a half away. Prior to installing the microwave system, these locations were connected with a different type of wireless link, a 900 MHz, spread spectrum radio link with only about a 2 Mbps throughput. Increased frequency band usage at 900 MHz in the suburban Scottsdale area caused the resort to experience interference and reduced network speeds. Furthermore, a growth of users on the network, resulting from increased business through corporate leasing, made it necessary for Plaza Resort to upgrade to a system with higher bandwidth. The Plaza Resort considered using either microwave or landline fiber systems, but ultimately chose the microwave solution because it was more cost effective. The microwave solution was supplied

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[23] Wireless LAN tutorial.

[24] Wireless LAN tutorial.

by Southwest Microwave, one of the largest microwave equipment vendors, which is headquartered in Tempe.[25]

[25] "Case History – Resort Hotel Implements Microwave For Critical Applications," *SMI.* <www.southwestmicrowave.com> See also "Tired of Being Wired," *Wireless Internetworking—Infoworld.* <www.inforworld.com>

EXHIBIT RGH-3

COMPETITION BETWEEN MOBILE WIRELESS AND ILEC SERVICE

I. Mobile Wireless as a Substitute for Wireline Local Exchange Service

Mobile wireless services (such as traditional analog & digital cellular services, personal communications services (PCS), and enhanced SMR (Special Mobile Radio) services) increasingly act as substitutes for landline services as many calls that would have otherwise been made on landlines are now being made on wireless facilities. Some customers are actually canceling, or not increasing, their wireline subscriptions to substitute their traditional phones with wireless.

Wireless substitution for landline calling has been historically limited by the high wireless-to-wireline premium (i.e. the relative pricing of wireless vs. landline service). In the past, wireless prices made substitutability impractical, and wireless services were a complementary "niche" product used mostly in those businesses where mobility was extremely valuable, or by wealthy individuals.

However, from 1992 to March 1999, the number of wireless subscribers has grown almost 700 percent,[1] and wireless prices have fallen dramatically. By

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[1] Data from CTIA website, which displays the "Wireless Subscribership: June 1985-June 1998" and conveys that there are 69,265,922 U.S wireless subscribers as of March 11, 1999. <www.wow-com.com>

1998, surveys showed more than 60% of wireless subscribers used their phones for personal rather than business purposes.[2] Roughly 90% of the U.S. population has had access to at least one competitive PCS service offering since the first commercial PCS system's launch three years ago. Most major cities and 60% of the US population today have at least two PCS offerings competing against the cellular incumbents.[3]

The successful introduction of PCS services throughout the country has promoted significant price reductions in wireless services overall. The Yankee Group's Wireless Price Index reveals that wireless rates have dropped by an average of 40% between early 1995 and the third quarter of 1998. This has also triggered average usage levels of 300-400 minutes of use per month for digital cellular and PCS customers, which is more than triple the historic industry average of 100 MOU.[4]

Price reductions have come in the form of reduced per minute prices, increased "free" minutes, discounts on packages of services, and large local calling areas. Wireless local coverage areas frequently extend further than the LEC's local

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[2] "Dynamics And Trends In The Wireless Marketplace," *Peter D. Hart Research Associates*, WOW-COM, January 1999. <www.wow-com.com>

[3] "PCS Competition In 87% Of U.S.," *Paul Kagan News, Wireless Market Stats. #113*, February 26, 1999.

[4] "Yankee Group Pricing Study: All-inclusive Wireless Rates Usher in The Era of Landline Displacement," *The Yankee Group Media Release*, January 4, 1999.

calling areas, resulting in the substitution of wireless MOUs for landline MOUs to avoid local toll charges.

As the wireless pricing premium declines further, wireless penetration, users' MOUs, and wireless displacement of landline revenues will all increase.[5] Continued price decreases coupled with increased usage will benefit the competitive position of wireless services, allowing for these services to compete as true substitutes to landline services rather than continue as mere complements.

Wireless services are also an attractive alternative to traditional landline services due to the bundling of value-added functionality, such as call waiting and voicemail, into monthly subscription plans at no extra charge.[6] In order to avoid the duplication of charges and services, some users are foregoing their landline services for wireless to consolidate them into a single monthly bill. It is estimated that at least 40 percent of current cellular users would be interested in consolidating their telephone services in a single personal telephone number, with one provider for wireless, local and long distance services.[7] Mobile phones allow users to maintain one phone number in any location, give them the option

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<www.yankeegroup.com>

[5] "Worldwide Wireless Pricing, the Sequel: Driving Penetration and Landline Displacement," *The Yankee Group Report* Vol. 2 No. 14, March 8, 1998, p. 22.

[6] "PCS Subscribers Are Full of Surprises; Cheap Talk Converts The Old, Lures the New and Paves the Way for Landline Displacement," *Bell Atlantic News Release*, August 19, 1997.

[7] "US Cellular Market Status & Outlook," *Strategy Analytics*, April 1998, p. 16.

of making calls outside of the local calling areas while travelling, and give them the ability to avoid the high cost of using calling cards and the inconvenience of public pay phones.[8]

In addition to decreased pricing, improvements in wireless technology, such as extended battery life, improved signal quality & coverage areas, smaller, lighter telephones with more advanced features, and the added convenience of mobility, will further make cellular and PCS more attractive than plain-old-telephone-service.

Today, I believe that wireless services are most likely to replace second and third land lines which would have been served by the wireline incumbent. In fact, an increasing number of users are canceling their wireline subscriptions altogether. This is consistent with consumer survey results reported by BellSouth. BellSouth reported that "[m]arket surveys of PCS service in Louisiana indicate that about 17 percent of PrimeCo's and Sprint Spectrum's 8000-plus customers chose to subscribe to PCS service instead of subscribing to wireline service" and that "29 percent of Louisiana PCS users report that they now use PCS as their primary home or business phone."[9] Some 65 percent of PCS users surveyed in

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[8] For example, Sprint PCS offers a nationwide "no roaming" plan which allows calls to be placed anywhere on the Sprint PCS Network, at the standard airtime home rate, for a flat, monthly charge. See Home Rate USA, *Sprint PCS Web Site.* <www.sprintpcs.com>.

[9] BellSouth Brief, *In the Matter of Application by BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in Louisiana*, CC Docket No. 97-231, November 6, 1997, p. 52.

Louisiana use the service to make or receive calls from home, up from 56 percent last fall.[10] According to another industry report, 38 percent of consumers show an interest in having their wireless phone replace their home landline phone.[11] Andersen Consulting predicts that cellular phones will achieve "25 to 35 percent displacement" of wired telephones in five to seven years.[12]

II. Anecdotal Examples of Wireline Customers Giving Up Their Subscriptions for Wireless Service

Reports are continually emerging that indicate that wireless services are already displacing significant volumes of wireline traffic and reducing the number of wired access lines. For example, the *San Francisco Chronicle* reported, "From rural towns to big cities, phone users are cutting the cord and shifting to wireless phones as their main means of telecommunication."[13]

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[10] "Surveys Show PCS Wireless Phones an Effective Substitute for Wireline Phone Service," *BellSouth Press Release*, July 6, 1998. <www.bellsouthcorp.com>

[11] "Dynamics And Trends In The Wireless Marketplace," *Peter D. Hart Research Associates*, WOW-COM, January 1999. <www.wow-com.com>

[12] Roy Furchgott, "Cutting the Phone Cord," *New York Times*, September 17, 1998. (Hereinafter, "Furchgott Article.")

[13] Deborah Solomon, "A World Without Wires: Untethered Talking Gets More Affordable, Accessible," *San Francisco Chronicle,* October 27, 1998.

The *New York Times* also reported numerous examples where consumers and businesses have substituted cellular phones for landline service. (See Furchgott Article.) In another article, a *Wall Street Journal* reporter who chose to go entirely wireless tells how she received "[1],000 free off-peak minutes and 150 free peak minutes and a range of free services- like voice mail, call forwarding, paging – for about the same as I was paying for my land line: $50 a month before taxes." (See Kara Swisher, "I Cut the Cord," *Wall Street Journal*, September 21, 1998.)

Wireless providers are also reporting substitution:

- According to the CEO of Sprint PCS:

  > [m]any of our customers are beginning to use their Sprint PCS phones for more of their communications needs...in a few cases, customers are actually disconnecting their land-line service and using Sprint PCS to make and receive all their calls at home. With Sprint PCS, consumers have a wireless phone that offers all the features, benefits and voice quality of land-line phone service with the added convenience of mobility.[14]

- According to Daniel Hesse, the CEO of AT&T Wireless Services:

  > People are using wireless as anytime, anywhere communications.[15]

- According to Merle Gilmore, President of Motorola's Communications Enterprise:

  > Wireless has become an equal player.[16]

The purchase of Airtouch by Vodaphone for $62 billion provides compelling evidence of the strong competitive impact of wireless on telecommunications markets. *The Economist* points out that the new Vodaphone will have a market capitalization larger than British Telecom (BT) itself:[17]

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[14] Remarks by Andrew Sukawaty, CEO of Sprint PCS, "Sprint PCS Reaches One Million Customers," *Sprint PCS Press Release,* February 3, 1998. <www.sprintpcsnews.com>

[15] "A Cell Phone in Every Pocket?" *Business Week*, January 18, 1999, p. 38.

[16] "A Cell Phone in Every Pocket?" *Business Week*, January 18, 1999, p. 38.

[17] Based on Vodaphone's current cashflow multiple. See "Look, no wires," *The Economist*, January 23, 1999, p. 60. (Hereinafter, "Look, no wires.")

> [F]orging the world's first genuinely global mobile-telephone company just as the wireless market is gaining the critical mass that is the prelude to ubiquity.
>
> According to Hans Snook, chief executive of Orange, one of the more ambitious mobile firms, the emergence of Vodaphone AirTouch is more of a validation than a threat. The old fixed-line telephone companies should be trembling.[18]

III. Some Wireless Service Pricing Options are Designed to Substitute for Landline Local Exchange Service

Competitors, such as AT&T and Sprint, are already actively marketing their wireless services as *local loop replacements.*[19] AT&T's marketing of its Digital One Rate Plan stated that it "could make your wireless phone your only phone."[20] The Digital One Rate Plan offers flat rate calling across the United States for one monthly subscription fee, varying with the level of MOUs included in the plan, with no additional roaming or long distance charges.[21] GTE currently offers the AmericaChoice wireless program which also does not charge roaming or long

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[18] "Look, no wires," p. 60.

[19] "Sprint PCS Reaches One Million Customers," *Sprint News Release*, February 3, 1998; "PCS vs. Cellular Pricing; This is war; PCS Competitive Markets: Pricing Strategies," *Paul Kagan News, Wireless Market Stats. #96*; and "Survey Shows GSM Phones Can Sub for Wired Phone Lines," *Newsbytes*, July 6, 1998.

[20] AT&T Digital One Rate, *AT&T Wireless Services*, as of 12/2/1998. <www.attws.com>

[21] See AT&T Digital One Rate, *AT&T Wireless Services*. <www.attws.com>

distance fees for its monthly subscription plans.[22] Concerning these all-inclusive rate plans, the Yankee Group comments:

> The impact of all-inclusive rate plans that either significantly reduce or eliminate roaming charges, and include long-distance, is becoming apparent. AT&T Wireless has led the way with its Digital One Rate program, which has garnered over 500,000 subscribers since its inception in May; Sprint PCS, Bell Atlantic Mobile, and AirTouch also offer similar all-inclusive plans...All-inclusive rate plans are the best option for wireless users with a high roaming or long-distance orientation and using more than 100 MOU/ month.
>
> Mark Lowenstein, Senior Vice President at the Yankee Group notes: "Landline displacement stories are becoming more than an occasional anecdote, as these roam- and long-distance-free price plans compare quite favorably to some pay phone, calling card, and even landline intraLATA long-distance rates especially considering the added convenience of mobility." The Yankee Group believes displacement from wireline to wireless begins to occur when the wireless to wireline price ration is 3-to-1 or less. This has been shown in countries such as Israel, Japan (PHS), and some Scandinavian wireless markets.[23]

AT&T's promotion of a "Wireless Home Phone Option" in Plano, TX competes for voice minutes of use formerly reserved for wirelines, second local exchange lines, and some primary lines.[24] The plan offers unlimited airtime within the fixed local calling area (i.e. the home cell site) at a comparable price to the wireline incumbent GTE's basic service. According to AT&T's marketing director Thomas

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[22] GTE AmericaChoice Wireless Plans, *GTE Products and Services*, as of 3/5/99. <www.gte.com>

[23] "Yankee Group Pricing Study: All-inclusive Wireless Rates Usher in The Era of Landline Displacement," *The Yankee Group Media Release*, January 4, 1999. <www.yankeegroup.com>

[24] "Wireless offered for secondary home lines in Plano," *The Dallas Morning News*, November 12, 1998 and "AT&T Wireless Home Phone Option," *AT&T Promotional Materials,* received

Emrich, this promotional plan is promising in that: "Rather than having two immovable wireline phones in your house, you can use our service and have the flexibility of wireless benefits for about the same cost."[25]

This promotion is perceived by a Salomon Smith Barney analyst as a force that will likely lead to a boom in the wireless equipment industry.[26] AT&T launched this Plano plan in November 1998 and is considering rolling it out on a national basis if the plan is successful during a six month trial period.[27]

September 1998.

[25] "AT&T Test-Market Mobile Telephone as Alternative to Second Hone Line," *The Dallas Morning News*, November 12, 1998

[26] "Wireless market looks homeward. Firm offer mobile phones as alternatives to land lines," *The Dallas Morning News*, February 9, 1999.

[27] "Technology cut the cord. AT&T wants to stop sharing its long distance revenues with the local phone monopolies. Hey, why not just give out cell phones?" *Forbes Magazine,* January 25, 1999.

In Arizona, seven wireless service providers compete in the mobile wireless voice services market, each offering a variety of different service plans. PCS wireless coverage extends mainly between Phoenix and Tucson and is not available across the entire state. Cellular wireless services provide more comprehensive coverage including the north eastern (Flagstaff) and western portions of the state (Lake Havasu, Yuma). Based on a usage level of 250 MOU, the following service packages were available as of January 1999:

- **AT&T Wireless**: $39.99 per month, including 200 minutes (anytime), and 26¢ for each additional MOU. Includes wireless messaging, voice mail, and e-mail in addition to caller ID, call waiting, call forwarding, and three-way calling.[28]

- **Voicestream**: $39.95 per month, including 500 minutes (anytime), and 25¢ for each additional MOU. Includes voice mail, caller ID, call waiting and Southwest toll free.[29]

- **AirTouch**: $49.95 per month, including 250 minutes (anytime), and 29¢ for each additional MOU. Includes call waiting, call forwarding, three-way calling, caller ID, and first incoming minute free.[30]

- **Cellular One**: $29.99 per month, including 250 minutes (anytime), and 33¢ for each additional MOU. Includes voice mail, call waiting, call forwarding, three-way calling, caller ID, and first incoming minute free. Also includes discounted long distance calling plan.[31]

- **Nextel**: $44.99 per month, including 300 minutes (anytime), and 20¢ for each additional MOU. Service offers no-roaming charges,

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[28] "Choose your perfect rate plan," *AT&T Wireless Services*. <www.attws.com>

[29] "VoiceStream: Products & Services: Rate Plans," *VoiceStream Wireless*. <www.voicestream.com>

[30] "Calling Plan Options:," *AireTouch Products & Services*. <www.app.airtouch.com>

[31] LECG phone survey and "Selected Plan CellularOne Digital PCS Ultra 250," *Wireless Dimension*. <www.wirelessdimension.com>

voice mail, call waiting, call forwarding, three-way calling, and caller ID.[32]

- **Sprint PCS**: $49.99 per month, including 400 minutes (anytime), and 30¢ for each additional MOU. Includes long distance, numeric paging, voice mail, caller ID, call waiting, call forwarding, three-way calling, and detailed billing.[33]

- **USWEST Advanced PCS**: $39.95 per month, including 200 minutes (anytime), and 25¢ for each additional MOU. Includes voice messaging, caller ID, call waiting, and three-way calling.[34]

Given the many types of services and plans described above, such as Cellular One and Sprint PCS, many Arizona consumers may consider wireless substitutable for their traditional landline service. The local calling area included with most of these wireless service plans extends beyond that available with landline service, and therefore allow consumers to avoid paying intraLATA toll charges by substituting their wireless service for wireline toll calls. This makes wireless particularly attractive for high-volume regional toll callers. Finally, it is noteworthy that wireless prices in Arizona are comparable to national prices as shown in Figure 1 below.

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[32] "Selected Plan Nextel Performance 300," *Wireless Dimension*. <www.wirelessdimension.com>

[33] "Selected Plan Sprint PCS 49.99 Plan," *Wireless Dimension*. <www.wirelessdimension.com>

[34] "Price-At-a-Glance," *US West Wireless*. <www.uswest.com>

Figure 1

Arizona vs. National Wireless Prices (250 MOU)

Wireless Provider	Bundled Price Per Minute[35]
Cellular One	$0.13
Voicestream (PCS)	$0.18
Nextel (SMRS)	$0.20
Sprint PCS	$0.22
Airtouch (Digital Cellular)	$0.22
US WEST Advanced PCS	$0.23
AT&T Wireless (Digital Cellular)	$0.24
Analog Cellular Nat'l Average	**$0.35**
Digital Cellular Nat'l Average	**$0.23**
PCS Nat'l Average	**$0.22**

Sources:

Price data taken from an LECG survey of Arizona wireless providers as of January 1999.

National average based on 250 MOU in the Top 25 US markets as defined in "Year-End 1998 Wireless Industry Update: The Impact of All-Inclusive Rates" Yankee Group, Exhibit 4, December 1998.

IV. The Effect of Wireless Competition on Wireline Local Exchange Market Share and Revenues

The consulting firm Technology Future Inc. (TFI) has estimated the impact of wireless competition on wireline market share and revenues for voice markets for a number of years. The company recently released an updated national report.[36]

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[35] Bundled Price Per Minute (BPPM) = {[(Monthly Subscription)+(Monthly Usage Cost After Bundled Airtime)]x(1+Tax)}/(Total Monthly Minutes). Based on 250 MOU. BPM is defined in Bundled Price Per Minute based on 250 MOU as defined in "Worldwide Wireless Pricing, The Sequel: Driving Penetration and Landline Displacement," *Yankee Group*, Vol. 2 #14, March 1998, Exhibit 6D, p. 11.

[36] For a recent article regarding TFI's President, Lawrence Vanston, see "Consultant's Call: Lawrence Vanston makes some pretty good predictions for the future of telecommunications; he has been right before," *The Wall Street Journal,* September 21, 1998.

In their analysis, TFI explains how wireless voice services are increasingly competing with wireline:

> The business case for competition with wireline is simple. There will be up to five major wireless providers and any number of resellers and small providers in each market where there were only two. Each of the new providers will have digital technology, which will increase capacity, battery life, and quality – at lower costs. They can compete with each other for portable usage, or they can attack the fixed wireline market. More capacity, falling costs, and more competitors will result in lower prices – which inevitably will result in more customers and higher usage. It is inevitable that, with more wireless customers and lower prices, usage and ultimately access will be diverted from wireline.[37]

TFI forecasts a sustained reduction in the price of wireless services. The *Effective Price Per Minute*[38] for a wireless voice call of 12¢ (calculated on historical data for 1997) is forecasted to drop 30 percent by 2000 to a level of 8¢.[39] This reduction in price will promote continuing consumer adoption of wireless services and the substitution of landline MOUs.

TFI conservatively[40] estimates that in 1999, total wireline voice MOUs will be reduced by 13 percent and total wireline voice revenue by 4 percent compared to

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Lawrence K. Vanston & Ray L. Hodges, "Wireless vs. Wireline for Voice Services: Forecasts and Impacts," *Technology Futures Inc*, Third Edition, July 1998. (Hereinafter, "Vanston"). This is an update of TFI's 1995 report.

[37] Vanston, p. 1-2.

[38] *Effective Price Per Minute* is calculated by subtracting a fixed amount ($10) for the cost of connectivity from the monthly bill and dividing by the plan's limit based on 250 MOU.

[39] Vanston, Exhibit 2.5, p. 12.

[40] "If anything, Mr. Vanston tries to err on the conservative side," See "Consultant's Call: Lawrence Vanston makes some pretty good predictions for the future of telecommunications;

the level that would have existed without wireless competition. By 2000, this loss is predicted to be 21 percent of total wireline voice MOUs, 8 percent of total wireline voice revenue, and 2 percent of total wired access lines.[41] These estimates account for customers who have both substituted landline for wireless minutes, and those who have actually disconnected their landline service entirely. TFI subsequently predicts a significant and sustained loss of wireline revenues and access lines to wireless services over time. Within the U S WEST Arizona service area alone, U S WEST will loose more than 25,000 access line by 1999 and more than 50,000 by 2000.[42]

V. Federal Policy Makers Have Recognized PCS as a Potential Competitive Alternative to Landline Local Exchange Service

From an economic standpoint, cellular and PCS services should be analyzed to determine whether they are competing with wireline local telecommunications service. The fact that consumers are increasingly substituting cellular and PCS services for wireline local telecommunications services should be considered by

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he has been right before," *The Wall Street Journal,* September 21, 1998. Various assumptions in TFI's analysis also demonstrate a conservative approach, e.g. see Vanston, p. 6, 10.

[41] A loss of MOUs will directly reduce revenues for metered local calls, local toll calls, and access charges for long distance calls.

Vanston, Exhibit 3.4, p.20 and Exhibit 3.10, p. 28.

[42] Based on year-end number of access lines in 1997 and TFI's forecast of 1% and 2% of total access line loss in 1999 and 2000 respectively, due to wireless competition. See *1997 Statistics of Communications Common Carriers*, FCC, November 1998, Table 2.3; also,

state and federal policy makers who are trying to assess the openness of the local telecommunications market for Section 271 purposes. In a recent letter to the Chairman of the FCC, Senator John McCain (Chairman – Committee on Commerce, Science, and Transportation) supported the recognition of the importance of PCS networks as a competitive alternative to local telecommunications service.

> [P]CS networks...could potentially provide new competition in the local market... [I] encourage you to give serious consideration to whether PCS is providing competition to the local exchange market. The Commission should be focused on implementing the Telecommunications Act to encourage competition, not maintain the status quo.[43]

Regulatory bodies at the federal and state level have recognized the potential of wireless to compete with wireline carriers. The National Telecommunications and Information Administration (NTIA) has recognized the effect of wireless competition and states that "There is no doubt that wireless is now a viable competitor to wired telephone service."[44]

The FCC also acknowledges the competitive impact of wireless services in the local telecommunications arena in its latest CMRS Competition Report:

Vanston, Exhibit 3.10, p.28.

[43] Letter from US Senator John McCain to William Kennard, Chairman of the FCC, September 15, 1998.

[44] Remarks by Larry Irving, Assistant Secretary for Communications and Information, "The Next Waves In Wireless Technologies," *RAWCON '98,* Colorado Springs, CO, August 10, 1998. <www.ntia.doc.gov>

> In addition to competing with each other for shares of the mobile telephone market, cellular, broadband PCS, and digital SMR operators can also potentially provide competition with wireline providers in the market for local exchange service.[45]

In the FCC's Bell South Louisiana 271 Order, the Commission explained that statutory language within the Telecommunications Act of 1996 prevented cellular but not PCS providers from being considered "facilities-based competitors" for purposes of satisfying Section 217 (c) (1) (a) of the Telecommunication Act.

> We, therefore, conclude that section 271 does not preclude the Commission from considering the presence of a PCS provider in a particular state as a 'facilities-based competitor.'
>
> We also emphasize, however, that an applicant must demonstrate that a PCS provider on which the applicant seeks to rely to proceed under section 271(c)(1)(A) offers service that both satisfies the statutory definition of 'telephone exchange service' in section 3(47)(A) and competes with the telephone exchange service offered by the applicant in the relevant state. In previous orders, the Commission has stated that the use of the term 'competing provider' in section 271(c)(1)(A) suggests that there must be 'an actual commercial alternative to the BOC.' We also note that, in other contexts, the Commission recently concluded that PCS providers appear to be positioning their service offerings to become competitive with wireline service, but they are still in the process of making the transition 'from a complementary telecommunications service to a competitive equivalent to wireline services.'[46]

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[45] "Third Annual CMRS Competition Report," *Federal Communications Commission*, FCC 98-91, June 11, 1998, p.26.

[46] Memorandum Opinion and Order, *Application of BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region,*

EXHIBIT RGH-4

COMPETITOR PROFILES

AT&T/TCG

Network Information:

In Arizona, TCG operates a 280-mile network,[1] composed of 11 self-healing SONET rings[2] and a switch,[3] covering Phoenix, Scottsdale, Mesa and Tempe.[4]

Nationally, AT&T's $11 billion acquisition of TCG will add 13,000 local loop fiber route miles to AT&T's network.[5] AT&T intends to spend up to $2 billion to build

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1 This includes the 30-mile expansion from Phoenix to Chandler. "30-Mile Expansion Planned For TCG's Phoenix Network," *Telecom A.M.*, March 6, 1997.

2 Testimony of David L. Teitzel On Behalf of U S WEST Communications, Inc., *In The Matter of the Application Of U S WEST Communications Inc., a Colorado Corporation, For A Hearing To Determine The Earnings Of The Company, The Fair Value of The Company For Rate Making Purposes, To Fix A Just and Reasonable Rate of Return Thereon And to Approve Rate Schedules Designed to Develop Such Return,* Docket No., T-01051B-99-0105, January 8, 1999.

3 *In The Matter of Petition of U S WEST Communications, Inc., For Forbearance from Regulation as a Dominant Carrier in the Phoenix, Arizona MSA,*CC. Docket No 98-157, Appendix A, Quality Strategies Report, p 25, August 24, 1998. (Hereafter, "U S WEST Forbearance Petition").

4 "TCG To Expand Fiber Network in AZ," *Telecom A.M.*, March 6, 1997.

5 With over 10,000 miles of fiber-optic cable and wireless services, the TCG network encompasses more than 300 communities, coast-to-coast. TCG website, TCG Fact Sheet Page, <www.tcg.com>. Also, "AT&T Completes TCG Merger; TCG Now Core of AT&T Local Services Network," *Excite News*, July 23, 1998, <http://nt.excite.com>.

5,000 to 18,000 additional local-loop fiber route miles throughout the country.[6] Currently, TCG operates in 57 markets.[7] AT&T plans to offer local services in at least 15 new markets by year-end, bringing the total number of cities covered to 98.[8] AT&T will also acquire TCG's 38 GHz microwave spectrum. AT&T plans to expand point-to-point wireless service to 500 more buildings by year-end, bringing the total number of buildings to 800.[9] In addition to local-loop facilities, AT&T acquired TCG's CERFnet, a national ISP focusing on business IP services which it plans to integrate with AT&T WorldNet, its existing ISP arm.

Business Strategy and Customer Base:

Traditionally, TCG has directed its marketing efforts toward the large business market and rapidly accumulated a customer list laden with Fortune 500 companies. One of the first customers in Arizona to take advantage of TCG's network expansion was Motorola's North American Telecom Group, which connected nine Motorola sites in Chandler and throughout Maricopa County.[10] TCG also landed a big contract with Phoenix's 532-room Crowne Plaza Hotel.[11] In Arizona, TCG provides service over its own fiber as well as via resale in XXX,

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6 Currently, AT&T has 13,000 local loop route fiber miles. "AT&T Gives Nets $6 billion Boost," *Network World*, March 8, 1999.

7 "TCG Bundles Long Distance With Local," *Telecom A.M.*, September 18, 1997.

8 Frank Ianna in "AT&T Gives Nets $6 Billion Boost," *Network World*, March 8, 1999.

9 Business users will be able to subscribe to AT&T's wireless local access service.

10 "TCG To Expand Fiber Network in AZ," *Telecom A.M.*, March 6, 1997.

XXX, XXX, XXX, XXX, XXX and XXX.[12] TCG's network connects 180 buildings.[13] This represents 1,500 lines serving about 300 customers.[14]

The AT&T/TCG merger will allow the two companies to capitalize on the strengths of each. As explained by an industry analyst, TCG can benefit from AT&T's strong brand name and the ability to offer integrated services.

> 'Branding is at the heart of our analysis here. Combining the nationwide brand recognition of leading IXCs with the ability to offer total communications solutions, places these new super carriers at the front of the pack,' says Daniel Ernst, The Strategis Group's competitive telephony analyst.[15]

AT&T is also providing originating local service for high volume business customers via its Digital Link service which allows customers with dedicated connections to the AT&T long distance network to make originating local calls via AT&T. This service is available nationally, including in Arizona.[16] The press release announcing completion of the merger explains how TCG's network will complement AT&T's existing local services offerings such as the Digital Link Plan:

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11 "TCG Lands Big Hotel Account," *CLEC News*, October 21, 1997.

12 U S WEST Internal Data

13 "Turf Wars: U S WEST Forced To Share Field," *Arizona Business Gazette*, July 10, 1997.

14 "Turf Wars: U S WEST Forced To Share Field," *Arizona Business Gazette*, July 10, 1997.

15 "Merger Activity Promotes Competition," *Strategis Group Press Release,* August 20, 1998 <www.strategisgroup.com>.

16 AT&T Website, "Digital Link Service Page," <www.att.com>.

> TCG's network infrastructure also helps the company add toll-free calling capabilities to AT&T Digital Link, a local service for businesses with dedicated digital connections to the AT&T network.[17]

Although TCI no longer has a substantial presence in Arizona after selling its Tucson system to Cox, the AT&T/TCI merger will allow AT&T to provision entertainment, high speed internet access, and telephone service to millions of homes across America. AT&T has announced plans to upgrade TCI's cable systems to provide IP telephony and Internet access over the next few years.[18] AT&T is making similar deals with other cable operators around the country, including Time Warner, who operates in parts of Arizona.

In the estimated 40 percent of the United States where AT&T does not own the local cable system or have a partnership with local the cable owner, AT&T also hopes to serve residential customers through fixed wireless local loops, using their PCS spectrum.[19] This plan, known as "Project Angel," has run into delays but is ready for test marketing this year and deployment in selected cities in 2000.[20] The current cost of installation is $750 per household.[21]

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17 "AT&T Completes TCG Merger; TCG Now Core of AT&T Local Services Unit," *AT&T Press Release*, July 23, 1998.

18 "AT&T Outlines post-TCI vision," *CNET*, Business News Page, July 7, 1998, <www.cnet.com>.

19 Rebecca Blumenstein, "AT&T To Enter Some Local Markets Using Its 'Fixed Wireless' Technology," *Wall Street Journal,* p B6, March 19, 1999.

20 Rebecca Blumenstein, "AT&T To Enter Some Local Markets Using Its 'Fixed Wireless' Technology," *Wall Street Journal,* p B6, March 19, 1999.

Services Offered:

TCG packages local and long distance (marketed as PrimeDistance)[22] and Internet[23] service in one bill and presumably has access to the full range of wireless, long distance and Internet services offered by AT&T.

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21 Rebecca Blumenstein, "AT&T To Enter Some Local Markets Using Its 'Fixed Wireless' Technology," *Wall Street Journal,* p B6, March 19, 1999.

22 "TCG Bundles Long Distance With Local," *Telecom A.M.*, September 18, 1997.

23 TCG acquired CERFnet, an internet and web service provider. "TCG's Internet Subsidiary Offers Bundled Services," *CLEC News*, April 14, 1997.

MCI WorldCom

Network Information:

MCI WorldCom, introduced local calling service in Phoenix on June 23, 1997.[24] MCI WorldCom (including MCI Metro, MFS and Brooks) has a combined network of over 150 miles in Arizona.[25] Through its acquisitions, MCI WorldCom has approximately 95 miles of network in Phoenix,[26] and 74 miles in Tucson,[27] with at least one switch installed in both.[28] Nationally, MCI WorldCom has local fiber networks in more than 100 markets.[29]

Business Strategy and Customer Base:

MCI WorldCom targets its services to the largest business customers. As the long distance carrier for several Fortune 500 companies, MCI WorldCom can use this relationship to market local exchange and other voice and data services to the largest business accounts. During the first phase of its launch, MCI WorldCom targeted large and medium-sized businesses or businesses that

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24 "MCI Introduces Local Calling Service To Phoenix," *The Arizona Republic*, June 24, 1997.

25 Phoenix and surrounding areas of Mesa, Tempe and Scottsdale. "MCI Launches CLEC Service in Phoenix," *Telecom A.M.*, June 24, 1997.

26 Teitzel Testimony, p. 10.

27 David Wichner, "Fiber-Optic Rise Heightens Phone Competition," *Star Tech,* September 15, 1997.

28 Teitzel Testimony, p. 10, 14.

29 Corporate Info, *MCI WorldCom.* <www.wcom.com>.

generated a phone bill of more than $3000 per month.[30] As of August 7, 1998, MCI WorldCom had 70-100 buildings on-net in Arizona.[31]

As of December 1998, MCI WorldCom was providing resale service to residents in XXX, and to businesses and residents in XXX, XXX and XXX.[32] Brooks provides resale services to about XXX business lines in XXX and XXX and via unbundled loops to XXX business lines in XXX.[33] MFS provides resale services to about XXX business lines in XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX, XXX and XXX.[34]

Services Offered:

MCI offers integrated telecommunications packages, which include local, long distance, international long distance, data, Internet, wireless, videoconferencing, audio conferencing and paging services in a single bill. The company advertises

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30 Phil Hugus, Director of MCI Phoenix branch office in "It's Just Good To Have A Choice', Firms Say," *Arizona Business Gazette*, July 10, 1997.

31 U S WEST Forbearance Petition, p 23.
There are over 50 single and multi-tenant buildings connected to WorldCom's 75 mile fiber network in the Phoenix MSA, with the majority clustered downtown and along Camelback Road. See also, Teitzel Testimony, p. 10.

32 U S WEST Internal Data

33 U S WEST Internal Data

34 U S WEST Internal Data Geographic areas currently covered by MCI WorldCom fiber in the greater Phoenix area include: Downtown Phoenix, Camelback Road/Indian School road areas between Central Avenue and 46th Street, Lincoln Road, Phoenix Sky Harbor International Airport, Van Buren Street, and Tempe.

the global reach of its services under the "one-net" banner.[35] In addition, through its subsidiary UUNet, MCI WorldCom is one of the leading Internet companies in the world.

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[35] "MCI Introduces Local Calling Service To Phoenix," *The Arizona Republic*, June 24, 1997.

e*spire

Network Information:

e*spire, formerly known as ACSI, was the first facilities-based CLEC to launch competitive local service for businesses in Tucson on June 4, 1997.[36] e*spire began with a network of 109 miles in Tucson[37] and has since expanded that network to 120 miles,[38] with a voice switch installed.[39] Nationally, e*spire operates in 35 cities.[40]

Business Strategy and Customer Base:

e*spire principally targets Tier II and Tier III markets. Southern states, such as Arizona, are particular targets "because of attractive demographic trends and expected growth in demand for telecommunication services in these regions."[41] Typical customers tend to be small and medium sized businesses (with ten to 100 employees) and government agencies. The company strategy is to serve customers on-net. To capture new customers the company first provides service via resale and then later migrates the customers onto its own facilities. As of

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36 "ACSI Offers Local Service in Tucson," *PR Newswire*, June 4, 1997.

37 e*spire 10KSB filed, March 28, 1997.

38 Teitzel Testimony, p. 15.

39 ACSI Marketing Materials, faxed Jan 30, 1999.

40 "e.spire Reports Continued Strong Growth In 1998, 4Q Revenue Up 108%; Full Year Increase Tops 165%," *e*spire Press Release*, February 18, 1999.

December 1998, e*spire was offering service through resale (XXX resold lines) in XXX and XXX and via unbundled loop (XXX lines) in XXX.[42]

Services Offered:

e*spire recognizes the growing demand for integrated telecommunications packages: "Our first-hand experience in the market tells us that businesses don't have time to deal with different providers for local dial tone and long distance. They need a provider that offers creative alternatives that can "do it all," offering the simplicity and convenience of a single point of contact and one bill."[43]

To address the increasing demand for packaged services, e*spire offers PLATINUM, an integrated telecommunications package to small and medium-sized business customers with up to 24 lines, for a monthly charge of $33.03 per line. Business customers can receive an array of services including local, long distance, Internet and high speed data, and custom calling features in an integrated billing invoice.[44] e*spire also offers GOLD, another integrated package targeting small businesses with 15 lines or less.[45] GOLD services include integrated voice, local, long distance and toll free service in a

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41 ACSI 10K Report, 1996.

42 U S WEST Internal Data

43 e*spire website, <www.espire.com>

44 e*spire Marketing Materials faxed February 1,1999.

45 Conversation with customer service representative on January 27, 1998.

consolidated bill for a monthly charge of $31.00 per line.[46] Recently, e*spire announced plans to offer dial up Internet service to small offices/home offices and residential customers in Tucson.[47]

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[46] e*spire Marketing Materials faxed February 1, 1999.

[47] "e.spire Announces Plans to Expand Dial-Up Internet Service in 25 Markets," *PR Newswire*, January 6, 1999.

Electric Lightwave Inc

Network Information:

Electric Lightwave (ELI), a subsidiary of Citizens Utility, launched competitive local service to Phoenix businesses on May 28, 1998.[48] ELI operates a 550 mile network (which includes 250 miles from an alliance with electric utility Salt River Project) and a switch in Phoenix.[49] The network covers the following Phoenix area cities: Phoenix, Scottsdale, Mesa, Glendale, Tempe and Peoria. In all, ELI has invested $37 million to build and upgrade its network in Phoenix.[50] Nationally, ELI has local networks in 84 municipalities.[51]

Business Strategy and Customer Base:

ELI targets its local exchange services to medium-to-large "communications intensive" businesses,[52] focusing its Phoenix efforts on businesses of about 100 employees each. "[We] normally would go after the large customers...but this is

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48 "ELI Launches Competitive Local and Long Distance Telephone Service to Phoenix Businesses," *ELI Press Release*, May 28, 1998. Surrounding areas include, Tempe, Scottsdale, Chandler, Glendale, Paradise Valley, Tolleson and Gilbert. Also see, U S WEST Forbearance Petition.

49 "ELI Launches Competitive Local and Long Distance Telephone Service to Phoenix Businesses," *ELI Press Release*, May 28, 1998.

50 "Phoenix Sees New Phone Service Competition," *The Phoenix Business Journal*, May 29, 1998.

51 ELI website, Media Fact Sheet Page, October, 1998 <www.eli.net>

52 ELI website, ELI Fact Page, <www.eli.net>.

a more diverse business community."[53] In its first month of operation in June, the firm signed up 15 to 20 local customers including, Insight Enterprises, CyberHighway, Arizona and OrthoLogic Corp,[54] and the Murphy School District.[55] As of August 7, 1998, ELI had 30-45 buildings on-net.[56] As of December 1998, ELI was also offering service via resale to businesses in XXX, XXX and XXX.[57]

Services Offered:

ELI offers a basic local services line with standard features such as call forwarding, call waiting, 3 way conferencing, etc., for about $30 a month.[58]

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53 Adam Schrage, General Manager, ELI Phoenix office in "Speeding Business Access; Washington Firm Piggybacks on SRP Fiber-Optic Network," *Arizona Business Gazette*, June 4, 1998.

54 "Speeding Business Access; Washington Firm Piggybacks on SRP Fiber-Optic Network," *Arizona Business Gazette*, June 4, 1998.

55 "Telephone Service To Lease SRP Network," *The Arizona Republic*, June 18, 1997.

56 U S WEST Forbearance Petition, p 26.

57 U S WEST Internal Data.

58 Conversation with customer service representative, March 5, 1999.

GST

Network Information:

GST introduced local dial tone service to businesses in Phoenix in Fall 1997[59] over its 29 mile network[60] with two switches (one voice, one data).[61] GST later introduced service to Tucson businesses in November 1997 over a 41.6 mile[62] network (with plans for an additional 70 mile expansion),[63] and two switches (one voice and one data).[64] The Phoenix and Tucson operations are linked via a 200 mile long-haul fiber.[65] GST has invested a total of approximately $24 million in Arizona.[66] Nationally, GST offers services in 43 markets.[67]

Business Strategy and Customer Base:

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59 Phoenix Location Page, *GST.* <www.gst.net>.

60 Phoenix Location Page, *GST.* <www.gst.net>.

61 Phoenix Location Page, *GST.* <www.gst.net>.

62 Tucson Location Page, *GST.* <www.gst.net>.

63 GST 1996 Annual Report, <www.gst.net>.

64 Tucson Location Page, *GST.* <www.gst.net>. GST has installed fiber beneath the following streets in Tucson: Country Club Road, Speedway Boulevard, Broadway Boulevard, 18th Street, and 6th Street. See also, Teitzel Testimony, p. 12.

65 Phoenix Location Page, *GST.* <www.gst.net>. GST will supply capacity on its LA-SF fiber route to IXC Communications, in return for capacity on IXC's fiber connecting LA, LV and Phoenix. "GST and IXC Communications Trade Long Distance Capacity," *Telecom A.M.*, January 9, 1998.

66 Tucson Location Page, *GST.* <www.gst.net>.

67 GST 10K Report, March 12, 1999.

GST offers resale service in XXX and XXX[68] to capture new customers in order to later migrate to their own network. Some of their large customers in Phoenix are Intuit, Inc,[69] Coldwell Banker and GE Capitol.[70] Part of GST's strategy is to link its CLEC networks via long haul fiber "to create regional synergy"[71] and to acquire CLEC's[72] and long distance companies.[73] GST targets medium-sized businesses with 12 lines or more[74] and, as of August 7, 1998, had a total of 15-25 buildings on-net.[75]

Services Offered:

GST offers integrated service packages that include local, long distance, data and Internet services for approximately $30 per month for one access line.[76]

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68 U S WEST Internal Data.

69 GST provides inbound calling services for Intuit, Inc., technical support line. "GST Lands Major Software Operation as Customer in Arizona," *CLEC News*, February 2, 1998.

70 Conversation with sales representative, March 5, 1999.

71 GST Annual Report 1997 <www.gst.net>.

72 GST bought Phoenix Fiber Access, which added a 10-mile fiber-optic network in downtown Phoenix. "GST Completes C-LEC Buyout," *CLEC News*, January 15, 1997.

73 GST's acquisition of Call America Phoenix will add "significant traffic" to GST's Phoenix-based switch. "GST Buys Call America Phoenix," *CLEC News*, March 12, 1998.

74 Conversation with sales representative, March 5, 1999.

75 U S WEST Forbearance Petition, p 26.

76 Conversation with sales representative, March 5, 1999.

WinStar

Network Information:

WinStar, a fixed wireless CLEC, has been providing point-to-point switched service to business customers in Phoenix since First Quarter 1998.[77] Fixed wireless access relies on using 28 and 38 GHz spectrum to transmit information between remote transceivers on the roof of a customers' site and a central hub antenna. Hubs are connected to a switch on the CLEC's fiber network that in turn is interconnected with an ILECs network. WinStar customer buildings are interconnected to WinStar's hub sites using wireless fiber links and/or facilities leased from other carriers. Traffic between hub sites is carried using wireless fiber microwave transmission, or as needed, on fiber-optic facilities leased from other carriers.[78] Phoenix, with its relatively flat terrain, is an ideal environment for utilization of wireless fiber, which relies on direct line of sight for successful transmission. WinStar has a switch in Phoenix.[79] The company went public in April 1991 and currently has a $1.3 billion market cap.[80] Across the U. S.,

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77 "WinStar Adds 7 New CLEC Markets," *WinStar Press Release*, May 7, 1998.

78 WinStar 10K405/A filing on January 6, 1999.

79 "WinStar Expands Switched Services To Columbus, Kansas City and Minneapolis; Remains on Schedule to Reach 30 Markets by Year-End," *Business Wire*, August 27, 1998.

80 Initial Public Offering and market cap information was obtained from *Bloomberg, Financial Markets, Commodities, News*, November 17, 1998.

WinStar serves 30 major markets[81] (with plans to expand to 110 domestic and international markets by 2004)[82] and recently deployed point-to-multipoint technology.[83]

Business Strategy and Customer Base:

WinStar's strategy is to operate both as a CLEC, serving business customers with its Wireless Fiber technology, and to sell its Wireless Fiber services to other CLECs helping them extend the reach of their existing fiber rings.[84] For example, ELI uses WinStar's Wireless Fiber service to expand its existing fiber in Phoenix;[85] WinStar, the CLEC, leases fiber from ELI for its own network.[86] WinStar also expanded a "large account" market initiative, geared towards Fortune 1000 businesses, to Phoenix in September 1998.[87] Apart from offering

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81 "WinStar Reports Fourth Quarter and Year End Results," *Business Wire*, March 4, 1999.

82 "WinStar Reports Fourth Quarter and Year End Results," *Business Wire*, March 4, 1999.

83 "WinStar Commercially Deploys Point-To-Multipoint Technology," *Business Wire*, December 17, 1998.

84 Carrier Services Page, *WinStar*. <www.winstar.com>.

85 "38 GHz Bypass Option Wins over CAPs," *Telephony*, July 31, 1995.

86 Conversation with ELI customer service representative, March 5, 1998.

87 "WinStar Expands Large Account Sales Effort to 15 Major Markets," *Business Wire*, September 16, 1998. Winters large account customers include leading Fortune 1000 corporations – ranging from insurance and financial companies to airlines, hospitality firms and consumer goods manufacturers.

wireless fiber service, it also resells some U S WEST services including XXX business lines in XXX, XXX, XXX, XXX and XXX as of December 1998.[88]

Services Offered:

WinStar offers a basic business line for $24.00 a month and eight enhanced features like call forwarding, call waiting and call transfer for an additional $1.50 each per month.[89]

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[88] U S WEST Internal Data.

[89] Conversation with customer service representative on January 29, 1999.

Teligent

Network Information:

Teligent, a fixed wireless CLEC, provides local service to business customers in Phoenix.[90] Teligent uses the 24-GHz portion of the microwave spectrum to transmit information between remote transceivers on the roof of a customers' site and a central hub antenna. Using higher frequencies allows its hubs to cover 25 percent more territory than Winstar (30 vs. 24 sq. miles).[91] Teligent's "point-to-point" technology allows it to serve a single building from a centrally located base station, while its "point to multi-point" technology allows it to interconnect many buildings from a single, centrally located base station.[92] Teligent went public in November 1997 and currently has a market cap of $250 million.[93] The company launched services in ten markets in October 1998[94] and plans to expand to 65 markets in 1999.[95]

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90 Teligent provides local service to Phoenix, Scottsdale, Mesa and Tempe. Conversation with customer service representative and Marketing Materials faxed March 16, 1999.

91 "Ticket To Ride?," *Data Communications*, September 1, 1998.

92 "Teligent Announces First Call Over Commercially Available 'Point to Multi-Point' Wireless Equipment from Nortel (Northern Telecom)," *Teligent Press Release*, March 18, 1998. <www.teligentcorp.com>

93 Initial Public Offering and market cap information was obtained from *Bloomberg; Financial Markets, Commodities, News*, November 17, 1998.

94 "Teligent Launches Service in First Ten Markets, Vows to Start a Communications Revolution," *Teligent Press Release*, October 27, 1998. <www.teligentcorp.com>

95 "Local Wireless Carriers Signal Advance," *CBS MarketWatch*, March 9, 1999.

Business Strategy and Customer Base:

Building a wireless network gives Teligent a lower cost structure than its competitors who are using traditional facilities.[96] The company is using these savings to target small and medium sized business customers with competitively priced bundled services. Richard J. Hanna, Teligent's Senior Vice President for Sales and Marketing, says, "We're offering up to 30 percent off the rates customers currently are paying their local Bell company, national long distance carrier and Internet provider. To qualify for the discount, customers switch their existing service – local service, or local service in some combination with long distance or Internet – and sign up with Teligent for a minimum of one year. In most cases that's all they have to do."[97]

Services Offered:

Teligent offers local, long distance, high speed data, and dedicated Internet services for a flat monthly rate, "with up to 30 percent savings off traditional

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96 Peter Haynes, "Teligent's Test," *Forbes Magazine*, March 9, 1998. <www.teligentcorp.com>

97 "Teligent Launches Service in First Ten Markets, Vows to Start a Communications Revolution," *Teligent Press Release*, October 27, 1998. <www.teligentcorp.com>

communication services".[98] Teligent offers a local business line for $29 a month and offers one month free long distance on most packages.[99]

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[98] "Teligent Sets 1999 Targets," *Reuters*, March 1, 1999.

[99] Teligent Marketing Materials, faxed March 16, 1999.

Advanced Radio Telecom

Network Information:

Advanced Radio Telecom (ART) is a facilities-based broadband ISP that provides business customers high-speed data transfer and direct connectivity to the Internet using point-to-point fixed wireless technology that completely bypasses the ILEC. The company operates in three markets, including Phoenix. ART utilizes an ATM switch, and aggregates Internet traffic to connect to a private network access point (P-NAP), which then carries traffic directly to major Internet backbone operators. ART, along with Lucent Technologies, is currently testing a point-to-multipoint system, which would allow the company to reduce cost while increasing its coverage area. ART hopes to install the new system in the third quarter of 1999.[100]

Business Strategy and Customer Base:

ART offers its wireless broadband data and Internet services to small and medium-sized businesses that do not have fiber connections. According to ART's CEO, Henry C. Hirsch, ART is meeting today's competitive business requirements and demands for a broadband connection "by bridging that first

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[100] "Advanced Radio Telecom Reports Fourth Quarter, Year-End Results," *PR Newswire Company News On-Call,* March 2, 1999. <www.prnewswires.com>.

mile [at high speeds], while providing a single source for all their Internet service needs."[101] ART serves about 40 clients in Phoenix, with planned expansion to Tucson slated for June.[102]

Services Offered:

ART offers direct Internet access and data transfer. ART's broadband network allows for connectivity speeds ranging from 64 Kbps to 10 Mbps, compared to 56 Kbps of the dial-up modem and 7mpbs downstream/1 mbps upstream for U S WEST's highest bandwidth DSL service. The company hopes to one-day offer businesses "one-stop shopping" data services, which would include offering enhanced services such as video, fax, and voice over IP.[103]

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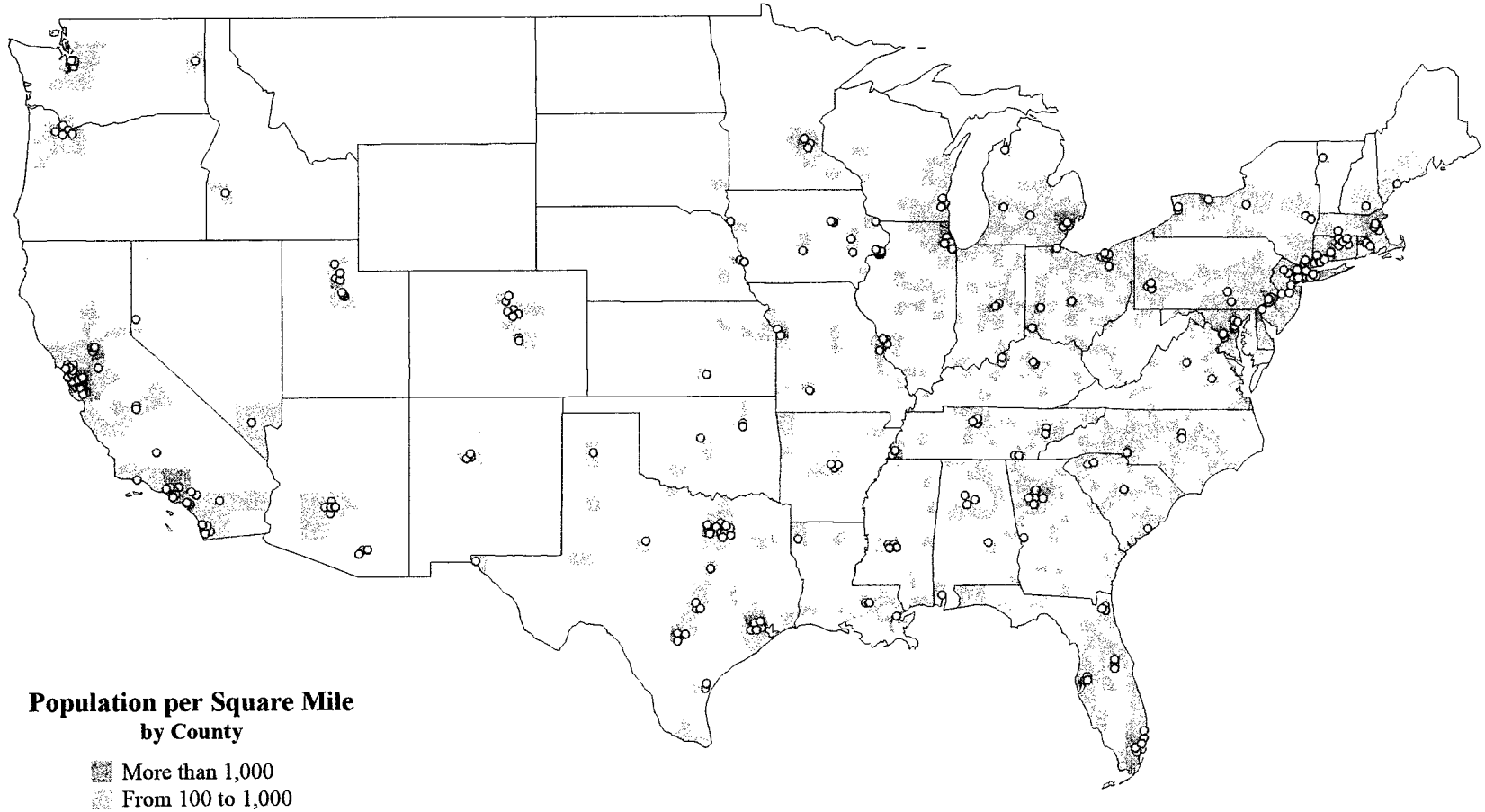
101 "Advanced Radio Telecom Leads Bandwidth Revolution with Successful Delivery of Internet Services Over Broadband Wireless Network," *Advanced Radio Telecom Press Release,* February 22, 1999. <www.artelecom.com>.

102 "Fast Internet Provider," *The Arizona Republic,* December 24, 1998.

103 *ART Website* and conversation with ART representative.

Exhibit RGH-5
Local Network Buildout by City:
Top 12 CLECs

Docket No. T-00000B-97-0238
Affidavit of Robert G. Harris



Population per Square Mile
by County

- More than 1,000
- From 100 to 1,000
- Less than 100
- CLEC Location

Sources: "Inside the Competitive Local Exchange," Telecom Publishing Group, January 1998; Company Websites

EXHIBIT RGH-6

MARKET CONCENTRATION

On a national basis, it is well documented that the market for interLATA calling, while less concentrated than in 1984, remains highly concentrated today. For example, the FCC measures AT&T's share of interstate switched access minutes in the 3rd quarter of 1998 at 50.7% and AT&T's share of long-distance revenues at the end of 1997 at 44.5%.[1] Using the FCC's data for total toll revenues of long distance carriers in 1997 – a $98.6 billion market – the Herfindahl-Hirschman Index (HHI)[2] was approximately 2,508.[3] I recognize that none of these measures are perfect, and that the FCC's data do not capture all interLATA calling, but there can be little doubt that the market for interLATA calls is highly concentrated. Moreover, the WorldCom - MCI merger increased concentration.

InterLATA calling within the State of Arizona is similarly concentrated. Based on U S WEST's CVA report, the three major facilities-based interLATA carriers, AT&T, MCI, and Sprint, accounted for over 89% of all intrastate, interLATA calling

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[1] From the FCC's most recent report on the long distance market: *Long Distance Market Shares: Third Quarter 1998*, December 1998.

[2] A HHI is calculated by summing the squares of the market shares of all competitors in a market (i.e. the HHI for a market with one competitor would be 100*100=10,000). A HHI of 2,508 is far above the level characterized as "highly concentrated" in the 1992 Merger Guidelines of the Department of Justice and the Federal Trade Commission. The guidelines define markets with HHIs in excess of 1800 as highly concentrated.

[3] *Long Distance Market Shares: Third Quarter 1998.*

in 1998, as measured by number of subscribers.[4] Market shares were estimated at 64% for AT&T, 16% for MCI, and 9% for Sprint.[5]

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[4] "QTR 4 – U S WEST Customer Value Analysis Residential," *U S WEST Communications,* December 1998.

[5] "QTR 4 – U S WEST Customer Value Analysis Residential," December 1998.

EXHIBIT RGH-7

REGULATORY SAFEGUARDS

The safeguards of the Telecommunications Act of 1996 ensure that

RBOC interLATA entry will not result in discrimination by requiring that:

- Authorized BOCs provide originating interLATA telecommunications services and certain interLATA information services only through a separate subsidiary (§272.a.2.A-C);
- This separate subsidiary must operate independently from the BOC; maintain separate books, records, and accounts from those of the parent BOC; have separate officers, directors, and employees; not obtain credit under any arrangement that would permit a creditor, upon default, to have recourse to the assets of the parent BOC; and conduct all transactions with the parent BOC on an arm's length basis, with any such transactions reduced to writing and available for public inspection (§272.b.1-5);
- The BOC may not discriminate between its interLATA affiliate and any other entity in the provision or procurement of goods, services, facilities, and information, or in the establishment of standards; and shall account for all transactions with an affiliate in accordance with accounting principles designated or approved by the Commission (§272.c.1-2);
- A BOC that provides interLATA services must provide intraLATA toll dialing parity to other carriers (§271.e.2.A);
- A BOC must charge its interLATA affiliate, or impute to itself (if using the access for its provision of its own services), an amount for access to its telephone exchange service and exchange access that is no less than the amount it charges any unaffiliated interexchange carriers for such service (§272.e.3);

- The equal access regime decreed by the MFJ and implemented by the FCC continues until such a time that the FCC no longer deems it necessary (§251.g).

- The FCC has the authority to suspend or revoke a BOC's authority to provide interLATA services if the BOC ceases to meet any of the conditions required for such approval (§271.d.6.A.iii).

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF ROBERT G. HARRIS**
STATE OF CALIFORNIA	)	
COUNTY OF ALAMEDA	)	**SS**

Robert G. Harris of lawful age being first duly sworn, deposes and states:

1. My name is Robert G. Harris. I am a Principal at LECG in Emeryville, CA.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Robert G. Harris

Robert G. Harris

SUBSCRIBED AND SWORN to before me this 19th day of March, 1999.

Jacqueline O'Neill
Notary Public

My Commission Expires:

Dec. 6, 2000

JACQUELINE O'NEILL
Commission # 1119125
Notary Public — California
Alameda County
My Comm. Expires Dec 6, 2000

AFFIDAVIT OF WEIDENBACH

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

Michael J. Weidenbach

U S WEST COMMUNICATIONS

March 25, 1999

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Identification of Affiant

My name is Michael J. Weidenbach. I am employed by U S WEST Communications ("U S WEST") as a Manager in the Wholesale Local Markets Organization. My business address is 1801 California, Room 2330, Denver, Colorado, 80202. My qualifications are provided in Exhibit MJW-01.

Purpose Of Affidavit

The purpose of this affidavit is to demonstrate that U S WEST has satisfied the requirements for interconnection and collocation (checklist item #1), pole, conduit, duct, and right-of-way space leasing (checklist item #3) and reciprocal compensation (checklist item #13) as specified in Section 271 of the Telecommunications Act of 1996 (Act) and various Federal Communications Commission (FCC) orders interpreting the Act. The requirements of checklist items 1, 3 and 13 of Section 271 are met through the proposed U S WEST Statement of General Available Terms and Conditions (SGAT) and the various interconnection agreements between U S WEST and CLECs in Arizona and the processes and procedures employed by U S WEST, which ensure that U S WEST is meeting the requirements of checklist items 1, 3 and 13. In addition, U S WEST is currently furnishing, or is ready to furnish, these checklist items in the quantities that competitors may reasonably demand and at an acceptable level of quality.

Executive Summary

Checklist item 1 requires U S WEST to make interconnection available to CLECs on a nondiscriminatory basis. The FCC has defined the term interconnection as ". . . the linking of two networks for the mutual exchange of traffic.

This term does not include the transport and termination of traffic."[1] Interconnection provides the means to connect the U S WEST network with the network of a CLEC for the exchange of calls.

U S WEST provides several alternative arrangements that facilitate the interconnection of a CLEC network with the U S WEST network, including physical collocation, virtual collocation, mid-span meet arrangements, entrance facilities, and hub locations. A wide variety of traffic types can be exchanged over these arrangements, including local, directory assistance, 911/E911, operator services, wireless traffic, intraLATA toll, and switched access. In accordance with the FCC's requirements, U S WEST provides interconnection at the line-side of a local switch, the trunk-side of a local switch, the trunk interconnection points for a tandem switch, central office cross-connection points, signal transfer points, and points of access to unbundled network elements.

U S WEST provides both physical and virtual collocation so that CLECs may place their equipment on U S WEST central office floor space for purposes of connecting to the six points of interconnection established by the FCC. There are three varieties of physical collocation -- caged, cageless and InterConnection Distribution Frame (ICDF) collocation. Under a caged physical collocation arrangement, the CLEC leases caged floor space in 100 square foot increments, up to a maximum of 400 square feet for placement of its transmission or cross-connection equipment within U S WEST's wire center. The CLEC is responsible for the procurement, installation and on-going maintenance of its equipment as well as the cross connections required within the cage. Under cageless physical collocation, CLEC equipment is placed in the U S WEST central office, but is not separated from other central office equipment by a cage. ICDF collocation is offered

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[1] 47 C.F.R. 51.5.

for CLECs that do not require equipment to be placed in the U S WEST central office, but who nevertheless require access to unbundled network elements. Under virtual collocation, the CLEC's equipment is delivered to U S WEST for installation and maintenance. The CLEC does not have physical access to its equipment in the U S WEST wire center. U S WEST's interconnection agreements and the proposed SGAT explicitly provide for collocation at U S WEST wire center buildings. Collocation at other locations may be requested through the bona fide request process.

Checklist item 3 requires U S WEST to provide nondiscriminatory access to poles, conduits, ducts and rights-of-way on rates terms and conditions that are consistent with Section 224 of the Act. U S WEST and other telecommunications carriers have entered into broad joint-use agreements for the use of poles, ducts, conduits, and rights-of-way, pursuant to the 1978 Pole Attachment Act. For years, U S WEST has been successfully negotiating such joint use agreements. Thus, U S WEST is highly experienced at providing access to poles, conduits and rights-of-way consistent with Section 224 of the Telecommunications Act of 1996. U S WEST satisfies the requirements of checklist item 3 and has a concrete and specific legal obligation to provide access as referenced in the proposed U S WEST SGAT and the various interconnection agreements between U S WEST and CLECs in Arizona.

Checklist item 13 requires U S WEST to negotiate interconnection agreements with CLECs that provide for compensation on a mutual and reciprocal basis for the transport and termination of local traffic. U S WEST satisfies these requirements through the proposed U S WEST SGAT and the various interconnection agreements between U S WEST and CLECs in Arizona.

1 U S WEST has procedures in place for providing interconnection, collocation,
2 access to poles, ducts, conduits, rights-of-way and reciprocal compensation in
3 conformance with the requirements of the Act and the FCC's rules. As a result, the
4 Arizona Commission should therefore find that U S WEST has satisfied the Act's
5 checklist requirements for interconnection, collocation, access to poles, ducts,
6 conduits and rights-of-way, and for reciprocal compensation.

Checklist Item 1 -- Interconnection

Interconnection Overview

The FCC has defined the term interconnection as ". . . the linking of two networks for the mutual exchange of traffic. This term does not include the transport and termination of traffic."[2] Interconnection provides the means to connect the U S WEST network with the network of a CLEC for the exchange of calls. The traffic that is exchanged may be local, toll, or a variety of specialized traffic, such as directory assistance, operator services, or 911.

The Exchange of Traffic between U S WEST and CLECs

Section 251(c)(2)(A) imposes a duty upon incumbent LECs to provide "interconnection with the [LEC's] network . . . for the transmission and routing of telephone exchange service and exchange access."

U S WEST specifies its legal obligation to provide interconnection in the proposed SGAT and the various interconnection agreements between U S WEST and CLECs in Arizona. Section 7.0 of the proposed SGAT describes how U S WEST makes available interconnection of U S WEST's network with CLEC networks for the purpose of exchanging local traffic. Section 7.0, Interconnection includes: Interconnection Facility Options, Methods of Interconnection, Exchange of Traffic, Transport and Termination of Local Traffic, Reciprocal Compensation, Interconnection Facility Options and Ordering.

Section 7.2.1 of the proposed SGAT defines a wide variety of traffic types that can be exchanged over these arrangements, including local, directory

assistance, 911/E911, operator services, wireless traffic, intraLATA toll, switched access traffic and transit traffic.

Currently, U S WEST is providing interconnection to 11 CLECs in 3 Arizona metropolitan areas, including Phoenix, Tucson and Yuma. A total of 350 local interconnection trunk groups, with considerably over 47,000 trunks are in service between U S WEST and CLECs in Arizona, interconnecting 68 wire centers. Listed below are the types and number of trunk groups in service in Arizona, including the equivalent number of DS0 trunks in service.

Trunk Type	Trunk Groups	Equivalent Trunks in Service
Directory Assistance	1	12
E911	9	56
Local	304	43,864
Operator	6	55
Switched Access	1	168
Toll	29	3,331
Totals	350	47,486

Confidential Exhibit MJW-C1 also provides specific wire center interconnection detail.

Interconnection at Any Technically Feasible Point

In addition to specifying the purposes for which carriers may request interconnection, Section 251(c)(2)(B) obligates incumbent LECs to provide interconnection within their networks at any "technically feasible point." U S WEST satisfies this requirement by providing CLECs with interconnection at the six minimum points of interconnection defined by the FCC. U S WEST satisfies any other requests for interconnection through the Bona Fide Request Process (BFR).

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[2] 47 C.F.R. 51.5.

The Six Minimum Points of Interconnection Defined by the FCC

The FCC has established a minimum of six required points of interconnection U S WEST must provide. The minimum points of interconnection are:

1) Line-side of a local switch;
2) Trunk-side of a local switch;
3) Trunk interconnection points for a tandem switch;
4) Central Office cross-connection points;
5) Signal Transfer Points; and
6) Points of access to Unbundled Elements.[3]

Section 7.1.1 of the proposed SGAT, for example, creates a specific legal obligation to provide interconnection at these points.

Standard Interconnection Arrangements Provided by U S WEST

Section 251(c)(6) of the Act imposes on incumbent local exchange carriers the duty to provide collocation so that CLECs may place their equipment on U S WEST central office floor space for purposes of interconnection with U S WEST's network. In addition to collocation, the FCC has established other methods of technically feasible interconnection or access to U S WEST's network, such as mid-span meet arrangements.[4]

In accordance with the Act and FCC's requirements, U S WEST provides several alternative arrangements that facilitate the interconnection of a CLEC network with U S WEST's network, including physical collocation, virtual collocation, mid-span meet arrangements, entrance facilities and hub locations. Section 7.1.2 of the proposed SGAT specifies the legal obligation to provide these methods of

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[3] First Interconnection Order at para. 212.

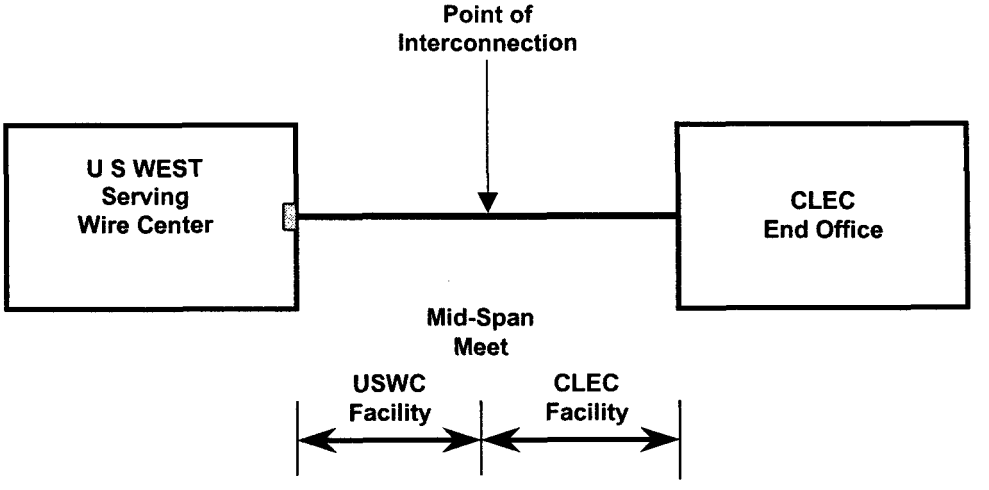
[4] First Interconnection Order at para. 553.

interconnection.[5] The four standard interconnection arrangements in the proposed SGAT are described below.

First, U S WEST provides both physical and virtual collocation so that CLECs may place their equipment on U S WEST central office floor space for purposes of connecting to the six points of interconnection established by the FCC. The collocation section of this affidavit describes in detail the collocation arrangements provided by U S WEST.

Second, U S WEST provides a mid-span meet interconnection arrangement. In a mid-span meet interconnection arrangement, U S WEST and a CLEC extend facilities from their respective networks to a common agreed upon point where their facilities meet. Included below is an illustration of a mid-span meet interconnection arrangement.

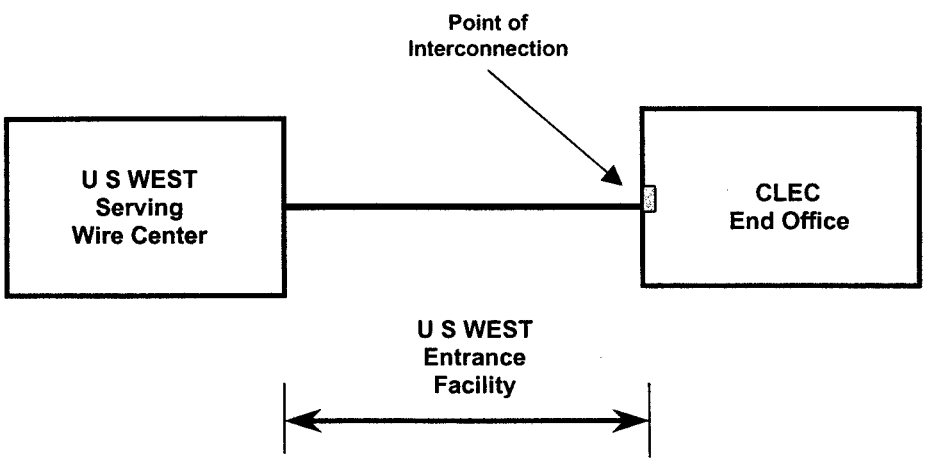
Mid-Span Meet Interconnection Arrangemen



5 First Interconnection Order at para. 551 through 553.

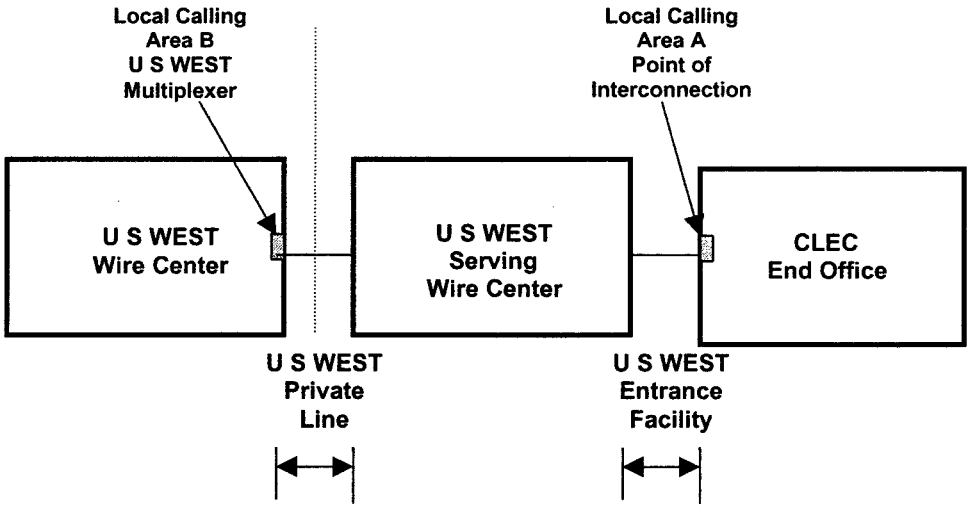
Third, U S WEST provides an entrance facility interconnection arrangement. This arrangement is comprised of a U S WEST provided transport system that extends from the CLEC's central office to the U S WEST serving wire center. The length of an entrance facility is limited to the boundary of the serving U S WEST wire center. U S WEST's private line transport service is also available as an alternative to an entrance facility, when a CLEC uses the private line transport service in conjunction with multiple services. Included below is an illustration of an entrance facility interconnection arrangement.

Entrance Facility Interconnection Arrangement



Fourth, when a CLEC locates its switch outside the U S WEST local calling area, the Hub Location Point of Interface establishes the CLECs Point of Interface within the local calling area. The Hub Location Point of Interface may be established at a U S WEST Central Office at which multiplexing is performed. Included below is an illustration of a Hub Location Interconnection arrangement.

Hub Location Point of Interface



U S WEST has incorporated the above interconnection alternatives in the SGAT. Specifically, the SGAT states:

> The parties will negotiate the facilities arrangement between their networks. CLEC shall establish a Point of Interconnection in each U S WEST local calling area where it does business. The following alternatives are negotiable: (1) a DS1 or DS3 entrance facility; (2) Collocation; (3) negotiated mid-span meet facilities; or (4) Hub location.[6]

The Bona Fide Request (BFR) process

In addition to the standard interconnection arrangements in the proposed SGAT, a CLEC may request additional points of interconnection through the Bona Fide Request (BFR) process. The proposed SGAT, for example, describes the use of the BFR process as follows:

> Any request for Interconnection . . . that is not already available as described herein shall be treated as a Bona Fide Request (BFR). U S WEST shall use the BFR Process to determine the terms and timetable for providing the requested Interconnection . . ., if available, and the technical feasibility of new/different points of Interconnection.

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6 See the SGAT, Section 7.1.2, Methods of Interconnection.

> U S WEST will administer the BFR Process in a non-discriminatory manner.[7]

During 1998, U S WEST received four BFR requests in Arizona. All four requests were completed by the required response date. Two requests were fulfilled, one was denied and the customer was offered a tariffed alternative, and one was withdrawn by the customer.

U S WEST Provides CLECs with Interconnection at Least "Equal in Quality"

Section 251(c)(2)(C) requires that the interconnection provided by an incumbent LEC be "at least equal in quality to that provided by the [incumbent LEC] to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection."

U S WEST is committed to provide CLECs with interconnection that is equal in quality to that which U S WEST provides itself, its subsidiaries and its affiliates. This commitment is included in the proposed SGAT, which states:

> U S WEST will provide to CLEC interconnection at least equal in quality to that provided to itself, to any subsidiary, affiliate, or any other party to which it provides interconnection.[8]

U S WEST has adopted industry standards for blocking and transmission quality in designing its interconnection facilities. Specifically, proposed SGAT Section 7.1.1.1 provides that: "The Parties will provide designed Interconnection facilities in accordance with current industry standards."

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[7] See the SGAT, Section 17.0, Bona fide Request Process.

[8] See the SGAT, Section 7.1.1.1, Interconnection Quality.

U S WEST has also implemented procedures to minimize trunk blocking by proactively monitoring interconnection traffic. At least once per month, U S WEST service assurance employees collect traffic data on all CLEC trunk groups. The traffic data is analyzed and trunk groups that are blocking beyond incidental levels are identified.

Based upon this analysis, U S WEST issues a "trunk group service request" (TGSR) to the CLEC on any group requiring augmentation to relieve blocking. The CLEC, in response to the TGSR, reviews its traffic data. If the CLEC agrees that augmentation is prudent, the CLEC issues an augmentation order to U S WEST. The CLEC must either accept or reject the TGSR within thirty days. The proposed SGAT, for example, includes the following TGSR process:

> When appropriate, U S WEST will notify CLEC through the U S WEST Trunk Group Servicing Request (TGSR) process of the need to take action and place orders in accordance with the forecasted trunk requirements.[9]

U S WEST has instituted the detailed TGSR process to monitor current trunk group status, enabling an appropriate response to both inadequate and excess capacity. This process allows CLECs to proactively ensure potential blocking problems are minimized. During 1998 and 1999, U S WEST issued 76 TGSRs in Arizona notifying CLECs of potential interconnection blocking issues. CLECs responded to 19 TGSRs placing orders to sufficiently augment the blocked trunk groups. CLECs also responded to 11 TGSRs issuing disconnect orders. Thirteen TGSRs were closed because the associated trunk group showed no further evidence of blocking. One TGSR was closed because the CLEC declined to augment the trunk group. The remaining 32 TGSRs are pending a CLEC response for a variety of reasons, including 1) further monitoring to establish a

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[9] See the SGAT, Section 7.2.2.7.11, U S WEST's Trunk Group Service Request Process.

pattern of blocking; 2) no CLEC response to the TGSR; and 3) insufficient CLEC augmentation.

U S WEST has developed detailed performance measures covering interconnection, including provisioning, repair and network performance, to ensure that CLECs receive interconnection that is equal in quality. For example, performance indicators NI-1A and NI-1B measure the average percentage of blocking between Arizona CLEC end offices and U S WEST's tandem offices (NI-1A) and U S WEST's end offices (NI-1B). The results of this indictor are as follows:

	December	January
NI-1A Trunk Blocking	.62%	.13%
NI-1B Trunk Blocking	.10%	.23%

According to these measurements, CLECs experience much less than one percent blocking, on average in trunk groups to a U S WEST tandem. In the case of direct interconnection trunks to end offices, the blocking is less than one-quarter percent.

Performance indicators NI-2A and NI-2B measure the percentage of trunks blocking in the U S WEST local interoffice final trunks, reported by NI-2A trunks connecting U S WEST end offices to U S WEST tandem offices and NI-2B trunks connecting U S WEST end offices to other U S WEST end offices. The results of this indictor are as follows:

	December	January
NI-2A Trunk Blocking	2.72%	7.51%
NI-2B Trunk Blocking	.47%	1.39%

As confirmed by performance indicators NI-2A and NI-2B, CLEC end offices experience less blockage in accessing U S WEST's tandems and end offices than U S WEST's end offices experience.

U S WEST's interconnection service performance indicators are included in Exhibit B of the SGAT. The affidavit of Michael Williams further discusses performance measures regarding interconnection.

Rate Elements for Interconnection

Section 251(c)(2)(D) requires that incumbent LECs provide interconnection "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory." Section 252(d)(1) requires rates for interconnection and unbundled network elements to be based on "cost" (determined without reference to a rate-of-return or other rate-based proceeding).

U S WEST offers interconnection in accordance with the rates, terms and conditions of its interconnection agreements and the proposed SGAT.

Section 7.2.3 describes the rates for interconnection and the rates are included in Exhibit A. The rates that apply to interconnection include: Entrance Facilities, Direct Trunked Transport, Tandem Switched Transport, Multiplexing, End Office Call Termination, Expedite Charge (LIS Trunks), and Transit Traffic. The development of those rates is described in the affidavit of Mr. Allcott.

The rates themselves are also discussed in a later section of my testimony regarding reciprocal compensation and collocation.

Ordering Interconnection

U S WEST and CLECs are responsible for the provision of trunk facilities necessary to meet agreed upon forecasted trunk requirements. Section 7.2.2.7 of the SGAT defines the responsibilities of both parties regarding the interconnection forecasting process, including: the forecast forms and format, required information, forecast cycle, joint planning meetings, U S WEST Trunk Group Servicing Request (TGSR) process and the trunk group resizing requirement.

The forecasting process includes joint planning meetings at quarterly intervals to review trunk design and provisioning requirements. The parties provide each other with forecasts of trunk utilization for each direct trunk group and the amount of traffic destined to each subtending office for tandem-switched traffic. Each party utilizes the forecast cycle outlined in the proposed SGAT, which stipulates that forecasts be submitted on a quarterly basis. The forecast will identify trunking requirements for a three-year period. These forecasts are intended to facilitate the availability of interconnection facilities and identify potential blockage problems before they occur. To the extent an unexpected trunk blockage occurs, either party can initiate a request for additional trunks. When appropriate, U S WEST notifies the CLEC through the U S WEST Trunk Group Servicing Request (TGSR) process of the need to take action and place orders in accordance with the forecasted trunk requirements.

To assist CLECs with ordering and obtaining interconnection, U S WEST offers Local Interconnection Service (LIS) training and facility tours and provides to CLECs its Interconnection and Resale Resource Guide. In addition, U S WEST's Account Teams meet individually with CLEC representatives to ascertain CLEC

specific requirements. The SGAT defines the responsibilities of both parties regarding the ordering process, including the joint planning meeting and the Access Service Request (ASR) process. The ASR provides the required information in order to establish interconnection with U S WEST. For example, the SGAT includes the following interconnection ordering process language:

> When ordering LIS, the ordering Party shall specify on the Access Service Request: 1) the type and number of Interconnection facilities to terminate at the Point of Interconnection in the serving Wire Center; 2) the type of interoffice transport, (i.e., Direct Trunked Transport or Tandem Transmission); 3) the number of trunks to be provisioned at a local exchange office or local tandem; and 4) any optional features. When the ordering Party requests facilities, routing, or optional features different than those determined to be available, the Parties will work cooperatively in determining an acceptable configuration, based on available facilities, equipment and routing plans.[10]

Processes Supporting Interconnection

U S WEST has developed detailed processes that support the ordering, provision and repair of interconnection for CLECs. Exhibit MJW-02 and Exhibit MJW-03 contain the end-to-end process flows and task lists, specifically defining the interconnection procedures utilized for the provision process. Exhibit MJW-04 and MJW-05 contain the end-to-end process flows and task lists for the repair process of interconnection services.

These processes are fully operational. During 1998, U S WEST used these processes to fulfill an average of 640 LIS trunk orders and installed an average of 13,418 LIS trunks per month in its 14-state territory. For the first two months in 1999, U S WEST is installing an average of 16,984 LIS trunks per month regionally.

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[10] See the SGAT, Section 7.4.1, Ordering Interconnection.

1 Currently, over 268,737 interconnection trunks are in service across U S WEST 14
2 state territory.

3 U S WEST satisfies the requirements for providing interconnection under the
4 Act and FCC rules through the proposed U S WEST SGAT, existing Commission-
5 approved interconnection agreements and the specific procedures it employs to
6 implement interconnection with CLECs. U S WEST has established centers that
7 fulfill "interconnection" service orders with trained personnel fulfilling CLEC demand
8 for interconnection in Arizona.

9 **Summary**

10 I have reviewed each of the requirements of the Act and the FCC rules with
11 regard to interconnection. U S WEST satisfies these requirements and has a
12 concrete and specific legal obligation to provide interconnection as referenced in the
13 proposed U S WEST SGAT and the various interconnection agreements between
14 U S WEST and CLECs in Arizona. The requirements for providing interconnection
15 are satisfied and supported by the specific procedures U S WEST employs to
16 implement interconnection with CLECs. U S WEST's centers that coordinate the
17 fulfillment of interconnection service orders support multiple states and trained
18 personnel exist to meet CLECs demand for interconnection in Arizona. U S WEST
19 stands ready to provide interconnection to CLECs in Arizona in accordance with
20 these requirements pursuant to the terms of the proposed U S WEST SGAT.

21 U S WEST has presented prima facie evidence that the procedures it has in
22 place for providing interconnection to CLECs ensure that the requirements of the
23 Act and the FCC First Order for interconnection are and will be satisfied, now and in
24 the reasonably foreseeable future, for competitors entering into the Arizona
25 telecommunications market. U S WEST's processes, procedures and capabilities

1 for interconnection ensure that an efficient competitor is afforded a reasonable
2 opportunity to compete.

3 Based on this evidence, the Arizona Commission should find that U S WEST
4 has satisfied the requirements of Checklist Item 1, Interconnection, of Section
5 271(c)(2)(B)(i) of the Telecommunications Act of 1996.

Checklist Item 1 -- Collocation

Section 251(c)(6) of the Act requires that incumbent local exchange carriers provide to CLECs physical collocation and when necessary virtual collocation. That Section reads:

> The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carriers. Except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.[11]

In Arizona, U S WEST is providing 70 units of physical collocation and 57 units of virtual collocation to 12 CLECs in 33 central office buildings under existing collocation agreements. Confidential Exhibits MJW-C2 and MJW-C3 provide specific wire center detail and collocation activity, respectively.

Collocation is not a specific checklist item requirement. However, checklist item one requires that U S WEST permit interconnection at "any technically feasible point" within U S WEST's network. U S WEST facilitates interconnection within U S WEST central office buildings through collocation. As such, collocation is a means to demonstrate compliance with the interconnection requirements of the checklist. Collocation also facilitates CLEC access to unbundled network elements or ancillary services. Thus, collocation is integral to the provision of other checklist items, such as:

Checklist Item	Requirement
2	Access to unbundled network elements

[11] Telecommunications Act of 1996, Section 251(c)(6).

4	Unbundled local loops
5	Unbundled local transport
6	Unbundled local switching

Definition of Collocation

Collocation is the term used to describe the ability of a CLEC to put its equipment in the incumbent LEC's wire center building and join the CLEC's equipment to the incumbent LEC's equipment (interconnection).

In other words, collocation allows for the placement of equipment necessary for interconnection. Collocation also facilitates CLEC access to unbundled network elements and ancillary and finished services.

Described more specifically, collocation allows a CLEC to place cables into a U S WEST central office and to terminate those cables on transmission equipment owned by the CLEC.[12] The CLEC's transmission equipment can be interconnected to the U S WEST network through connections referred to as "Interconnection Tie Pairs" (ITP). The ITP provide for interconnection with a wide variety of network services, including trunk-side ports on end office and tandem switches, unbundled loops, and other private line facilities.[13]

U S WEST Provides Physical and Virtual Collocation

U S WEST offers two types of collocation – physical and virtual. There are three types of physical collocation – (1) caged, (2) cageless and (3) InterConnection Distribution Frame (ICDF) collocation. Under a caged physical collocation

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[12] See the SGAT, Section 8.2.4, Transmission Facility Access to Collocation Space.

[13] See the SGAT, Section 9.1.10, Interconnection Tie Pair.

arrangement, the CLEC's equipment is surrounded by a cage. Under cageless physical collocation, a CLEC's equipment is placed in the U S WEST central office, but it is not separated from other central office equipment by a cage or walls. ICDF collocation is offered to CLECs that do not require transmission equipment to be placed in the U S WEST Central office, but require access to unbundled network elements or ancillary services for the purpose of combining them. Under virtual collocation, the CLEC's equipment is turned over to U S WEST for installation and maintenance of the CLEC equipment.

Physical and virtual collocations are relatively similar, but differ in a few significant ways. Under a physical collocation arrangement, the CLEC engineers, installs and maintains its own equipment in the collocation space provided by U S WEST. The CLEC has access to its leased floor space and the ICDF collocation for the purpose of combining its equipment with U S WEST's unbundled network elements, ancillary services or finished services. ICDF is offered for the purpose of facilitating a CLEC's combining of unbundled network elements. Under ICDF Collocation, a CLEC need not collocate either transmission equipment or cross-connection equipment in the U S WEST central office.

Under virtual collocation, the CLEC's equipment is turned over to U S WEST for installation and maintenance of the CLEC equipment. CLEC equipment is located in the same vicinity as other U S WEST network equipment.

Quite simply, the difference between physical and virtual collocation is dependent on who installs and maintains the CLEC's transmission equipment in the collocation space provided by U S WEST. If the CLEC installs and maintains the transmission equipment, then it constitutes a physical collocation. If U S WEST installs and maintains the CLEC's transmission equipment, then it is a virtual collocation arrangement.

In accordance with the proposed SGAT, the option of virtual and physical collocation are available to CLECs in Arizona. Specifically, Section 8.1.1 of the SGAT includes the collocation descriptions and arrangements offered by U S WEST. The arrangements include virtual, caged physical, cageless physical, and ICDF collocation.

U S WEST's SGAT explicitly allows for collocation consistent with the FCC's collocation rules:

> We therefore interpret the term "premises" [where collocation is required] broadly to include LEC central offices, serving wire centers and tandem offices, as well as all buildings or similar structures owned or leased by the incumbent LEC that house LEC network facilities. We also treat as incumbent LEC premises any structures that house LEC network facilities on public rights-of-way, such as vaults containing loop concentrators or similar structures.[14]

Collocation at other locations other than U S WEST central offices may be requested through the Bona Fide Request process.

Ordering Collocation

CLECs follow two steps to order collocation. First, the CLEC submits the collocation order form and the Quotation Preparation Fee (QPF) to its U S WEST Account Manager. U S WEST then conducts a feasibility study to determine whether space is available and to develop a quotation specific to the CLEC's request. A letter is provided to the CLEC indicating the results of the feasibility study. If space is available, the U S WEST product manager compiles the quotation information and provides the CLEC with a quote identifying the nonrecurring and recurring charges, also including the estimated construction schedule.

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[14] First Interconnection Order at para. 573.

1 Second, within 30 days of U S WEST's quotation, the CLEC must submit fifty
2 percent (50%) of the nonrecurring charges to U S WEST or the quotation expires
3 and the space is returned to available inventory. Physical collocation arrangements
4 are typically scheduled for completion 90 days after receipt of the partial payment.
5 Similarly, virtual collocation arrangements are generally scheduled for completion 90
6 days after receipt of the CLEC's equipment, whichever is later.

7 The collocation process described above is included in the SGAT.[15] These
8 provisions demonstrate U S WEST's legal obligation to provide collocation.
9 Specifically, Section 8.4.2 of the SGAT includes the specifics concerning the
10 collocation ordering process and intervals.

11 U S WEST offers collocation on a first-come, first-served basis.[16] However, if
12 a request for collocation is denied due to lack of space in a U S WEST central office,
13 that CLEC will be offered a number of collocation alternatives. Alternative
14 collocation options include: (1) the closest 100 square foot increment that is
15 determined to be available in relation to the original request; (2) CLEC will be
16 offered cageless physical collocation (bay at a time); or (3) virtual collocation as an
17 alternative to physical collocation. A CLEC may also request space reclamation
18 such as: the grooming or the moving of working circuits from working equipment to
19 other equipment for the purpose of providing additional collocation space or
20 conditioning or reconditioning of space for the placement of transmission equipment.
21 CLEC requirements for collocation are taken into consideration during U S WEST
22 central office expansion planning.

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15 See the SGAT, Section 8.0, Collocation.

16 See the SGAT, Section 8.2.3.2, Space Allocation.

U S WEST has incorporated the above approach in the proposed SGAT. Specifically, Section 8.2.1.8 through 8.2.1.11 of the SGAT includes the specifics concerning the offer of collocation on a first-come, first serve basis and the space reclamation process.

Processes Supporting Collocation

U S WEST satisfies the Act and the FCC requirements for providing collocation through the proposed U S WEST SGAT and the specific procedures U S WEST employs to implement collocation with CLECs. Exhibit MJW-06 contains detailed process flows defining the collocation procedures and Exhibit MJW-07 contains the task list associated with the process flows.

These processes are fully operational. U S WEST centers that coordinate the fulfillment of "collocation" requests support multiple states and trained personnel are in place to meet demand for collocation in Arizona.

Collocation Performance Measures

U S WEST has developed detailed performance measures covering collocation to ensure that that an efficient competitor is afforded a reasonable opportunity to compete. Performance measurements such as average quote interval, feasibility study interval and collocation installation commitments met are available to a CLEC collocating in Arizona. Further details on the collocation performance indicators is provided in the affidavit of Mr. Michael Williams.

Collocation Rate Elements

The rate elements for collocation are described in Section 8.3 of the proposed SGAT and the collocation rates are included in Exhibit A. The development of those rates has been discussed in the affidavit of Mr. Wayne Allcott.

Collocation Summary

I have reviewed each of the requirements of the Act, the FCC rules and the proposed SGAT with regard to collocation. U S WEST has satisfied these requirements and has a concrete and specific legal obligation to provide collocation as referenced in the proposed U S WEST SGAT and the various interconnection agreements between U S WEST and the CLECs in Arizona. The FCC requirements for providing collocation are satisfied and supported by the specific procedures U S WEST employs to implement collocation with CLECs. U S WEST's centers that coordinate the fulfillment of collocation requests support multiple states and trained personnel meet CLECs' demand for collocation in Arizona. U S WEST stands ready to provide collocation to CLECs in Arizona in accordance with these requirements pursuant to the terms of the proposed U S WEST SGAT.

U S WEST has presented prima facie evidence that the procedures it has in place for providing collocation to CLECs ensure that the requirements of the Act and the FCC rules are and will be satisfied, now and in the foreseeable future, for competitors entering into the local Arizona telecommunications market. U S WEST's processes, procedures and capabilities for the provision of collocation ensure that an efficient competitor is afforded a reasonable opportunity to compete.

Based on this evidence, the Arizona Commission should find that U S WEST has satisfied the collocation requirements of Checklist Item 1 of Section 271(c)(2)(B)(i) of the Telecommunications Act of 1996.

Checklist Item 13 - Reciprocal Compensation

Reciprocal Compensation Overview

When two carriers collaborate to complete a local call, the originating carrier is compensated by its end user and the terminating carrier is entitled to reciprocal compensation pursuant to section 251(b)(5) of the Act. Reciprocal compensation is the payment between U S WEST and CLECs for the transport and termination of local traffic between their respective networks. The FCC defines "termination," for purposes of section 251(b)(5), as the switching of traffic that is subject to section 251(b)(5) at the terminating carrier's end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party's premises.[17] Call transport is the transport of traffic originating at one carrier's network and terminating at another carrier's end office switch. Under a reciprocal compensation arrangement the originating carrier pays the terminating carrier for the use of the terminating carrier's end office switch, transport facilities and tandem switch facilities when used.

Call Termination

Call Termination charges apply to local traffic and involve the terminating carrier's end office switching. The Act and FCC orders recognize that carriers make significant investments in switches. Reciprocal compensation arrangements compensate the terminating carrier for the use of those facilities on a usage sensitive basis. Call termination is illustrated below.

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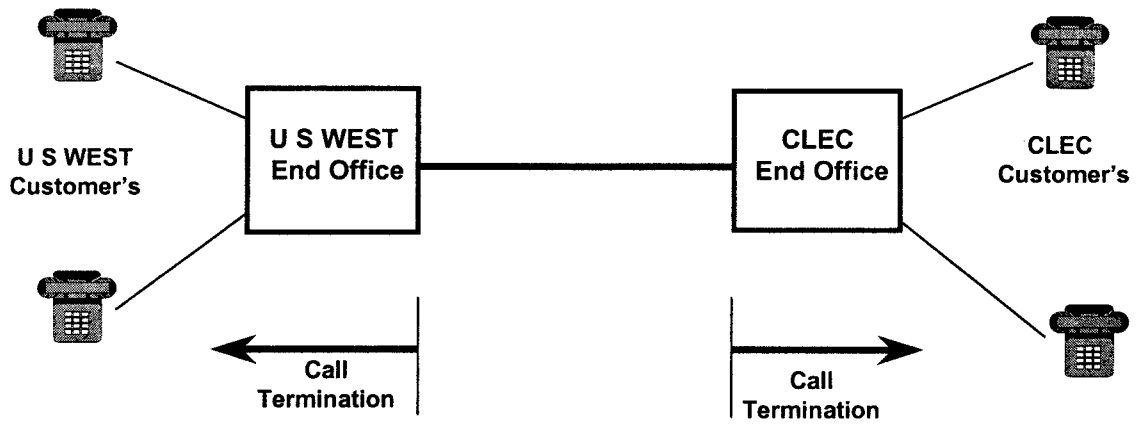
[17] See First Report and Order, para. 1040.

Call Termination



The only rate element for call termination is a per minute of use charge for the use of the end office terminating switch. This rate is reflected in Exhibit A of the SGAT.

Transport Options Provided By U S WEST

U S WEST offers direct trunked transport[18] and tandem-switched transport[19] to CLECs. Wherever possible, U S WEST offers two-way trunking.[20] The Parties may elect to purchase transport services from each other, a third party, or from a third party that has leased a Private Line Transport Service facility from U S WEST.[21]

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18 See the SGAT, Section 7.3.2, Direct Trunked Transport.

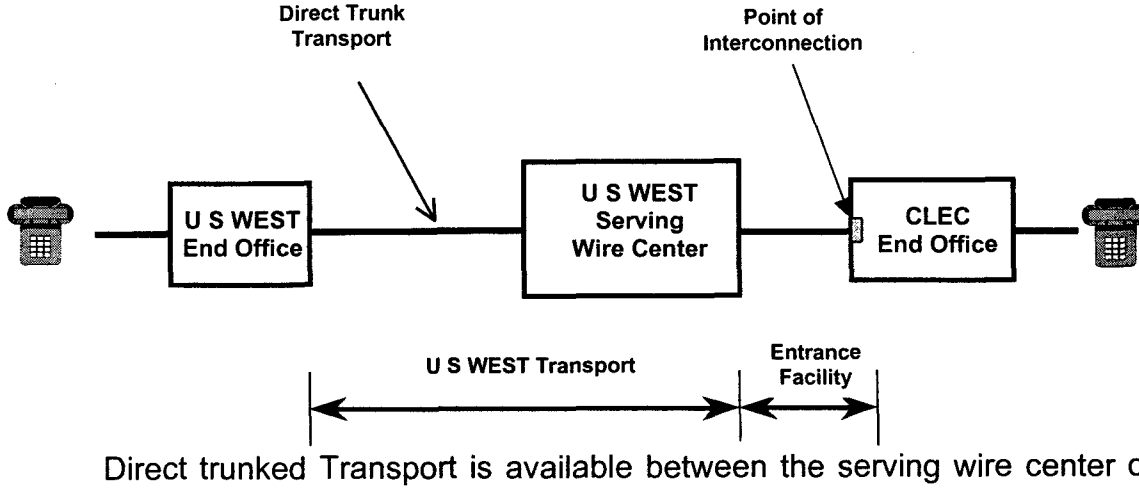
19 See the SGAT, Section 7.3.4.2, Tandem-Switched Transport.

20 See the SGAT, Section 7.2.2.1.2.1, Two-way Trunk Groups.

21 See the SGAT, Section 7.2.2.1.2.2, Private Line Transport.

Direct trunked transport is an uninterrupted path between two end offices. Direct trunks link a U S WEST end office to another U S WEST end office or a CLEC end office. The transport facility originates at the point of interconnection between the U S WEST network and the CLEC network and terminates at the U S WEST switch; it provides a direct path between the CLEC switch and the U S WEST end office for the exchange of local traffic. Included below is an illustration of a U S WEST's Local Interconnection Service (LIS), configured with Direct Trunked Transport.

Direct Trunk Transport

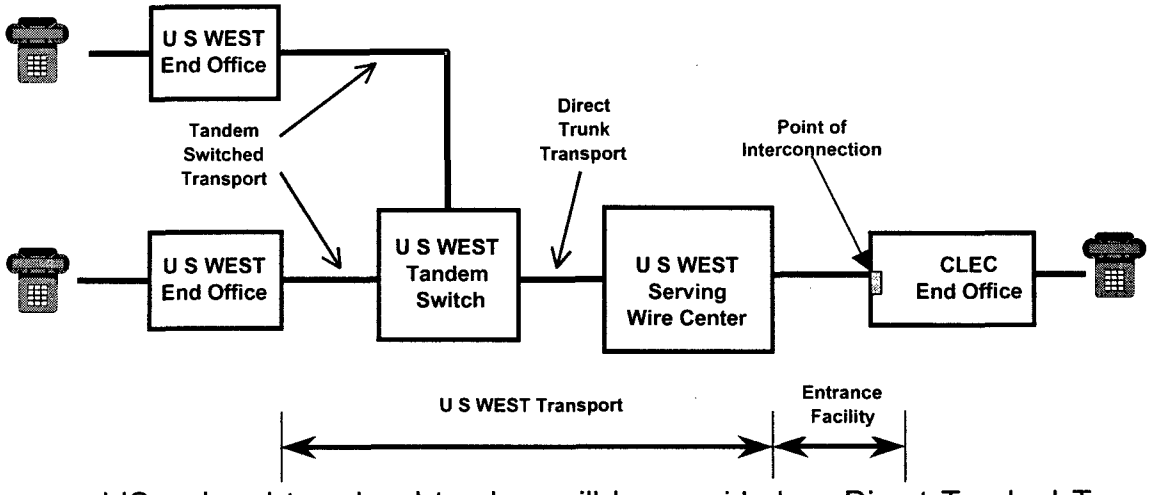


Direct trunked Transport is available between the serving wire center of the POI and the terminating party's local tandem or end office switches. The rates are listed in Exhibit A of the proposed SGAT.

Tandem-switched transport links two or more end offices through the tandem switch. By way of example, tandem-switched transport connects a CLEC's switch to a U S WEST wire center through an intermediate U S WEST tandem switch. The dedicated transport facility originates at the point of interconnection between the U S WEST network and the CLEC network and terminates at the U S WEST tandem

switch. Tandem trunks connect the tandem switch to each end office switch in the local calling area. These trunks are considered common trunks because the trunks are not dedicated to the CLEC's use, but instead are used "in common" by many carriers, including U S WEST, independent local exchange carriers, and CLECs. The combination of switching at the tandem switch and the common trunks is the "tandem switched transport" which allows the CLEC access to every central office connected to the local tandem switch for the exchange of local traffic. Included below is an illustration of a U S WEST's Local Interconnection Service (LIS), configured with Tandem Switched Transport.

Tandem Switched Transport



LIS ordered to a local tandem will be provided as Direct Trunked Transport between the serving Wire Center of CLEC's POI and the local tandem. Tandem transmission rates, as specified in Exhibit A of the SGAT, apply to the transport provided from the local tandem to U S WEST's end office.

The mix of end office switching and tandem switching is important to ensure the most efficient and cost effective form of transport between the two networks. Direct trunks to U S WEST end offices are required when the traffic between a

U S WEST end office and the CLEC switch exceeds or will soon exceed the busy hour equivalent of approximately one DS1 (i.e., 24 voice grade trunks).

U S WEST has incorporated this requirement in the SGAT:

> Based on forecasted or actual traffic at CLEC's busy hour in centum call seconds (CCS), where there is a DS1's worth of traffic (512 CCS) between CLEC's switch and a U S WEST end office, CLEC will order a dedicated (i.e., direct) trunk group from the CLEC POI directly to the U S WEST end office. To the extent that CLEC has established a collocation arrangement at a U S WEST end office location, and has available capacity, the Parties agree that CLEC shall provide two-way direct trunk facilities, when required, from that end office to CLEC's switch. In all other cases, the direct facility may be provisioned by U S WEST or CLEC or a third party. If both CLEC and U S WEST desire to provision the facility and cannot otherwise agree, the Parties may agree to resolve the dispute through the submission of competitive bids.[22]

Direct trunked traffic involves two switches and a single path. Tandem-switched traffic involves at least three switches and two paths. Since the tandem-switched route is more costly, the direct trunked route is favored to manage building traffic.

As previously mentioned U S WEST accommodates two-way trunks wherever possible. However, separate trunk groups will be established based on billing, signaling, and network requirements. For example, the SGAT states:

> Two-way trunk groups will be established wherever possible; however, either Party may elect to provision its own one-way trunks for delivery of local traffic to be terminated on the other Party's network.[23]

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[22] See the SGAT, Section 7.2.2.1.3, Terms and Conditions.

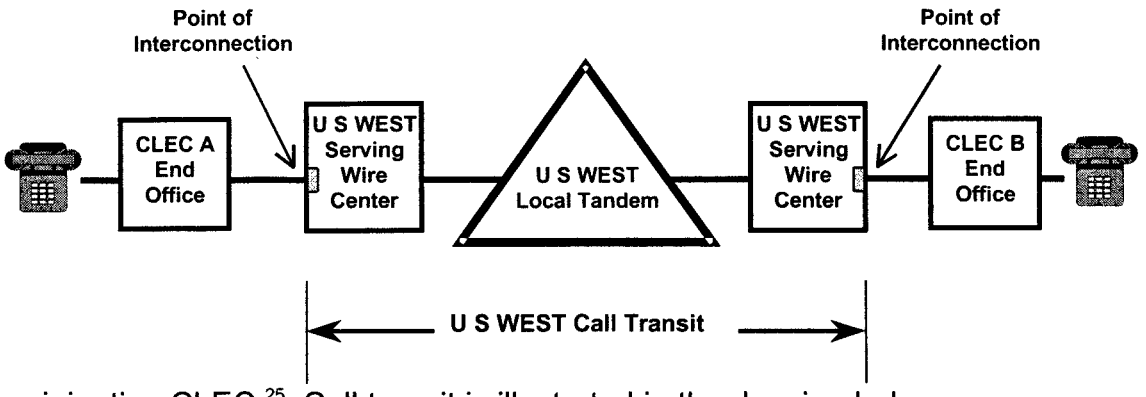
[23] See the SGAT, Section 7.2.2.1.2.1, Terms and Conditions, Two way trunk groups.

Separate trunk groups will be established based on billing, signaling, and network requirements. For example, (1) billing requirements - switched access vs. local traffic, (2) signaling requirements - MF vs. SS7, and (3) network requirements - directory assistance traffic to Operator Services tandems.[24]

Call Transit

U S WEST will accept traffic originated by a CLEC or ILEC and will terminate it at a point of interconnection with another CLEC or ILEC. U S WEST will provide this transit service through local switches. The applicable tandem switching and tandem transmission rates contained in Exhibit A of the proposed SGAT apply to the

Call Transit



originating CLEC.[25] Call transit is illustrated in the drawing below.

Rate Elements Associated with Reciprocal Compensation

As explained earlier in my affidavit there are two types of transport – tandem switched transport and direct trunked transport.

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[24] See the SGAT, Section 7.2.2.8.2, Terms and Conditions, Trunking Requirements.

[25] See the SGAT, Section 7.3.7, Transit Traffic and associated Rate Elements in Exhibit A.

Direct-trunked transport has two rate elements: (1) A fixed, per month charge, and (2) a fixed per mile charge. Both fixed charges vary with the length of the dedicated facility provided (based on airline mileage), as measured from the serving wire center to the tandem or end office. Direct-trunked transport levies different charges for the DS1 and DS3 transmission levels. The proposed SGAT states:

> When DTT is provided to a local tandem for local traffic, or to an access tandem for toll traffic, the applicable DTT rate elements apply between the serving Wire Center and the tandem.[26]

Direct trunk charges are adjusted when the trunks are established as two-way trunks. For example, assuming that U S WEST provides the direct trunks to the CLEC, the charges will be lowered to account for the portion of the trunk used by U S WEST to transport U S WEST's originating traffic to the CLEC. If U S WEST uses the trunk 50% of the time, then the fixed rates are reduced by 50%. In this arrangement the CLEC pays only for U S WEST transport facilities used by the CLEC to deliver its originating traffic to the U S WEST end office switch. The reverse is true if the CLEC provides the direct trunks to U S WEST. The proposed SGAT, for example, includes the following two-way trunk group compensation language:

> If the Parties elect to establish two-way trunks, the compensation for such jointly used, shared facilities shall be adjusted pursuant to this paragraph. The provider of the DTT will always bill 100% of the charges for the facility to the other Party, who will in turn, bill the provider 50% of the DTT charges. Payments according to this 50/50 allocation of traffic

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[26] See the SGAT, Section 7.3.2.2.2 and Exhibit A, Direct Trunked Transport and associated Rate Elements.

> will continue until either Party provides actual minutes of use data to substantiate a change in the allocation.[27]

Tandem-switched transport has two rate elements: A transport element and a switching element. Both the transport element and the tandem switching element are fixed, per minute of use rates. The proposed SGAT states:

> For traffic delivered through a U S WEST or CLEC local tandem switch (as defined in this SGAT), the tandem switching rate and the tandem transmission rate in Exhibit A shall apply per minute in addition to the end office call termination rate described above.[28]

U S WEST's reciprocal compensation arrangements are in accordance with section 252(d)(2). U S WEST has in place reciprocal compensation arrangements in accordance with section 252(d)(2). U S WEST has a concrete legal obligation to pay reciprocal compensation. Section 7.3 of the proposed SGAT states: "the reciprocal compensation provisions of this SGAT shall apply to the exchange of local traffic between CLEC's network and U S WEST's network." The reciprocal compensation rates in the proposed SGAT and the existing interconnection agreements are symmetrical. Symmetrical compensation arrangements obligate U S WEST to pay a CLEC for transport and termination of traffic originated by U S WEST at the same rate that U S WEST charges to transport and terminate traffic originated by the CLEC. The proposed SGAT states:

> The Parties agree that per minute of use call termination rates as described in Exhibit A of this SGAT will apply reciprocally for the termination of EAS/Local traffic.[29]

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[27] See the SGAT, Section 7.3.2.3, Two-way trunk group compensation.

[28] See the SGAT, Section 7.3.4.1, Tandem Switched Transport and associated Rate Elements in Exhibit A.

[29] See the SGAT, Section 7.3.4.1, End office Call Termination and associated Rate Elements in Exhibit A.

The reciprocal compensation rates are included in Exhibit A of this SGAT. The development of these rates is described in the testimony of Mr. Wayne Allcott.

Billing Records, Billing and Payment of Reciprocal Compensation

U S WEST will record, bill, and pay in accordance with the proposed SGAT and the various interconnection agreements in Arizona.

There are certain types of calls or types of interconnection that require exchange of billing records between U S WEST and the CLEC, including, for example, alternate billed and toll free service calls. All call types must be routed between the networks, accounted for, and settled between CLECs and U S WEST. Certain calls will be handled via the respective operator service platforms. U S WEST uses a CroSS7 Platform system that collects and formats call data from the Signaling System Seven (SS7) Network to determine requirements for billing and reporting. Where possible and appropriate, existing accounting and settlement systems will be used to exchange records and bill.

The FCC requires reciprocal compensation payments for local traffic to be made in a timely fashion.[30] Pursuant to an order by the Arizona Corporation Commission, parties in Arizona relied upon bill and keep as the mechanism to recover payments for local and EAS traffic for a period of 24 months from the effective date of Commission approval of the first interconnection Agreement pursuant to R14-2-1506. The 24 month time period expired on December 31, 1998.[31] Since this date, U S WEST has been prepared to make reciprocal compensation payments for local traffic in a timely fashion, provided the carrier submitting the bill distinguishes in its bill local traffic and non-local traffic. The latter

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[30] See BellSouth Louisiana II, Para. 302.

category would include traffic delivered to Internet Service Providers (ISPs), as discussed below. The proposed SGAT states:

> Amounts payable under this SGAT are due and payable within thirty (30) calendar days after the date of invoice.[32]

The proposed SGAT includes language exempting traffic originated to and terminated by enhanced service providers (defined elsewhere as ISP traffic) from the reciprocal compensation arrangements of the proposed SGAT. The SGAT states:

> For purposes of call termination, this SGAT recognizes the unique status of traffic originated by and terminated to enhanced service providers. These parties have historically been subject to an access charge exemption by the FCC which permits the use of Basic Exchange Telecommunications Service as a substitute for Switched Access Service.[33]

Such a provision is consistent with current law, as expressed by the FCC in its order regarding a 271 application in Louisiana.

> At this time, we do not conclude that BellSouth is failing to make required reciprocal compensation payments in Louisiana on a timely basis. The general issue of a LEC's obligation to pay reciprocal compensation for traffic delivered to ISPs is pending in a number of proceedings. Neither this commission nor the Louisiana Commission have reached a final determination on this matter. We do not, at this time, consider BellSouth's unwillingness to pay reciprocal compensation for traffic that is delivered to ISPs located within the same local calling area as the originating BellSouth end user in assessing whether BellSouth satisfies this checklist item. Any future grant of in region interLATA authority

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31 A.A.C. R14-2-1304.

32 See the SGAT, Section 5.4.1, Payment.

33 See the SGAT, Section 7.3.4.1.4,Traffic originated by and terminated to enhanced service providers.

> under Section 271 will be conditioned on compliance with the forthcoming decisions related to Internet traffic in Louisiana.[34]

The FCC has subsequently ruled regarding the nature of ISP-traffic. The FCC In the matter of Implementation of the Local Competition Provision in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic, CC Docket No. 99-38 states:

> As noted, section 251(b)(5) of the Act and our rules promulgated pursuant to that provision concern inter-carrier compensation for interconnected *local* telecommunications traffic. We conclude in this Declaratory Ruling, however, that ISP-bound traffic is non-local interstate traffic. Thus, the reciprocal compensation requirements of section 251(b)(5) of the Act and Section 51, Subpart H (Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic) of the Commission's rules do not govern inter-carrier compensation for this traffic. As discussed, *supra*, in the absence a federal rule, state commissions have the authority under section 252 of the Act to determine inter-carrier compensation for ISP-bound traffic.[35]

As evidenced by the language of U S WEST's proposed SGAT and existing interconnection agreements, U S WEST has not agreed to pay reciprocal compensation for ISP-bound traffic. The Arizona Corporation Commission has not determined as a matter of policy that carriers must pay reciprocal compensation for ISP traffic. Since Internet traffic is interstate in nature according to the FCC and since the Arizona Corporation Commission has not ordered the payment of reciprocal compensation for ISP-bound traffic, U S WEST's unwillingness to pay reciprocal compensation for ISP-bound traffic can not be considered in assessing whether U S WEST satisfies this checklist item.

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[34] See FCC 98-271, CC Docket No. 98-121, FCC BellSouth Louisiana II, Para. 5.

[35] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic, CC Docket Nos. 96-98 and 96-68, ¶28, fn87 (FCC February 25, 1999).

U S WEST Processes Supporting Reciprocal Compensation

U S WEST has developed detailed processes that support reciprocal compensation billing and payments to CLECs. Exhibit MJW-08 contains the detailed process flows defining the billing and payments procedures and MJW-09 contains the task list associated with the process flows.

A CLEC or U S WEST may request an audit of reciprocal compensation billing. Section 18.0 of the proposed SGAT defines the terms and conditions of the audit process. The party requesting the audit may review the non-requesting party's records, books and documents. The proposed SGAT includes the following audit provisions:

> [An audit is] the comprehensive review of: Data used in the billing process for services performed, including reciprocal compensation, and facilities provided under this SGAT; and
>
> Data relevant to provisioning and maintenance for services performed or facilities provided by either of the Parties for itself or others that are similar to the services performed or facilities provided under this SGAT for Interconnection or access to unbundled loops, ancillary and finished services.[36]

Summary

The Act requires U S WEST to include reciprocal compensation arrangements for call transport and call termination in its interconnection agreements. U S WEST satisfies these requirements through the proposed U S WEST SGAT and the various interconnection agreement with CLECs in Arizona.

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[36] See the SGAT, Section 18.1, Audit process.

1 U S WEST's processes, procedures and capabilities for reciprocal
2 compensation ensure that an efficient competitor is afforded a reasonable
3 opportunity to compete.

4 Thus, this Commission should find that U S WEST has satisfied the
5 requirements of Checklist Items 13, reciprocal compensation.

1 **Checklist Item 3 -- Poles, Ducts, Conduit and Rights-of-Way**

2 U S WEST satisfies Section 271(c)(2)(B)(iii) of the Act if it provides
3 "[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned
4 or controlled by the [BOC] at just and reasonable rates in accordance with the
5 requirements of section 224."[37]

6 **Overview of Access to Poles, Conduits, Ducts and Rights-of-Way**

7 Poles are used to support cable, equipment, facilities, apparatuses or
8 appurtenances that are used or useful in providing telecommunications services
9 ("attachments"). U S WEST provides attachments to poles that are owned in full or
10 in part by U S WEST.

11 "Ducts" or conduits are enclosed reinforced passages capable of housing
12 communications cables. Some ducts or conduit controlled by U S WEST may be
13 located within buildings owned by third parties. Access to such ducts or conduit is
14 made available to other carriers, to the extent permissible, under existing rights-of-
15 way permits and easements. U S WEST permits an attaching party to interconnect
16 its ducts in the manholes of U S WEST. This allows the attaching party to
17 conveniently enter and exit U S WEST's conduit system.

18 All of U S WEST's poles, conduits, ducts, and rights-of-way are located either
19 in public rights-of-way, such as streets, alleys, bridges or dedicated utility
20 easements, or on property owned by private or public entities. U S WEST's

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[37] 47 U.S.C. § 271(c)(2)(B)(iii). As originally enacted, section 224 was intended to address obstacles that cable operators encountered in obtaining access to poles, ducts, conduits or rights-of-way owned or controlled by utilities. The 1996 Act amended section 224 in several important respects to ensure that telecommunications carriers as well as cable operators

1 authority to have its poles and conduit systems on public rights-of-way is subject to
2 state and local ordinances and laws, zoning regulations, or other permissions or
3 authorities granted by government entities. On private or public property (other than
4 public rights-of-way), U S WEST obtains an easement or license from the owner to
5 place and maintain its poles and conduit systems. Sometimes, easements or
6 licenses from adjoining property owners are necessary even to occupy public rights-
7 of-way. U S WEST shares use of poles and conduit systems and easements with
8 an electric utility under the terms of joint use or joint ownership agreements. In
9 some instances, U S WEST may have poles, ducts or conduits on private property
10 without any right (or an incomplete right) to grant access to third parties.

11 U S WEST's ability to maintain its poles and conduit systems is subject to the
12 terms, conditions and limitations of these various laws and agreements, and so
13 U S WEST must condition an attaching party's access to its poles and conduit
14 systems on those same terms and conditions.[38] If U S WEST loses its right to have
15 a pole, duct, conduit or right-of-way at any particular location, it obviously cannot
16 provide an attaching party with a right to use such structure. The Federal Act does
17 not require the controlling LECs to acquire grants of authority on behalf of other
18 carriers. U S WEST has incorporated the above approach in the SGAT.[39]

19 **The Prima Facie Case for Checklist Item 3**

20 The FCC in its BellSouth Louisiana II Order specified four elements for
21 establishing a prima facie case for checklist item 3:

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have access to poles, ducts, conduits, or rights-of-way owned or controlled by utility companies, including LECs.

38 First Report and Order, Para. 1179.

39 See the SGAT, Section 10.8.2.8, Access to Poles, Terms and Conditions, Ducts, Conduits, and Rights-of-Way.

1. The evaluation of facility requests pursuant to Section 224 of the Act and the Local Competition Order,
2. Granting competitors nondiscriminatory access to information on facilities availability,
3. Permitting competitors to use non-[RBOC] workers, and
4. Compliance with state and federal rates.[40]

Evaluating Requests for Access to Poles, Conduits, Ducts and Rights-of-Way

When a CLEC first inquires about access to poles, ducts, conduits and rights-of-way, the CLEC completes the "General Information" pages of the U S WEST access request form.[41] The information provided by the CLEC on these pages includes a drawing of the proposed route and a general description of the facility to be placed. Upon completion and submission of the General Information pages by the CLEC, they are provided to the U S WEST Account Manager.

Once the U S WEST Account Manager receives this package, the request is forwarded to U S WEST engineering. U S WEST engineering then gathers all available records applicable to the CLEC request. For example, engineering may research records to determine (1) if the requested route exists, (2) the recorded distances, (3) structure ownership, and (4) the number of manholes/poles along the route. Upon completion of the records verification process, a quote is prepared for the field verification work and submitted to the CLEC. The records verification work and quote for field verification is completed within 10 business days of inquiry for standard requests.

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[40] FCC BellSouth Louisiana II Order, Para. 174.

[41] See the SGAT Section 10.8.4.1, Inquiry.

Upon request and payment of estimated costs, U S WEST will perform field verification of space along the requested route. This information will be given to the CLEC for approval. The field verification for duct lease requests includes the identification of all conduits and ducts that enter each wall of each manhole.[42] The field verification also allows for the identification of any make-ready work. The field verification required for pole attachments will include the physical inspection of all poles along the requested route for available space to attach and the identification of clearance requirements and any required modifications or make ready work that is necessary to add additional attachments. U S WEST completes the field verification within 35 days for standard requests.

Upon completion of the field verification process, a response is provided to CLEC concerning duct/pole availability and estimated cost quote for any required modifications/make ready work. The combined 45-day timeline for evaluating facilities requests complies with the FCC's requirements.[43] Upon acceptance of the quote, U S WEST and the CLEC will enter into an appropriate contract.[44]

The three additional elements defined by the FCC in its BellSouth Louisiana II Order for the evaluation of access requests are included in the proposed SGAT.[45] Specifically, (1) U S WEST must not discriminate in favor of themselves[46],

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42 See the SGAT, Section 10.8.2.4, Access to Poles, Terms and Conditions, Ducts, Conduits, and Rights-of-Way, Facility Locations.

43 See the First Report and Order, Para. 1224.

44 See the SGAT, Section 10.8.4.3, Access to Poles, Ducts, Conduits, and Rights-of-Way, Ordering.

45 FCC BellSouth Louisiana II Order, Para. 176.

46 See the SGAT, Section 10.8.2.

1 (2) denials must be in writing and enumerate the reasons access was denied[47] and
2 (3) U S WEST must take reasonable steps to accommodate access.[48] U S WEST is
3 committed to satisfying these FCC requirements.

4 Also, as part of the prima facie case, the FCC requires compliance with the
5 provisions of the Local Competition Order on poles, ducts, conduits and rights-of-
6 way. In the Local Competition Order, the FCC established five rules of general
7 applicability concerning poles, ducts, conduits, and rights-of-way. First, in
8 evaluating a request for access, a utility may continue to rely on such codes as the
9 National Electrical Safety Code (NESC) to prescribe standards with respect to
10 capacity, safety, reliability, and general engineering principles. Second, federal
11 requirements, such as those imposed by the Federal Energy Regulatory
12 Commission (FERC) and the Occupational Safety and Health Administration
13 (OSHA), will continue to apply to utilities to the extent such requirements affect
14 requests for attachments to utility facilities under Section 224(f)(1). Third, the FCC
15 considers state and local requirements affecting pole attachments.[49] Fourth, where
16 access is mandated, the rates, terms, and conditions of access must be uniformly
17 applied to all telecommunications carriers and cable operators that have or seek

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47 See the SGAT, Section 10.8.4.7.

48 See the SGAT, Section 10.8.2.6.

49 The FCC states in the Local Competition Order: ". . . state and local requirements affecting attachments are entitled to deference even if the state has not sought to preempt federal regulations under section 224(c). The 1996 Act increased significantly the Commission's role with respect to attachments by creating federal access rights and obligations, which for decades had been the subject of state and local regulation. Such regulations often relate to matters of local concern that are within the knowledge of local authorities and are not addressed by standard codes such the NESC. We do not believe that regulations of this sort necessarily conflict with the scheme established in this Order. More specifically, we see nothing in the statute or in the record that compels us to preempt such local regulations as a matter of course. Regulated entities and other interested parties are familiar with existing state and local requirements and have adopted operating procedures and practices in

access. Except as specifically provided herein, the utility must charge all parties an attachment rate that does not exceed the maximum amount permitted by the FCC formula. Other terms and conditions also must be applied on a nondiscriminatory basis. Fifth, a utility, in most circumstances, may not favor itself over other parties with respect to the provision of telecommunications or video programming services.[50] U S WEST satisfies these requirements of checklist item 3 and has a concrete and specific legal obligation to provide access as referenced in the proposed U S WEST SGAT and the various interconnection agreements between U S WEST and CLECs in Arizona.[51]

Nondiscriminatory Access to Information

The FCC requires U S WEST to provide nondiscriminatory access to "maps and similar records." U S WEST has committed to provide such information within a reasonable time through the bona fide request process[52] or various interconnection agreements in Arizona, which is substantially the same as the process approved in the FCC BellSouth Louisiana II Order.[53]

Choice of Workforce

The FCC also requires U S WEST to allow CLECs to use workers of their choice to perform make-ready or other work necessary for the attaching of their facilities if those workers have the same qualifications and training as U S WEST's

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reliance on those requirements. We believe it would be unduly disruptive to invalidate summarily all such local requirements." First Report and Order, Para. 1154.

50 First Report and Order, Para 1151 - 1158.

51 See the SGAT, Section 10.8.

52 See the SGAT, Section 10.8.2.4.

53 FCC BellSouth Louisiana II Order, Para. 180.

own workers.[54] The proposed SGAT Section 10.8.2.16 states: "CLEC may use individual workers of its choice to perform any work necessary for the attaching of its facilities so long as such workers have the same qualifications and training as U S WEST's workers. CLEC may use any contractor approved by U S WEST to perform make-ready work." In fact, CLECs have used their contractors to perform make-ready work.

Rates for Access to Poles, Conduits, Ducts and Rights-of-Way

Checklist item 3 requires rates to be consistent with section 224, state commission rates and to be uniformly applied. U S WEST satisfies this element by its rates in the SGAT, which are expressly consistent with section 224, FCC rules and Commission rates.[55]

The rate elements associated with providing access to poles, ducts, conduits and rights-of-way allow U S WEST to recover its costs -- both recurring and nonrecurring -- associated with providing pole and conduit space. U S WEST quotes to the attaching party the following fees: Inquiry Fee, Field Verification Fee, required Make Ready/Modification Work and Annual Usage.[56]

Processes Supporting Access to Poles, Ducts, Conduits and Rights-of-Way

U S WEST developed detailed processes to support the ordering of access to poles, ducts, conduits and rights-of-way for CLECs. Exhibit MJW-10 contains

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[54] FCC BellSouth Louisiana II Order, Para. 181.

[55] See the SGAT §10.8.3, Rate Elements.

[56] See the SGAT, Section 10.8.3, Access to Poles, Ducts, Conduits, and Rights-of-Way, Rate Elements descriptions.

the end to end process flows, specifically defining the access to poles, ducts, conduits and rights-of-way procedure and MJW-11 contains the task list associated with the process flows.

During 1997, 1998 and 1999, three CLECs placed four requests for access to poles and five CLECs placed eight requests for duct within the State of Arizona. One request for access to poles resulted in an attachment to 29 U S WEST poles. Three requests for access to poles were declined after U S WEST completed the records verification and the field survey procedures. One CLEC leases 351 feet of duct for a highway crossing. Six requests for duct were declined after the record review process. The remaining CLEC request is for 16 miles of duct. This request is currently in the field verification stage. To the best of my knowledge, no CLEC has requested access to rights of way.

Summary

U S WEST satisfies the requirements of checklist item 3 and has a concrete and specific legal obligation to provide access as referenced in the proposed U S WEST SGAT and the various interconnection agreements between U S WEST and CLECs in Arizona. U S WEST has presented prima facie evidence that the procedures it has in place for providing access to poles, conduit, duct, and rights-of-way ensure that the requirements of the Act and the FCC rules for providing access to poles, conduit, duct, and rights-of-way are and will be satisfied, now and in the reasonably foreseeable future, for competitors entering into the Arizona telecommunications market. Moreover, U S WEST's processes, procedures and capabilities for the provision of access to poles, conduit, duct, and rights-of-way ensure that an efficient competitor is afforded a reasonable opportunity to compete. Based on this evidence the Arizona Commission should find that U S WEST has

1 satisfied the requirements of Checklist Item 3, access to poles, duct, and rights-of-
2 way, of Section 271(c)(2)(B)(iii) of the Telecommunications Act of 1996.

1 **CONCLUSION**

2 For the reasons described in my affidavit, the Arizona Commission should
3 find that U S WEST has satisfied the Act's checklist requirements for
4 interconnection, collocation, access to poles, ducts, conduits and rights-of-way, and
5 for reciprocal compensation.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

Michael J. Weidenbach

U S WEST COMMUNICATIONS

March 25, 1999

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
Qualifications of Mr. Michael J. Weidenbach	MJW-01
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Interconnection provisioning process task list	MJW-03
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Interconnection repair process task list	MJW-05
Collocation process flow	MJW-06
Collocation process task list	MJW-07
Reciprocal compensation billing process flow	MJW-08
Reciprocal compensation billing process task list	MJW-09
Poles, Ducts, and Rights of Way process flow	MJW-10
Poles, Ducts, and Rights of Way process task list	MJW-11
Confidential Exhibit of Interconnection LIS Trunks	MJW-C1
Confidential Exhibit of Interconnection Collocation	MJW-C2
Confidential Exhibit of Collocation Activity	MJW-C3

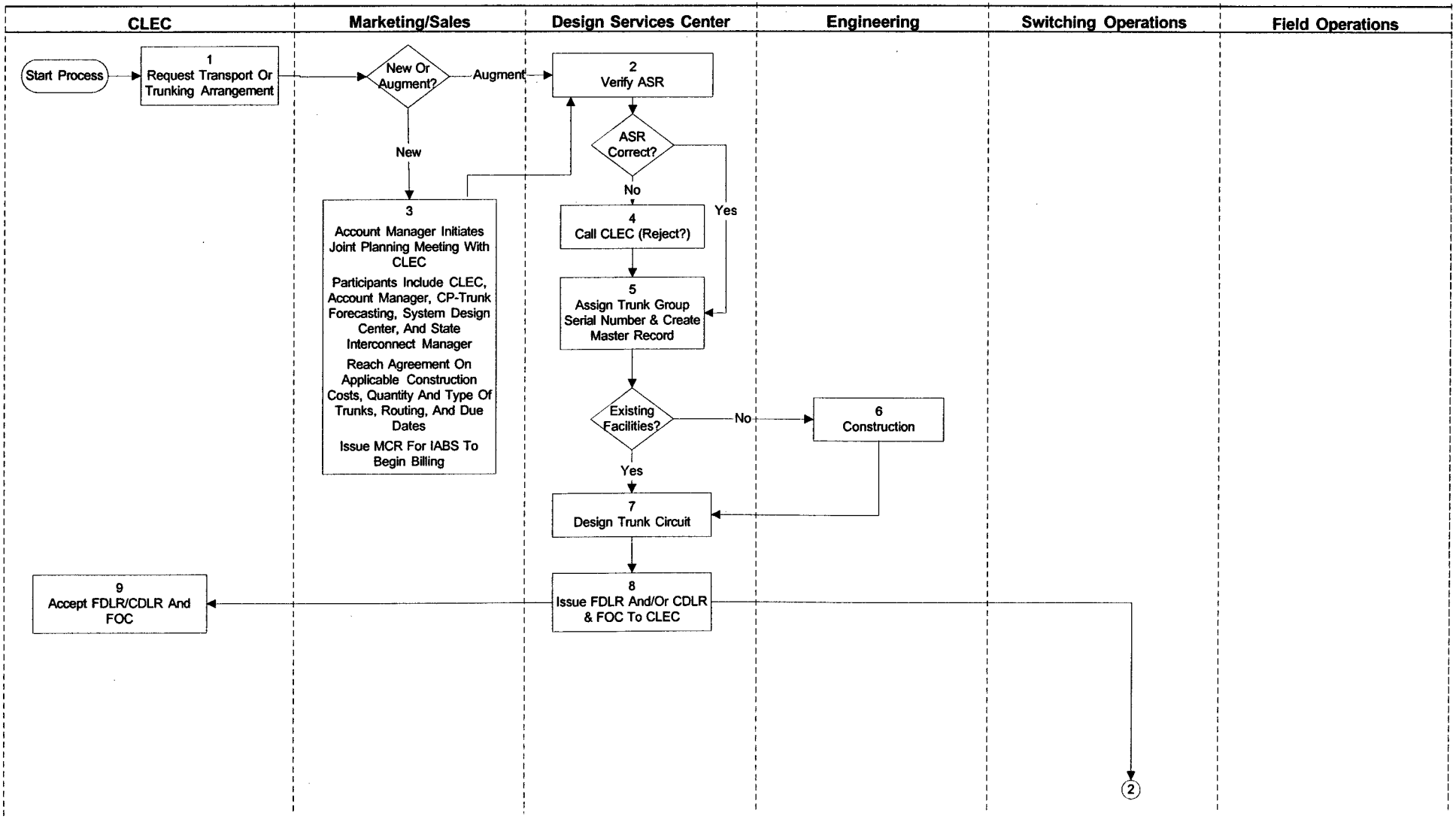
QUALIFICATION OF MICAHEL J. WEIDENBACH

My formal education consists of two degrees: a Bachelor of Science degree in Accounting from the University of Wyoming in 1976, and a Masters of Business Administration degree from the University of Denver in 1995.

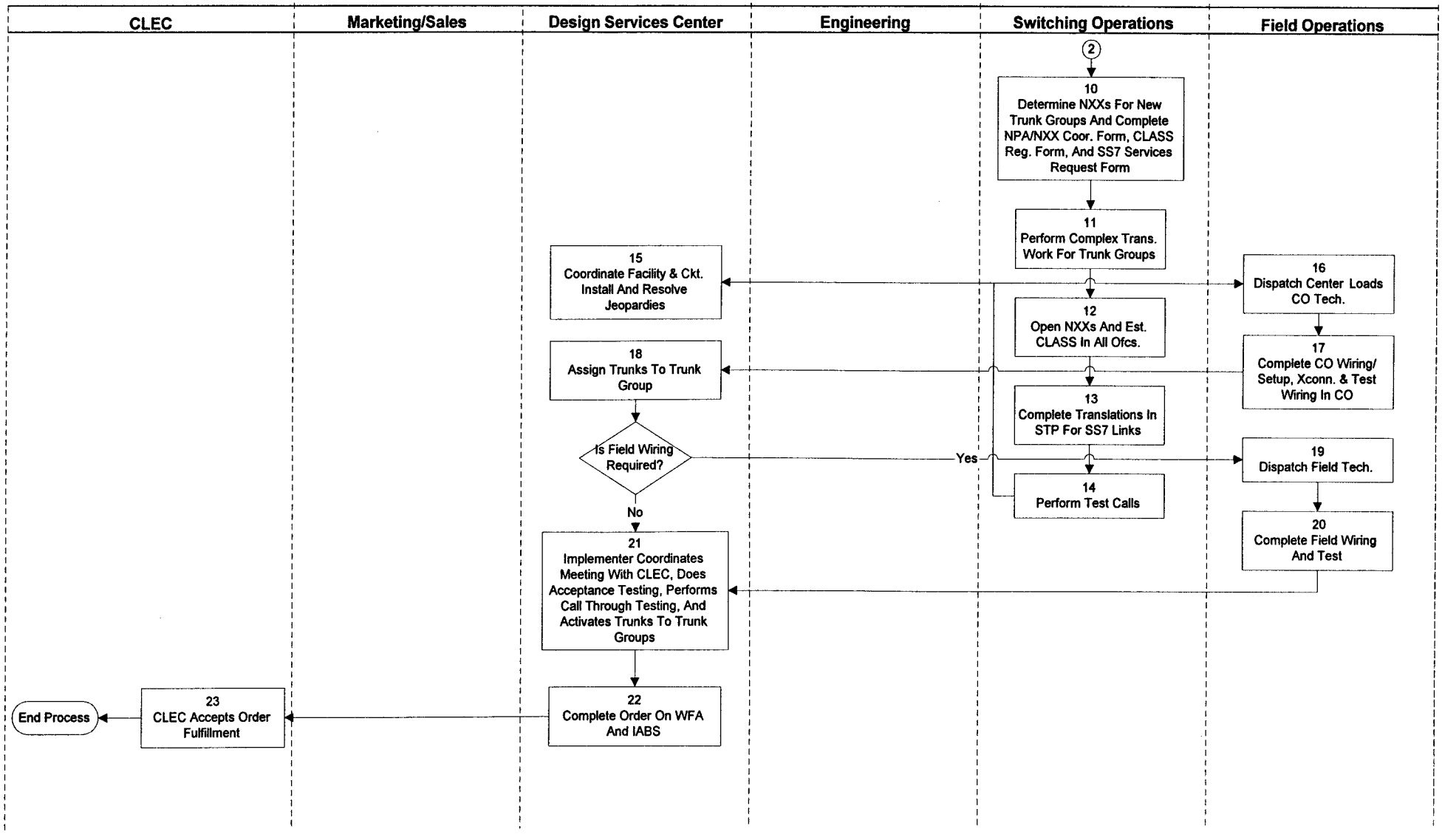
In 1977, I joined Mountain Bell Telephone Company. I have completed several domestic and international assignments within U S WEST, U S WEST Communications, U S WEST International and U S WEST Inc. Over the past 22 years, I have managed outside plant construction, network planning and engineering, financial planning and analysis and strategic planning.

I am currently a manager in the Wholesale Markets organization of U S WEST Communications. My current responsibilities include regulatory advocacy for wholesale services.

LIS TRUNKING PROVISIONING FLOW



LIS TRUNKING PROVISIONING FLOW

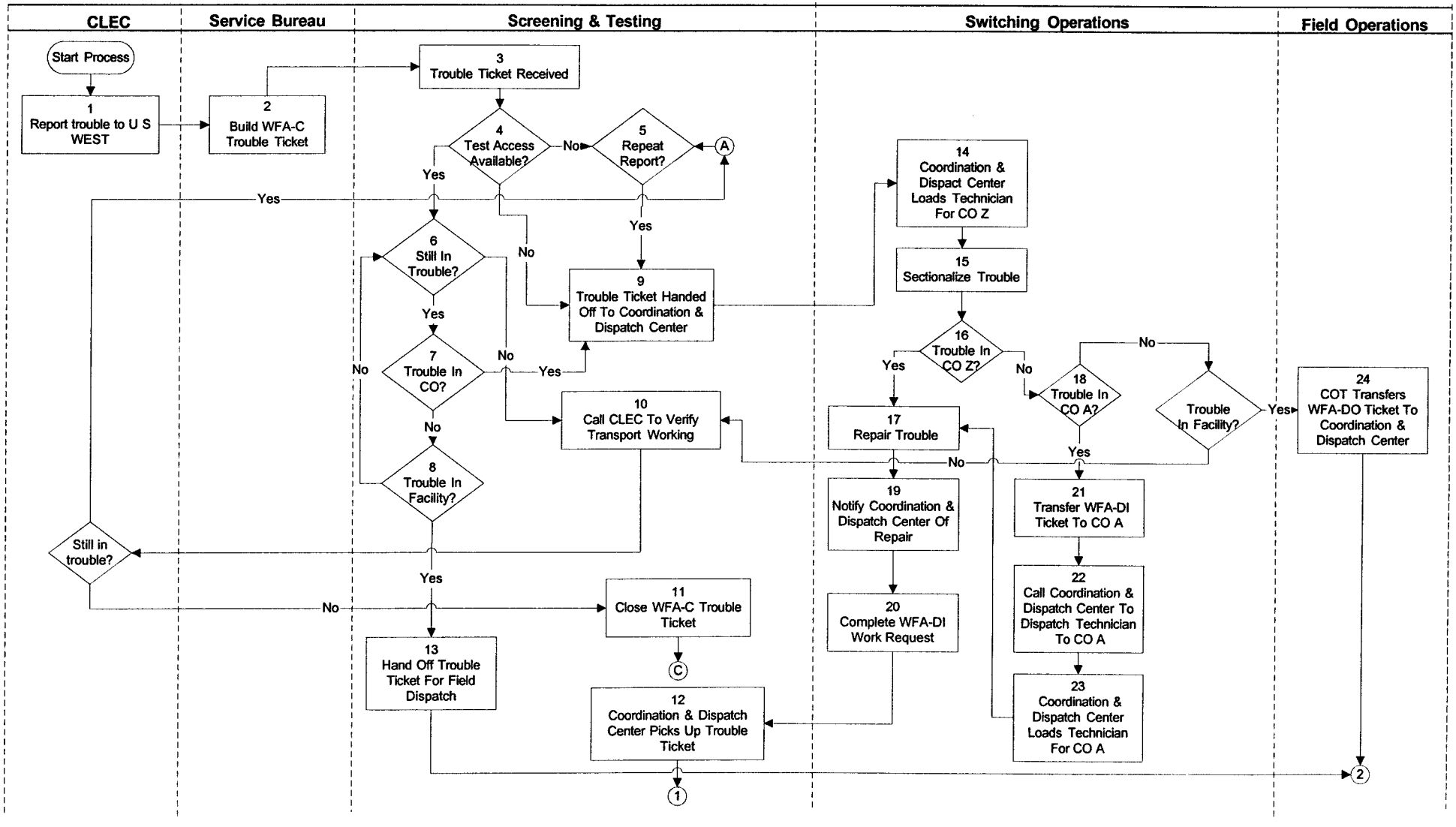


LIS Trunking Provisioning Process Flow

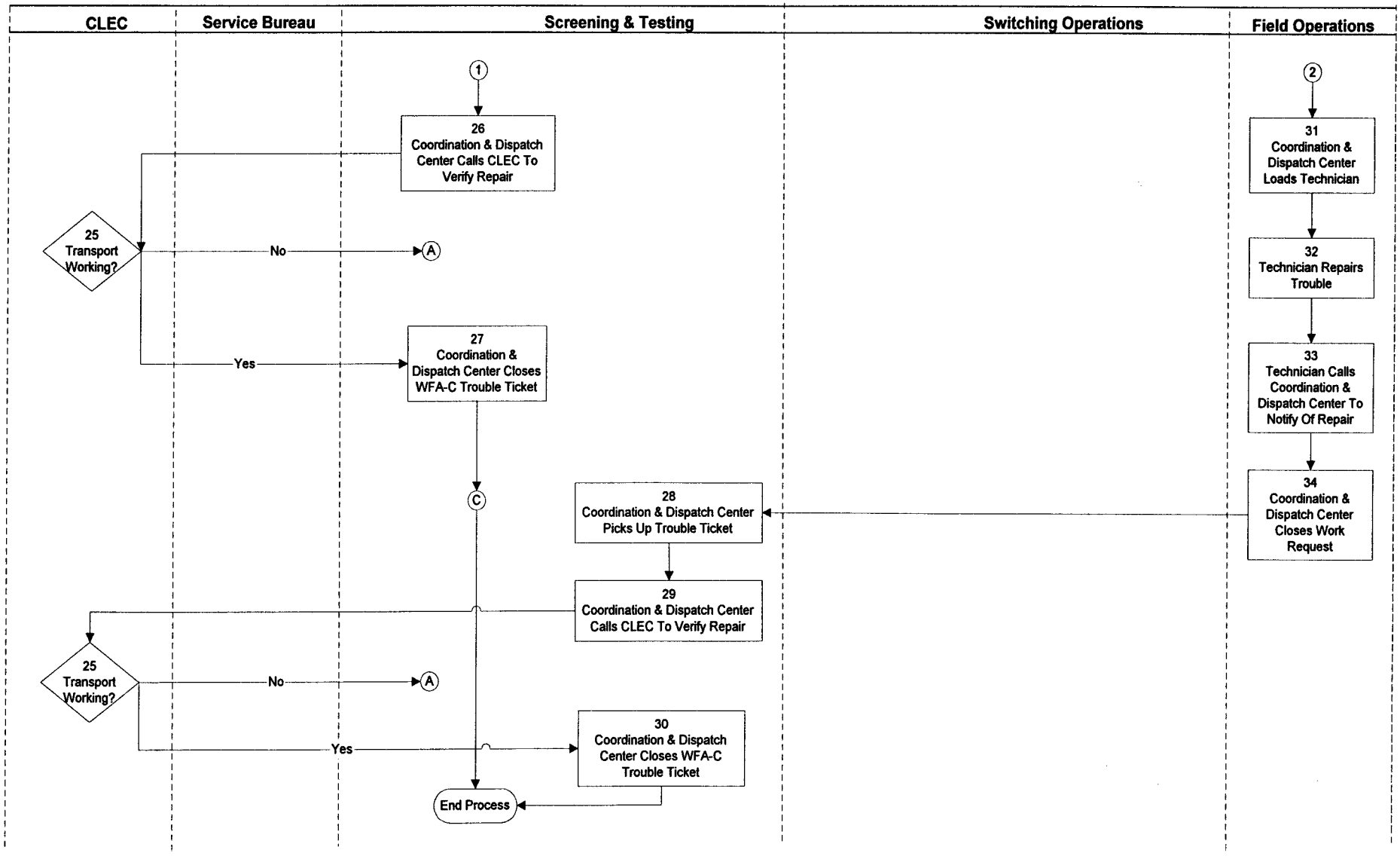
Task List

Assoc. Task #	Process
1	CLEC Requests Transport or Trunking Arrangement.
2	Design Service Center: Verify ASR – if ASR is incorrect, call CLEC and reject ASR.
3	Marketing/Sales: Initiate joint planning meeting with CLEC.
4	Design Services Center: If ASR is incorrect/incomplete, call CLEC for data before rejecting ASR.
5	If ASR is correct, build ASR/TQ, Assign 2-6 code and build TGMR, Log GOC, Complete TIRKS and TAS assignments. IF CFA is incorrect – build facility. Build DRI & WA
6	Construction
7	Design Trunk Circuit
8	Issue FDLR and/or CDLR & FOC to CLEC
9	CLEC Accepts FDLR/CDLR and FOC
10	Switching Operations: Determine NXXs for new trunk groups and complete NPA/NXX coor form, CLASS reg form, and SS7 services request form.
11	Perform complex translation work for trunk groups.
12	Open NXXs and estimate CLASS in all offices.
13	Complete translations in STP fir SS7 links.
14	Perform test calls.
15	Design Services Center: Coordinate facility and circuit installation and resolve jeopardies.
16	Field Operations: Dispatch center loads CO technician
17	Complete CO wiring/setup, cross-connection and test wiring in CO.
18	Design Services Center: Assign trunks to trunk group.
19	Field Operations: If field wiring is required, dispatch field technician
20	Complete field wiring and test.
21	Design Services Center: Coordinates meeting with CLEC, performs acceptance testing and call through testing, and activates trunks to trunk group.
22	Complete Order on WFA and IABS.
23	CLEC Accepts order fulfillment.

LIS TRUNKING REPAIR FLOW



LIS TRUNKING REPAIR FLOW

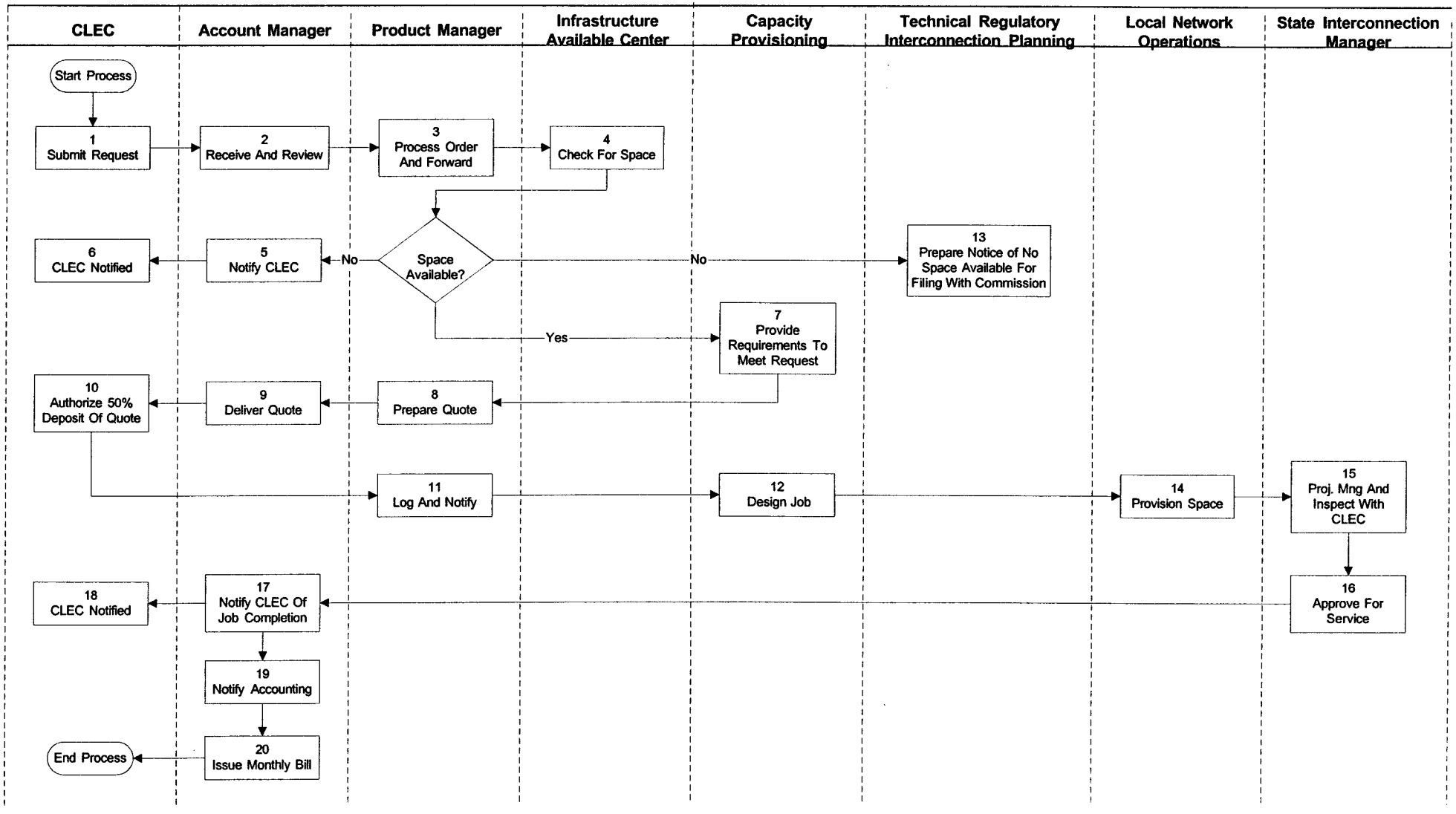


LIS Trunking Repair Process Flow

Task List

Assoc. Task #	Process
1	CLEC Report trouble to U S WEST.
2	Build WFA-C trouble ticket.
3	Trouble ticket received.
4	Check for test access availability.
5	Check to see if this is a repeat report.
6	If test access available, test circuit.
7	Test for trouble in CO.
8	Test for trouble in facilities.
9	If trouble is in CO, send trouble ticket to coordination and dispatch center.
10	If no trouble after test access, call CLEC to verify transport is working.
11	If CLEC verifies transport is working, close WFA-C trouble ticket
12	Coordination and dispatch center receives trouble ticket.
13	If trouble is found in facilities, send trouble ticket for field dispatch.
14	Coordination and dispatch center loads technician for CO A.
15	Sectionalize trouble
16	Check for trouble in CO Z.
17	If trouble in CO Z, repair trouble
18	Check for trouble in CO A.
19	Notify coordination & Dispatch Center of repair
20	Complete WFA-DI work request.
21	If trouble is in CO LOC A, transfer WFA-DI ticket to CO A.
22	Call Coordination & Dispatch Center to dispatch technician to CO A.
23	Coordination & Dispatch Center loads technician for COA
23	Check for trouble in facilities to CO A.
24	COT transfers WFA-DO ticket to Coordination & Dispatch Center.
25	Checks to verify transport is working.
26	Coordination & Dispatch Center calls CLEC to verify repair.
27	Coordination & Dispatch Center closes WFA-C trouble ticket.
28	Coordination & Dispatch Center receives trouble ticket from Field Operations.
29	Coordination & Dispatch Center calls CLED to verify repair.
30	Coordination & Dispatch Center Closes WFA-C trouble ticket
31	Coordination & Dispatch Center loads technician.
32	Technician repairs trouble.
33	Technician notifies Coordination & Dispatch Center of repair.
34	Coordination & Dispatch Center closes work request.

COLLOCATION PROCESS FLOW

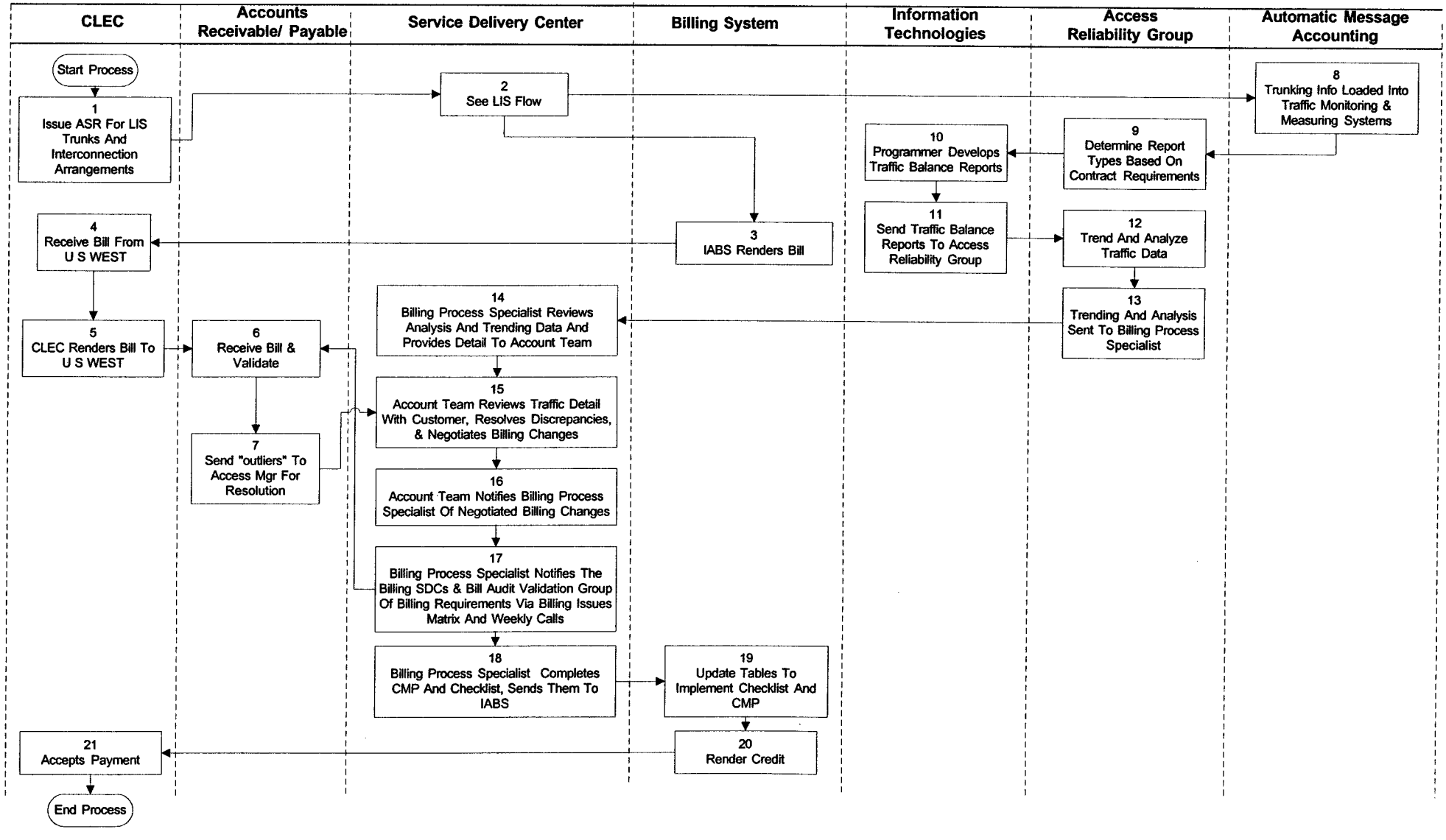


Collocation Process Flow

Task List

Assoc. Task #	Process
1	Submit request.
2	Receive and review request.
3	Process order and send to Infrastructure Available Center.
4	Check for available space.
5	If space is unavailable, notify CLEC.
6	Receive notification of no space available.
7	If space is available, provide requirements to meet request.
8	Prepare quote.
9	Send quote to CLEC
10	Authorize 50% deposit of quote.
11	Log receipt of quote deposit and notify capacity provisioning to begin process.
12	Issue CPD and design job.
13	If no space available, prepare notice of no space available for filing with Commission.
14	Provision CLEC space
15	Manage the project and inspects the project with the CLEC.
16	Approve space for service.
17	Notify CLEC of job completion
18	Receives notification of job completed.
19	Notify Accounting
20	Issue monthly bill for collocation .

RECIPROCAL COMPENSATION PROCESS
PROCESS FLOW

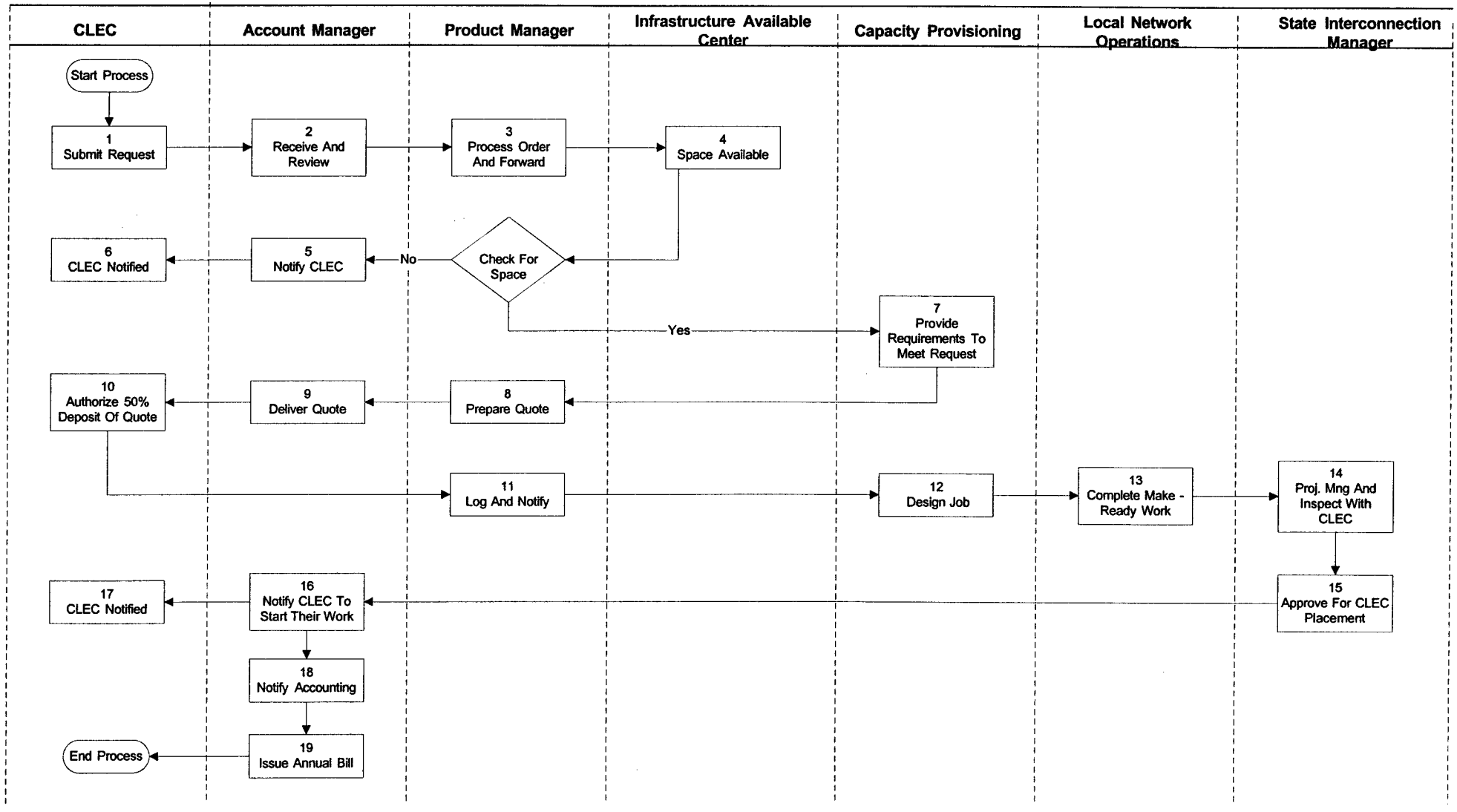


Reciprocal Compensation Process Flow

Task List

Assoc. Task #	Process
1	Issue ASR for LIS trunks and/or entrance facility.
2	LIS Flow.
3	IABS render a bill to CLEC.
4	Trunking information loaded into traffic monitoring & measurement systems
4	Receive bill from U S WEST.
5	CLEC renders a bill to U S WEST.
6	Receive and validate CLEC bill.
7	Send "outliers" to access manager for resolution.
8	Trunking information loaded into Trafic Monitoring & Measuring Systems.
9	Determine report types based on contract requirements
10	Develops traffic balance reports
11	Send traffic balance reports to access reliability group
12	Trend and analyze traffic data.
13	Trending and analysis sent to billing process specialist.
14	Reviews analysis and trending data and provides detail to account team.
15	Account team reviews traffic detail with customer, resolves discrepancies, and negotiates billing changes.
16	Account team notifies billing process specialist of negotiated billing changes.
17	Billing process specialist notifies the billing SDCs and Bill Audit Validation Group of billing requirements via billing issues matrix and weekly calls.
18	Billing process specialist completes CMP and Checklist and sends them to IABS.
19	Updates tables to implement checklist and CMP.
20	Render credit.
21	Accepts payment.

POLES AND CONDUIT PROCESS FLOW



Access to Poles, Ducts and Right-of-Way Process Flow

Task List

Assoc. Task #	Process
1	Submit request.
2	Receives and review request.
3	Process order and send to Infrastructure Available Center
4	Check for available space.
5	If space is unavailable, notify CLEC.
6	Receive notification of no space available.
7	If space is available, provide requirements to meet request.
8	Prepare quote.
9	Send quote to CLEC
10	Authorize 50% deposit of quote.
11	Log receipt of quote deposit and notify capacity provisioning to begin process.
12	Issue CPD and design job.
13	Complete make ready work.
14	Manage the project and inspects the project with the CLEC.
15	Approve structure for CLEC placement.
16	Notify CLEC to start their work.
17	Receives notification to start their work.
19	Notify Accounting
20	Issue annual bill for poles, ducts or rights-of-way..

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF** Michael J. Weidenbach
STATE OF Colorado	)	
COUNTY OF Denver.	:	**SS.**

Michael J. Weidenbach, of lawful age being first duly sworn, deposes and states:

1. My name is Michael J. Weidenbach. I am a manager in the Wholesale Markets organization of U S WEST Communications in Denver, Colorado.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Michael J. Weidenbach

SUBSCRIBED AND SWORN to before me this 22 day of March, 1999.

Barbara Pinedo Humbles
Notary Public

My Commission Expires:

My Commission Expires
12-11-2001

AFFIDAVIT OF STEWART

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

KAREN A. STEWART

U S WEST COMMUNICATIONS

MARCH 25, 1999

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CONCLUSION 43

1 **Identification of Affiant**

2 My name is Karen A. Stewart and I am employed by U S WEST. My title is
3 Director, Markets-Regulatory Strategy. My office is located at 421 SW Oak Street,
4 Portland, Oregon.
5 I received a Bachelor of Science degree in Business Administration from
6 Portland State University in 1980, and a Masters degree in Business Administration
7 from the University of Oregon in July, 1994. I have been employed by U S WEST since
8 1981 (then Pacific Northwest Bell). I have held a variety of positions in U S WEST,
9 including sales, product management, regulatory affairs, issues management, and
10 E911 service and technical design.
11 I filed testimony on January 8, 1999 in Arizona supporting the U S WEST rate
12 case. Under either my current name or the name of Karen A. Baird, I have testified in
13 the states of Colorado, Idaho, Iowa, New Mexico, Minnesota, Nebraska, North Dakota,
14 Oregon, South Dakota, Utah and Washington.

15 **Purpose of Affidavit**

16 The purpose of my affidavit is to demonstrate that U S WEST has satisfied the
17 requirements for checklist items listed in Section 271 of the Telecommunications Act of
18 1996 (Act) that concern access to unbundled network elements (checklist item 2),
19 unbundled loops (checklist item 4), local transport unbundled from switching (checklist
20 item 5), and local switching unbundled from transport and the local loop (checklist item
21 6). My affidavit, through references to the Statement of Generally Available Terms and
22 Conditions (SGAT), interconnection agreements, and technical publications, will prove

that U S WEST provides access to unbundled network elements in conformance with the Act. Ultimately, I conclude that the Arizona Corporation Commission (Commission) should confirm that U S WEST satisfies checklist items 2, 4, 5 and 6.

Executive Summary

Section 271 of the Act established a checklist which includes several requirements under which U S WEST must provide its network on an unbundled basis to CLECs. In this affidavit, I will demonstrate that U S WEST has satisfied the requirements for four of these checklist items:

Checklist Item 2	Access to Unbundled Network Elements
Checklist Item 4	Local Loop Transmissions Unbundled from Switching
Checklist Item 5	Loop Transport Unbundled from Switching
Checklist Item 6	Local Switching Unbundled from Transport and the Local Loop

The Act also required the FCC to establish regulations to determine which unbundled network elements must be provided on an unbundled basis. In response to the above requirement of the Act, the FCC adopted a minimum list of unbundled network elements, which were specified in 47 C.F.R. 51.319 ("Rule 319").

On January 25, 1999, the Supreme Court of the United States issued a decision in *AT&T Corp. v. Iowa Utilities Bd.*, No. 97-826, slip op. (U.S. Jan. 25, 1999), which vacated the FCC Rule 319 that defined the list of unbundled network elements (UNEs). The Supreme Court's decision also remanded to the Eighth Circuit for further review the FCC's pricing rules that were to apply to unbundled network elements.[1] Finally, the

[1] 47 C.F.R. 51.501-51.515, 51.601-51.611, 51.701-51.717.

1 Supreme Court also upheld the FCC's Rule 315(b) which requires incumbent LECs to
2 provide pre-existing combinations of unbundled network elements to CLECs.
3 Based on the Supreme Court's decision, the FCC must review and reevaluate its
4 required list of unbundled network elements contained in Rule 319. Although
5 U S WEST is still evaluating the impact of the Supreme Court's recent decision, the
6 decision has important implications – including what unbundled network elements must
7 be provided, under what rules, and which elements must be provided on a combined
8 basis.
9 During the period of time before the FCC establishes the required list of
10 unbundled network elements pursuant to the Supreme Court's decision, U S WEST will
11 continue to provide CLECs access to the UNEs listed in the vacated Rule 319 pursuant
12 to existing interconnection agreements, and will provide a means for CLECs to combine
13 those accessed UNEs. The rates in the interconnection agreements are consistent with
14 the FCC's pricing methodology as established in the Arizona Cost Docket No. U-3021-
15 96-448.
16 U S WEST has also included each of the Rule 319 unbundled network elements
17 in the proposed SGAT. The proposed SGAT does not require U S WEST to provide
18 these services on a combined basis, since they have not yet been determined by the
19 FCC to qualify as unbundled network elements.
20 U S WEST has satisfied the Act's requirements for checklist item 2, access to
21 unbundled network elements, by providing several collocation alternatives, including
22 caged and cageless physical collocation, virtual collocation, and interconnection
23 distribution frame (ICDF) collocation. Through these arrangements, U S WEST will
24 deliver unbundled network elements to CLECs in a manner that will permit CLECs to

connect such elements to the CLEC's collocated equipment, or to combine two or more unbundled network elements.

U S WEST is currently providing access to unbundled network elements and ancillary services in Arizona, pursuant to Commission approved interconnection agreements. Four CLECs in Arizona are successfully accessing unbundled loops to create telecommunications services for end users. U S WEST has satisfied the requirements of the Act for checklist item 2.

U S WEST provides access to the FCC required two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals. U S WEST has installed 1,546 unbundled loops as of March 1, 1999 for four CLECs in Arizona. U S WEST has satisfied the requirements of the Act for checklist item 4.

CLECs can access the FCC required dedicated and shared transport unbundled network elements in Arizona. U S WEST is operationally prepared to offer unbundled transport and has conducted testing of the provisioning systems. There has been no order activity for unbundled transport in Arizona prior to March 1, 1999. U S WEST has satisfied the requirements of the Act for checklist item 5.

U S WEST has demonstrated that unbundled switching is available to CLECs in Arizona, but has yet to receive any orders for the service in Arizona. U S WEST has the processes in place to adequately provision and maintain unbundled switching UNEs when they are ordered. U S WEST has satisfied the requirements of the Act for checklist item 6.

Overview – The Supreme Court Decision on Unbundled Network Elements

Section 271 of the Act established a checklist which includes several requirements under which U S WEST must provide its network on an unbundled basis to CLECs. Specifically, the checklist includes the following requirements:

Checklist Item 2	Access to Unbundled Network Elements
Checklist Item 4	Local Loop Transmission Unbundled from Switching
Checklist Item 5	Local Transport Unbundled from Switching
Checklist Item 6	Local Switching Unbundled from Transport and the Local Loop
Checklist Item 7	Directory Assistance and Operator Services
Checklist Item 10	Databases and Signaling

The Act also required the FCC to establish regulations to determine which unbundled network elements must be provided on an unbundled basis, subject to the requirement that the FCC consider, at a minimum, whether access to such network elements as are proprietary in nature is necessary, and whether the failure to provide access to such network elements would impair the ability of a CLEC to provide services.[2]

In response to the above requirement of the Act, the FCC adopted a minimum list of unbundled network elements, which were specified in 47 C.F.R. 51.319 ("Rule 319"). That rule required the unbundling of a more extensive list of unbundled network elements than were explicitly stated in Section 271 of the Act. Rule 319 required the unbundling of the following elements:

(a) Local Loops
(b) Network Interface Device (NID)

[2] Telecommunications Act of 1996, Section 251(d)(2).

(c) Local Switching, including
  (1) Vertical Features
  (2) Tandem Switching
(d) Interoffice Transmission Facilities (i.e., Transport), including
  (1) Shared Transport
(e) Signaling Networks and Call Related Databases
(f) Operation Support Systems (OSS)
(g) Operator Services and Directory Assistance

Exhibit KAS-01 provides on overview of the major components of a LEC local network, including an illustration of many of the unbundled network elements listed in the FCC's Rule 319.

On January 25, 1999, the Supreme Court of the United States issued a decision in *AT&T Corp. v. Iowa Utilities Bd.,* No. 97-826, slip op. (U.S. Jan. 25, 1999), which vacated the FCC Rule 319 that defined the list of unbundled network elements (UNEs). My understanding of the Supreme Court's rationale was that the FCC did not adequately consider the "necessary and impair" standards established in Section 251(d)(2) of the Act prior to identifying what network elements incumbent LECs are required to unbundle for CLECs.

The Supreme Court's decision also remanded to the Eighth Circuit for further review the FCC's pricing rules that were to apply to unbundled network elements.[3] The final pricing rules will not likely be known until the Eighth Circuit Court reviews the merits of the challenges to the pricing rules, which could be several months in the future. The issue of pricing is also directly linked to which unbundled network elements the FCC requires LECs to provide after it appropriately applies the "necessary and impair" standard.

As I stated earlier in my affidavit, Section 251(d)(2) requires that the FCC

[3] 47 C.F.R. 51.501-51.515, 51.601-51.611, 51.701-51.717.

consider two standards when analyzing whether a LEC must offer a proposed unbundled network element. In particular, the FCC must analyze for each unbundled network element whether: "(A) access to such network elements as are proprietary in nature is necessary and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer."

Based on the Supreme Court's decision, the FCC must review and reevaluate its required list of unbundled network elements contained in Rule 319. Although U S WEST is still evaluating the impact of the Supreme Court's recent decision, the decision has important implications – including what unbundled network elements must be provided, under what rules, and which elements must be provided on a combined basis.

The Supreme Court also upheld the FCC's rule 51.315(b), which requires that LECs provide CLECs with pre-existing combinations of unbundled network elements. However, other portions of the FCC's 315 rules remain vacated, including the rules that require LECs to combine previously uncombined network elements on behalf of CLECs. As a result of this rule, U S WEST will be required to provide a limited set of combinations of unbundled network elements to CLECs – but only preexisting combinations.

At the present time, however, Rule 315(b) cannot be effectuated, since there are currently no unbundled network elements subject to that rule. That will remain the case until the FCC establishes a list of unbundled network elements pursuant to the Supreme Court's interpretation of the "necessary and impair" standard. The Supreme Court specifically recognized the interrelationship between Rule 315(b) and the list of

unbundled network elements in its vacation of the FCC's list of UNEs contained in Rule 319. In its review of Rule 315(b), the Court addressed Incumbent LEC concerns that such a rule would result in price arbitrage of resale through UNE-based rates by stating: "As was the case for the all-element rule, our remand of Rule 319 may render the incumbents' concern on this score academic."

U S WEST will continue to provide CLECs access to the UNEs listed in the vacated Rule 319, and will provide a means for CLECs to combine those accessed UNEs, until the FCC develops a lawful list of UNEs to which rule 315(b) would apply. In the interim, U S WEST will provide requesting telecommunications carriers access to network elements with rates consistent with the FCC's pricing methodology, as contained in the CLEC's respective interconnection agreements.

To summarize, the Supreme Court decision has created uncertainty on what unbundled network elements are required to be offered by U S WEST, the pricing rules that apply to such elements, and which elements, if any, must be provided to CLECs on a combined basis. Such uncertainty will be resolved by the FCC with the establishment of new unbundled network elements and pricing rules pursuant to the Supreme Court decision.

Despite the uncertain regulatory environment, it is possible to move forward in this proceeding. U S WEST has committed to the following in a letter to the FCC which is included as Exhibit KAS-02:

> First, U S WEST will honor existing contracts with respect to the availability and pricing of unbundled network elements until the FCC adopts its order setting forth new interconnection rules, network elements definitions and ILEC obligations.
>
> Second, any new competitive carriers seeking interconnection during this period may opt into our existing contracts subject to appeals or dispute

resolution.

Third, U S WEST will extend the term of any contracts that are about to expire until the end of the year in order to allow time for the FCC's new rules to be in place.

Fourth, U S WEST will continue to negotiate in good faith new interconnection agreements consistent with the terms of the Act.

Thus, U S WEST will continue to make available to CLECs the unbundled network elements described in the now vacant Rule 319 pursuant to these existing interconnection agreements until a new set of unbundled network elements are established by the FCC.

U S WEST has also included each of the Rule 319 unbundled network elements in the proposed SGAT, although most are referred to in that document as "ancillary services." For the sake of simplicity, I will continue to refer to these services in my affidavit as unbundled network elements. The proposed SGAT does not require U S WEST to provide these services on a combined basis, since they have not yet been determined by the FCC to qualify as unbundled network elements under the "necessary and impair" standard.

With the above background, I will demonstrate in this affidavit that U S WEST meets the requirements of the Act for checklist items 2, 4, 5 and 6. Specifically, I will show that U S WEST provides these checklist items, including those unbundled network elements that were incorporated in the now vacant Rule 319:

Checklist Item 2	Access to Unbundled Network Elements
Checklist Item 4	Subscriber loop
Checklist Item 4	Network Interface Device (NID)
Checklist Item 5	Transport
Checklist Item 5	Dedicated transport
Checklist Item 5	Shared Transport
Checklist Item 6	Local switching
Checklist Item 6	Vertical Features

1 Checklist Item 6 Tandem Switching
2
3 The following checklist items will be discussed in the affidavit of Ms. Lori Simpson:
4 Checklist Item 7 Operator Services
5 Checklist Item 7 Directory Assistance
6
7 And, the following checklist items will be discussed in the affidavit of Ms. Margaret
8 Bumgarner:
9 Checklist Item 10 Signaling links
10 Checklist Item 10 Signal transfer points (STPs)
11 Checklist Item 10 Access to Service Control Point (SCP) via STPs
12
13 U S WEST is currently providing access to unbundled network elements and
14 ancillary services in Arizona, pursuant to Commission approved interconnection
15 agreements. For example, as of March 1, 1999, U S WEST provides four CLECs
16 access to 1,546 unbundled loops in Arizona.[4]

[4] This loop count does not include 43 unique service arrangements installed, per an interconnection agreement, in 1997.

Checklist Item Number 2 – Access to Unbundled Network Elements

Checklist item 2 requires that U S WEST provide "[n]ondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)."[7]

Section 251(c)(3) of the Act requires that U S WEST provide access to unbundled network elements, at any technically feasible point. The Act requires U S WEST to provide unbundled network elements in a manner that allows the requesting carrier to combine such elements.[8]

Section 252(d)(1) establishes standards for the pricing of unbundled network elements. Those standards require unbundled network elements to be priced to cover cost and a reasonable profit.[9]

Thus, checklist item 2 establishes requirements for access to unbundled network elements, including the ability of CLECs to combine such unbundled network elements. Checklist item 2 also establishes pricing standards for unbundled network elements.

Mr. Allcott describes the rate-making process of the ACC Consolidated Cost Docket No. U-3021-96-448, Decision No. 60635. This docket resulted in prices for unbundled network elements such as unbundled loops, dedicated transport and tandem switching. As I detailed previously in this affidavit, U S WEST will continue to honor the unbundled network elements and pricing contained in its current interconnection

---

7 Telecommunications Act of 1996, Section 271(c)(2)(B)(ii).

8 Telecommunications Act of 1996, Section 251(c)(3).

9 Telecommunications Act of 1996, Section 252(d)(1)

agreements. In U S WEST's proposed SGAT, however, prices for unbundled switching and shared transport were set so that when these combined services are provided to a CLEC they are consistent with the resale rate for business exchange service.

An additional requirement of checklist item 2, as required by the FCC's Rule 319, is access to Operational Support Systems (OSS) to support the resale and unbundling needs of CLECs. U S WEST's efforts to provide for access and unbundling of OSS are in the affidavit of Mr. Buhler, who describes how U S WEST provides for the pre-ordering, ordering, provisioning, billing, and repair and maintenance of unbundled network elements and ancillary services.

In this section of my affidavit, I will describe how U S WEST provides unbundled network elements to CLECs, and how CLECs may combine such unbundled network elements. I will also describe how CLECs may request additional unbundled network elements through the bona fide request process.

A. Access to Unbundled Network Elements

The proposed SGAT provides CLECs nondiscriminatory access to unbundled network elements and ancillary services:

> 9.1.1 U S WEST shall provide non-discriminatory access to unbundled network elements on rates, terms and conditions that are nondiscriminatory, just and reasonable. U S WEST shall provide to CLEC on a nondiscriminatory basis unbundled network elements of substantially the same quality as the network facilities that U S WEST uses to provide service to its own customers within a reasonable timeframe and with a minimum of service disruption.

U S WEST provides a connection between each unbundled network element and a demarcation point. The connection between the unbundled network element and the demarcation point is referred to in the proposed SGAT as an Interconnection Tie Pair

(ITP). The demarcation point is that point where U S WEST delivers the unbundled network element to the CLEC. U S WEST provides several options for establishing a demarcation point, including a point within the CLEC's collocation space.

U S WEST provides nondiscriminatory access to unbundled network elements pursuant to Commission approved interconnection agreements. For example, the Teligent agreement states:[10]

> 8.1.1 USWC agrees to provide nondiscriminatory access to the following unbundled Network Elements on rates, terms and conditions that are just, reasonable and nondiscriminatory which are addressed in more detail in later sections of this Agreement: 1) local Loop, 2) local and tandem switches (including all vertical switching features provided by such switches), 3) interoffice transmission facilities, 4) network interface devices, 5) signaling and call-related database facilities, 6) operations support systems functions, and 7) operator and directory assistance functions. For any other requested Network Elements, Teligent will use the BFR process as provided in Section 8.2.7

U S WEST has several collocation options available to CLECs for the purpose of accessing UNEs. The U S WEST collocation options are:

- Virtual Collocation
- Caged Physical Collocation
- Cageless Physical Collocation
- Interconnection Distribution Frame (ICDF) Collocation

The affidavit of Mr. Michael Weidenbach provides a detailed description of U S WEST's collocation offerings, and demonstrates how U S WEST's collocation options satisfy the Act's requirements.

The delivery of unbundled network elements to CLECs is described in the proposed SGAT:

> 9.1.3 U S WEST will provide a connection between unbundled network elements and a demarcation point. Such connection is an Interconnection

[10] Teligent Interconnection Agreement effective 10/7/98 at 8.1.1.

Tie Pair (ITP). The demarcation point shall be:

a) at CLEC-provided cross-connection equipment located in the CLEC's Virtual or Physical Collocation Space; or
b) if CLEC elects to use ICDF Collocation, at the Interconnection Distribution Frame (ICDF); or
c) if CLEC elects to use an ICDF in association with Virtual or Physical Collocation, at the ICDF; or
d) at another demarcation point mutually-agreed to by the parties.

B. U S WEST Allows CLECs to Combine Unbundled Network Elements

The Act requires U S WEST to provide unbundled network elements in a manner which enables a CLEC to combine them to provide telecommunication services.[11] U S WEST satisfies this requirement through its proposed SGAT, which states:

> 9.1.5 CLEC may connect UNEs in any technically feasible manner. U S WEST will provide CLEC with the same features, functions and capabilities of a particular element that U S WEST provides to itself, so that CLEC can provide any Telecommunications Services that can be offered by means of the element. U S WEST shall provide such unbundled network elements in a manner that allows CLEC to combine such elements in order to provide Telecommunications Service.

U S WEST provides unbundled network elements in a manner that enables CLECs to combine the network elements, pursuant to Commission approved interconnection agreements. The Teligent interconnection agreement provides:[12]

> 8.1.3 USWC will not restrict the types of telecommunications services features, functions and capabilities that any unbundled element is capable of providing that Teligent may offer through unbundled elements. Teligent may combine its or USWC's elements with any technically compatible equipment Teligent owns or leases or otherwise obtains from third parties. USWC will provide Teligent with the same features, functions and capabilities of a particular element that USWC provides to itself, its

[11] See Section 251(c)(3) of the Act.

[12] Teligent Interconnection Agreement, effective 10/7/98, at Section 8.1.3.

1 affiliates and any other Co-Provider, so that Teligent can provide any
2 telecommunications services that can be offered by means of the element.

3 There are several options available to a CLEC, such as Teligent, to combine two or
4 more unbundled network elements. For example, a CLEC could obtain caged physical,
5 virtual or cageless physical collocation at a U S WEST central office, and order
6 whatever unbundled network elements that the CLEC wishes to combine. For each
7 individual element ordered by the CLEC, U S WEST will provide connections to the
8 CLEC's equipment located in its collocation space through the use of Interconnection
9 Tie Pairs (ITP). The CLEC would then be responsible for assembling the various
10 elements into a telecommunication service by connecting together the appropriate
11 elements in their collocated space.

12 A second option that enables a CLEC to combine unbundled network elements
13 is the Interconnection Distribution Frame (ICDF). The ICDF is available to those
14 CLECs who do not intend to collocate their own equipment in a U S WEST central
15 office. Under this collocation option, U S WEST will deliver the CLEC's unbundled
16 network elements to an ICDF located in the central office. The ICDF is a practical
17 method available today to comply with the requirement to allow nondiscriminatory
18 access to network elements on an unbundled basis. The ICDF would become the
19 CLEC's combined collocation and demarcation point, and the CLEC would have access
20 to the ICDF to combine two or more elements.

21 Prior to illustrating how the CLEC would use the ICDF, I will describe how
22 U S WEST connects its central office switch to a local loop to deliver dial tone to a local
23 exchange.

24 First, Exhibit KAS-01 B is a diagram that illustrates the inside of a U S WEST

Central Office. U S WEST utilizes a Cosmic or Main Distribution Frame to connect different pieces of equipment within the office to deliver a complete service to a customer. Local loops and switching office equipment terminate on the Cosmic or Main Distribution Frames. Tie Pairs run from the Cosmic or Main Distribution Frames to Intermediate and Tie Pair Distribution Frames.

Intermediate distribution frames are used to access miscellaneous equipment bays and other termination points that are required to condition and complete the electrical path of the circuit. Tie pair distribution frames are also used when loop or office equipment from different Cosmic Bay line-ups must be connected and a direct jumper connection is not practical.

Exhibit KAS-01 C illustrates one panel of a Cosmic Frame. The frame is divided into two modules: Outside Plant (OSP) and Office Equipment (OE). The OSP module is the termination point for the local loop, while the OE module is where the switching equipment is terminated. Between these two modules are wire jumpers that are run to complete continuity between the loop and switching equipment, thus providing the customer with dialtone.

A Cosmic panel will have multiple OSP and OE modules. The short jumper concept applies when the OSP termination is very close to the OE termination module, but long jumpers may also exist when the two are far apart. The preferred design is to have short jumpers on the Cosmic Frame. The top panel of a Cosmic frame contains a module of tie pairs that run between the Cosmic Frame and Intermediate or Tie Pair Distribution Frames. These tie pairs provide access to required termination points and miscellaneous equipment.

When an OSP is located in a different Cosmic Bay line-up than the OE, a tie pair

is required to connect these two facilities. U S WEST utilizes a Tie Pair Distribution Frame (TPDF) to provision these types of circuits. The diagram in KAS-01 D illustrates the three jumpers that must be run to complete continuity of the circuit from the OSP in one Cosmic lineup to an OE in another lineup. The first connection is made from the OSP termination point to a tie pair termination going to the TPDF. The second jumper is wired from the OE termination point to a second tie pair going to the TPDF. The third jumper is run on the TPDF and connects the two tie pair terminations together.

Similarly, KAS-01 D also illustrates how an Interconnection Distribution Frame (ICDF) is utilized by the CLEC to provision an end to end circuit. As with the TPDF connection, three jumpers are utilized to combine a line port with a switch port. The first jumper is wired from the OSP termination point to Interconnection Tie Pairs (ITPs) going to the ICDF. The second jumper is wired from the OE termination point to a second ITP going to the ICDF. The third and final jumper is wired at the ICDF and connects the two ITP terminations together.

Attached as Exhibit KAS-01 E is a diagram that illustrates how the CLEC would access unbundled elements in its collocated space or at the ICDF. The proposed SGAT includes terms and conditions for both the Interconnection Distribution Frame, as well as the tie pairs that extend from the ICDF to the unbundled network elements and, if required, the tie pairs that extend from the ICDF to the CLEC's collocated equipment.

In summary, CLECs are accessing unbundled network elements in a manner that enables the CLEC to combine network elements to provide telecommunications services for end users. For example, CLECs are accessing unbundled loops and combining them with their own network elements to provide services for end users in Arizona.

1 **C. CLECs May Request Additional Unbundled Network Elements**

2 If a CLEC desires a unique unbundled network element that is not included in its
3 interconnection agreement or in the proposed SGAT, the CLEC may submit a bona fide
4 request (BFR) to U S WEST. The BFR specifies the additional unbundled network
5 element desired from U S WEST, along with the specific location and quantities, etc.
6 Within 30 days of the BFR, the proposed SGAT requires that U S WEST respond to the
7 CLEC with a preliminary analysis of the request.

8 Should U S WEST determine that the request is not technically feasible, or that
9 the BFR does not identify an unbundled network element that meets the necessary and
10 impair standards set forth in the Act, U S WEST must notify the CLEC in writing within
11 10 business days after the initial 30 business day review period. If the requested
12 unbundled network element is technically feasible, and meets the standards set forth in
13 the Act, U S WEST is required to respond with a quote for the requested element no
14 later than 90 days after the request is submitted by the CLEC.[13]

15 Consistent with the Act and the FCC's First Interconnection Order, U S WEST
16 will provide these additional unbundled network elements when the requesting party
17 agrees to pay the costs of provisioning and maintaining the requested service.

18 In addition, in the proposed SGAT filed with the Commission, all of U S WEST's
19 checklist requirements under the Act are incorporated. If a CLEC's interconnection
20 agreement does not contain an individual unbundled network element or ancillary
21 service that is available in the proposed SGAT, U S WEST will negotiate on an
22 expedited basis to amend the CLEC's interconnection agreement to provide the UNE or

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[13] See SGAT, Section 17, Bona Fide Request Process.

1 ancillary service under the SGAT terms and conditions.

2 CLECS can also use the BFR process identified in their interconnection
3 agreements. As previously identified, the Teligent agreement specifically provides for
4 the BFR process to allow Teligent to request additional network elements.[14]

5 **D. U S WEST has Tested its Ability to Provide Unbundled Network Elements**

6 U S WEST has tested its ability to provision unbundled network elements and
7 ancillary services. In addition to the specific OSS efforts described in Mr. Dean Buhler's
8 affidavit, U S WEST has completed internal testing of both the electronic and human
9 interfaces needed to provide unbundled network elements and ancillary services. The
10 unbundled network elements and ancillary services described in my affidavit were
11 tested using a highly structured format to ensure that both mechanized and manual
12 business processes adequately allow for their ordering, installation and maintenance in
13 accordance with nondiscriminatory provisioning requirements.

14 Business Integration Testing (BITS) was completed by U S WEST's Information
15 Technology team; live order trials were undertaken to simulate the ordering, installation
16 and maintenance processes; and bench testing was completed on groups of unbundled
17 network elements and ancillary services which may be combined by a CLEC. The
18 bench tests demonstrated a CLEC's ability to combine loop, transport and switching by
19 performing end-to-end local call completion tests. Service requests successfully flowed
20 through the appropriate operating support test systems; loop, transport and switching
21 services were connected to the designated frames; and unique Line Class Codes were

[14] Teligent Interconnection Agreement, effective 10/7/98, Section 8.2.7.

1 established in the switch. Both intra and inter-office local calls were successfully
2 originated and terminated to and from the designated frame.[15]
3 In summary, U S WEST has demonstrated that it satisfies checklist item 2
4 because it makes available all of the unbundled network elements listed in the vacated
5 Rule 319, and offers to consider requests for additional unbundled network elements
6 through the bona fide request process. U S WEST has also demonstrated that its
7 provision of these UNEs is made in a nondiscriminatory manner that allows CLECs to
8 combine them in the provision of finished telecommunication services.

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15 The FCC'S South Carolina order provides that a BOC may present third-party or internal testing. As Chairman William E. Kennard stated in his letter to Senators John McCain and Sam Brownback regarding Section 271 compliance: "Of course, there may be multiple ways to demonstrate compliance with a particular checklist item." That letter contains references to testing and measurements which "would be helpful" but does not indicate that any certain type of evidence is required. (Letter from FCC Chairman William E. Kennard to Senators John McCain and Sam Brownback, March 20, 1998, pp. 2-3.)

Checklist Item Number 4 – Unbundled Local Loops

The Act requires U S WEST to provide "local loop transmission from the central office to the customer's premises, unbundled from local switching or other services."[16]

In its First Interconnection Order, the FCC defined a local loop as "a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and an end user customer premises."[17] Exhibit KAS-01 F provides a diagram of an unbundled loop as defined by the FCC.

A. Unbundled Loops

Before the Supreme Court vacated its Rule 319, the FCC required U S WEST to provide two and four-wire unbundled loops, conditioned for either analog or digital signals:

> [This] definition [of unbundled loops] includes, for example, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals.[18]

Consistent with these requirements, U S WEST offers unbundled loops that connect the U S WEST central office main distribution frame, or equivalent, with the Network Interface Device (NID) at the customer's premises. Moreover, U S WEST provides both two wire and four wire analog voice grade loops. Conditioned loops and four-wire digital capable loops are also available. For example, the proposed SGAT states:

> U S WEST offers nondiscriminatory access to unbundled local loops. An unbundled loop establishes a transmission path between a central office distribution frame (or equivalent) up to, and including, U S WEST's Network Interface Device (NID) and/or demarcation

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16 Section 271(c)(2)(B)(iv) of the Act.

17 47 C.F.R. 51.319(a).

18 First Interconnection Order at para. 380.

> point. For existing loops, the inside wire connection to the NID and/or demarcation point will remain intact. Unbundled loops are available in three categories: (i) 2-Wire or 4-Wire Analog, (ii) 2-Wire or 4-Wire Non-Loaded and (iii) Digital Capable - either Basic Rate ISDN or DS1.[19]

U S WEST further defines the specifications, interfaces, and parameters associated with its Unbundled Loops in Technical Reference Publication No. 77384.

Additionally, U S WEST provides access to unbundled loops pursuant to Commission approved interconnection agreements. The Electric Lightwave (ELI) Agreement, for example, states:

> i. An Unbundled Loop establishes a transmission path between the USWC distribution frame (or equivalent) up to, and including, USWC's network interface device (NID). For existing loops, the inside wire connection to the NID will remain intact.
>
> ii. Basic Unbundled Loops are available as a two-wire or four-wire, point-to-point configuration suitable for local exchange type services within the analog voice frequency range of 300 to 3000 Hz. For the two-wire configuration, ELI is requested to specify loop start, ground start or loop reverse battery options. The actual loop facilities that provide this service may utilize various technologies or combinations of technologies. Basic Unbundled Loops provide an analog facility to ELI.
>
> (a) To the extent ELI requires an Unbundled Loop to provide ISDN, HDSL, ADSL or DS1 service, such requirements will be identified on the order for Unbundled Loop Service. Conditioning charges will apply, as required, to condition such loops to ensure the necessary transmission standard.[20]

U S WEST also complies with the FCC requirement that it "condition" existing loops:

> Our definition of loops will in some instances require the incumbent LEC to take affirmative steps to condition existing loop facilities to enable requesting carriers to provide services not currently provided over such facilities. For example, if a competitor seeks to provide a digital loop functionality, such as ADSL, and the loop is not currently conditioned to carry digital signals, but it is technically feasible to condition the facility, the incumbent LEC must condition the loop to permit the transmission of

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[19] U S WEST Arizona SGAT at 9.2.1.

[20] ELI Interconnection Agreement, effective April 3, 1997.

> digital signals. . . .[21]

This conditioning provision, however, is subject to a technical feasibility standard:

> Incumbent LECs are required to provide access to these transmission facilities only to the extent technically feasible. That is, if it is not technically feasible to condition a loop facility to support a particular functionality, the incumbent LEC need not provide unbundled access to that loop so conditioned. For example, a local loop that exceeds the maximum length allowable for the provision of a high-bit-rate digital service could not feasibly be conditioned for such service. . . .[22]

As identified above, U S WEST provides for conditioned loops. The U S WEST proposed SGAT, for example, provides for conditioning in several different situations:

- U S WEST will "condition" the loop by removing load coils and excess bridge taps (*i.e.*, "unload" the Loop). The CLEC is charged a non-recurring charge for the cable unloading and bridge tap removal in addition to the Unbundled Loop installation nonrecurring charge.

- A CLEC may request a Basic Rate ISDN capable loop. U S WEST will review the available loops and take steps to condition, and/or place extension technology, as necessary for the CLEC to deliver Basic Rate ISDN service over the loop. Additional charges apply for conditioning and extension technology.

- When a CLEC requests a DS1 capable loop, U S WEST will install the electronics at both ends including any intermediate repeaters.[23]

U S WEST also complies with the FCC requirement to provide unbundled loops to CLECs regardless of whether Integrated Digital Loop Carrier (IDLC) or similar technologies are utilized by U S WEST to provide loops to a particular address. In its First Interconnection Order, the FCC specifically addressed IDLC and reviewed several of the options for providing unbundled loops to CLECs. The Order explains:

> . . . If we did not require incumbent LECs to unbundle IDLC-delivered loops, end users served by such technologies would not have the same

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[21] First Interconnection Order at para. 382.

[22] First Interconnection Order at para. 381.

[23] SGAT at 9.2.2.3 to 9.2.2.5

> choice of competing providers as end users served by other loop types. Further, such an exception would encourage incumbent LECs to "hide" loops from competitors through the use of IDLC technology.
>
> We find that it is technically feasible to unbundle IDLC-delivered loops. One way to unbundle an individual loop from an IDLC is to use a demultiplexer to separate the unbundled loop(s) prior to connecting the remaining loops to the switch. Commenters identify a number of other methods for separating out individual loops from IDLC facilities, including methods that do not require demultiplexing.
>
> Again, the costs associated with these mechanisms will be recovered from requesting carriers.[24]

Therefore, when a CLEC requests an unbundled loop in an area where the loops are provisioned through IDLC, U S WEST will first attempt to provide the requested unbundled loop through a Universal Digital Loop Carrier System (UDLC). UDLC is a form of digital carrier that is not integrated with the switch, and therefore allows an individual loop to be demultiplexed at the central office for delivery to the CLEC. If no UDLC is available, U S WEST will attempt to locate copper facilities that will meet the CLEC's requirements.

If no facilities are available, an outside plant engineer will review the situation, and determine the best way to provide the loop facility. Once the outside plant engineer has made a recommendation, the CLEC will be notified and installation time frames and any additional charges will be negotiated.

The outside plant engineer will review the option of using a new generation of IDLC. This new generation IDLC allows U S WEST to "groom" the CLEC's loops into a a D4 formatted, single DS-1 channel. That channel is then delivered to the U S WEST central office where it can be delivered to the CLEC at the appropriate Interconnection

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[24] First Report and Order, Paragraphs 383-384.

Distribution Frame, or its collocation facility, in either the DS-1 format or demultiplexed into individual DS-0 (voice level) channels.

The proposed U S WEST SGAT, for example, offers the CLEC four different installation options when ordering an unbundled loop.[25]

- Basic Installation Option for Existing Service.
- Basic Installation with Performance Testing Option for New Service.
- Coordinated Installation With Cooperative Testing Option.
- Coordinated Installation Without Testing for Existing Service.

The coordinated installation options allow the CLEC to designate a specific appointment time when U S WEST will deliver the requested unbundled loop to the ICDF or CLEC collocation facility.

In addition to the testing available in the standard installation options, U S WEST Central Office Technicians will perform other testing as requested by the CLEC. Any test that is not a required Bellcore standard test for the type of service offered will be billed on an individual case basis (ICB). These test results are provided to the U S WEST Designed Services Implementor, who records them as benchmarks for future testing and then forwards the test results to the CLEC. General hours of operations for the testing related options are 8:00 a.m. - 5:00 p.m. That time is applicable to the zone in which the work is being performed. Requests for after hours provisioning and testing will be addressed on an individual case basis and additional

[25] SGAT at 9.2.2.7 to 9.2.2.4

charges will apply.

U S WEST has the processes in place to provision an unbundled loop order. The CLEC submits a completed Local Service Request (LSR) form and Loop Service Form via facsimile or the Interconnection Mediated Access (IMA) ordering system to U S WEST's Interconnect Service Center (ISC). The CLEC may also speak directly with a U S WEST representative at the ISC via an 800 telephone number. Within 24 hours of successful order entry by the ISC service representative, the ISC will provide the CLEC, via facsimile or IMA, a Firm Order Confirmation (FOC) and, if required, any loop design requirements.

Exhibit KAS-03 A contains high level unbundled loop process flows that demonstrate the tasks performed by U S WEST to install and repair unbundled loops. In addition, Exhibit KAS-03 B contains a matrix that describes each task identified in the work flow charts. Detailed information regarding the order processing flow for unbundled network elements is also included in the affidavit of Mr. Buhler.

U S WEST will work cooperatively with CLECs to resolve trouble reports on unbundled loops. Once a CLEC has determined that the trouble is isolated to the U S WEST unbundled loop, it will submit a repair call to U S WEST through the Account Maintenance Service Center (AMSC) via an 800 number. U S WEST will coordinate repair activities through its service center. Detailed information regarding a CLEC's access to repair and maintenance systems is documented in the affidavit of Mr. Buhler.

U S WEST demonstrates that its installation and repair of unbundled loops is non-discriminatory in the affidavit of Mr. Michael Williams. Mr. Williams details U S WEST's performance measurement procedures for unbundled loops.

U S WEST prices for two wire and four wire unbundled loops in Arizona meet the requirements established in section 252(d)(1). As detailed in the affidavit of Mr. Allcott, U S WEST's rates for unbundled loops in the proposed SGAT were established in the consolidated cost docket, U-3021-96-448, in Decision No. 60635.

U S WEST also provides a cross-connection between an unbundled loop and a CLEC's collocation space. The FCC, in its rules, requires U S WEST to provide the following types of connections:

> Incumbent LECs must provide cross-connect facilities, for example, between an unbundled loop and a requesting carrier's collocated equipment, in order to provide access to that loop. . . . [A]n incumbent LEC must take the steps necessary to allow a competitor to combine its own facilities with the incumbent LEC's unbundled network elements.[26]

U S WEST cross-connect facilities are called Interconnection Tie Pairs (ITP). An ITP is required for each unbundled loop.

U S WEST is currently providing access to unbundled loops in Arizona, pursuant to Commission approved interconnection agreements. For example, as of March 1, 1999, U S WEST had provided four CLECs with access to 1,546 unbundled loops in Arizona.[27]

B. Network Interface Device (NID)

The Network Interface Device (NID) is located at the customer's premises and represents the interface point between a loop and the customer's inside wiring. The NID serves not only as a point of demarcation between a LEC's network and a

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[26] First Interconnection Order at para. 386.

[27] This loop count does not include 43 unique service arrangements installed, per an interconnection agreement, in 1997.

customer's inside wire, but also as a protection against voltage surges caused by lightning hits.

The FCC, in its vacated rules, required U S WEST and other local exchange carriers to provide access to the NID:

> We require incumbent LECs to offer unbundled access to the network interface device (NID), as a network element, as described below. When a competitor deploys its own loops, the competitor must be able to connect its loops to customers' inside wiring in order to provide competing service, especially in multi-tenant buildings. In many cases, inside wiring is connected to the incumbent LEC's loop plant at the NID. In order to provide service, a competitor must have access to this facility. Therefore, we conclude that a requesting carrier is entitled to connect its loops, via its own NID, to the incumbent LEC's NID.[28]

U S WEST provides such unbundled access to the NID. This will allow a competitor to connect its loops to an end user's inside wiring via the U S WEST NID. In such cases, the competitor may connect its loops via its own NID to the end user's inside wiring housed in the U S WEST NID.

In addition, U S WEST goes beyond the FCC requirement and allows CLECs the option of placing their loops in the U S WEST NID to connect with the end user's inside wiring, space permitting.

Figure 1 demonstrates the two options provided by U S WEST. The first option allows a CLEC to install its own NID and to run a jumper from its NID to the U S WEST NID. The second option allows a CLEC (space permitting) the ability to terminate its loops in the U S WEST NID rather than installing its own NID.

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[28] First Interconnection Order at para. 392.

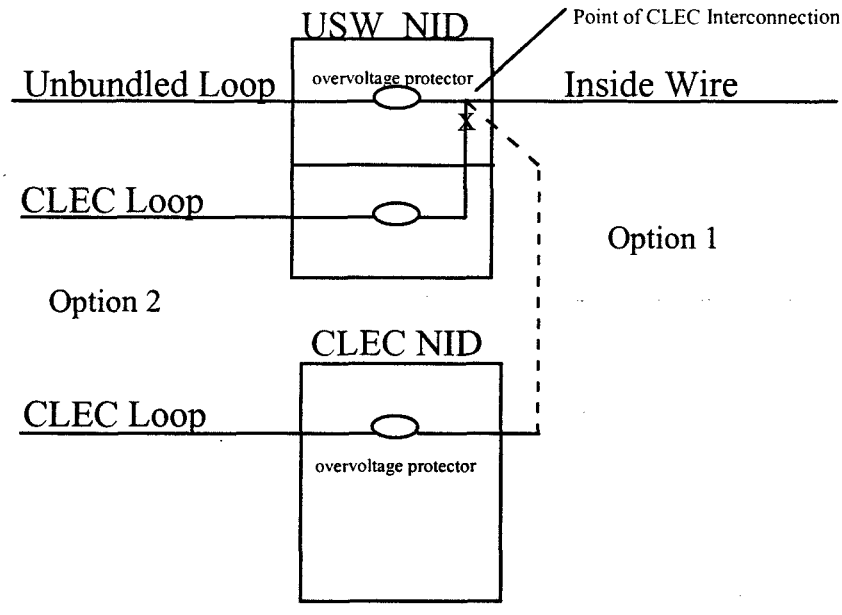

Figure 1

When the CLEC connects its NID to the inside wire side of the U S WEST NID, the CLEC will open the connection between the network side and the customer side of the U S WEST NID. This will remove any potential bridged tap that may interfere with the provisioning of high speed data services.

The proposed SGAT also gives the CLEC the option to order a modular NID to replace an existing non-modular NID for ease in end-user testing.

In summary, U S WEST provides access to the FCC required two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide services such as ISDN, ADSL, HDSL, and DS1-level signals. U S WEST separately provides access to unbundled NIDs.

U S WEST has installed 1,546 unbundled loops, as of March 1, 1999, for four CLECs in Arizona. U S WEST meets the requirements of the Act to provide "local loop transmission from the central office to the customer's premises, unbundled from local

1 switching or other services."[29] U S WEST has therefore satisfied the Section 271

2 requirements for checklist item 4.

[29] Section 271(c)(2)(B)(iv) of the Act.

Checklist Item 5 -- Local Transport

The Act requires that U S WEST provide "local transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services."[30]

The FCC defined two general categories of local transport in its Rule 319:

- Dedicated Transport - incumbent LEC transmission facilities dedicated to a particular customer or carrier
- Shared Transport - transmission facilities shared by more than one carrier, including the incumbent LEC

As previously discussed, the Supreme Court vacated these rules. However, U S WEST still provides the unbundled network elements contained in each CLEC's approved interconnection agreement, including both types of transport. U S WEST's proposed SGAT also offers both types of transport unbundled from local switching and other services.

A. Unbundled Dedicated Interoffice Transport (UDIT)

U S WEST provides unbundled access to dedicated transmission facilities between U S WEST end offices or between U S WEST end offices and CLEC end offices.

The proposed SGAT, for example, provides for dedicated interoffice transport between U S WEST wire centers in the same LATA and state.[31] UDIT is available in DS0, DS1 and DS3 where facilities are available. UDIT is also available in OC-n bandwidths on an individual case basis where available. Specifications, interfaces and

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[30] See Section 271(c)(2)(B)(v) of the Act.

[31] SGAT at 10.9.1.

parameters are described in Technical Publication 77389.

U S WEST provides interoffice facilities between its end offices and serving wire centers (SWC), its SWCs and IXC POPs, its tandem switches and SWCs, and between its end offices or tandems and the wire centers of U S WEST and requesting carriers.

As identified above, U S WEST provides all technically feasible transmission capabilities, such as DS1, DS3, and Optical Carrier levels that the CLEC could use to provide telecommunications services.

Additionally, U S WEST provides CLECs access to unbundled transport via Commission approved interconnection agreements. The ELI agreement states:

> USWC will provide unbundled access to shared transmission facilities between end offices and the tandem switch. Further, USWC will provide unbundled access to dedicated transmission facilities between its central offices or between such offices and those of competing carriers. This includes, at a minimum, interoffice facilities between end offices and serving wire centers (SWCs), SWCs and IXC POPs, tandem switches and SWCs, end offices or tandems of USWC , and the wire centers of USWC and requesting carriers. USWC will also provide all technically feasible transmission capabilities, such as DS1, DS3, and Optical Carrier levels (e.g. OC-3/12/48/96) that ELI could use to provide telecommunications services. (p. 71-72).[32]

U S WEST will provide requesting telecommunications carriers access to network elements with the rates contained in the CLEC's respective interconnection agreements. The rates in the interconnection agreements for unbundled dedicated interoffice transport (UDIT) are consistent with the FCC's pricing methodology, and were established in the Arizona Cost Docket No. U-3021-96-448.

U S WEST's rates for DS1 and DS3 UDIT contained in the proposed SGAT were established in the consolidated cost docket and ordered in Decision No. 60635. The

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[32] ELI Interconnection Agreement, effective April 3, 1997.

DS0 UDIT rate established in the cost docket did not contain the appropriate components, and therefore the proposed SGAT provides for an ICB pricing until such time as a new cost study can be completed and approved.

A CLEC submits an Access Service Request (ASR) to begin the UDIT order process. After a Service Delivery Coordinator (SDC) reviews and validates the ASR, the ASR is sent to an interoffice designer who designs the circuit based on the best available route. For an overview of how U S WEST provides UDIT, see the attached work process flow chart contained in Exhibit KAS-04 A. The accompanying matrix in KAS-04 B describes each task identified in the work flow chart. Detailed information regarding the service order processing flow for UDIT is included in the affidavit of Mr. Buhler.

U S WEST will work cooperatively with a CLEC to resolve trouble reports when the CLEC has determined that the trouble condition has been isolated to U S WEST's dedicated transport services. U S WEST accepts all repair calls for dedicated transport services through its Account Maintenance Service Center (AMSC), which has a dedicated toll free number: 800-233-7881. U S WEST uses a Maintenance Control Office provided by the Design Service Center for end to end coordination of CLEC dedicated transport services repair efforts.

In cases of natural disasters, U S WEST's Maintenance Control Office will notify a CLEC's Single Point of Contact of any fire, power or natural disaster related problems in the central office that may impact the CLEC's dedicated transport service. The Maintenance Control Office provides jeopardy status information and updates to the CLEC with a status report on the disaster recovery efforts. The CLEC will be notified when the trouble has been cleared, or the disaster is over and, if necessary, when the

CLEC can have access to the disaster location.

As of March 1, 1999, U S WEST has not received any requests for UDIT in Arizona.

U S WEST has identified external indicators that it will use to measure the level of service provided CLECs These performance measurement indicators are described in the affidavit of Mr. Williams.

B. Shared Transport

U S WEST provides shared transport in Arizona, as described in the proposed SGAT.[33] Shared transport utilizes interoffice transmission facilities which are shared between U S WEST and one or more requesting CLEC. The shared transport facilities connect U S WEST end office switches with other U S WEST end office switches and/or with U S WEST tandem switches for the delivery of traffic within the local calling area. A CLEC may not mix Unbundled Dedicated Interoffice Transport (UDIT) and shared transport in the same local calling area.

Shared transport is a product available only in conjunction with unbundled switching. This limitation was recognized by the FCC in its Third Report and Order:

> A requesting carrier that uses its own self-provisioned local switches, rather than unbundled local switches obtained from an incumbent LEC, to provide local exchange and exchange access services would use dedicated transport facilities to carry traffic between its network and the incumbent LEC's network. *Thus, the only carrier that would need shared transport facilities would [be] one that was using an unbundled local switch.*[34]

Shared transport provides CLECs who serve their customers via unbundled switching, a

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[33] SGAT at 10.10.1.1 to 10.10.1.4.

[34] Third Report and Order, footnote 127.

means of transporting traffic from their customers to distant end offices or interexchange carriers. Each and every CLEC call can use the same information in the same routing table as used for U S WEST calls. Therefore, the CLEC call uses the identical transport facilities that are available to U S WEST calls. That is, when a CLEC's customer served by unbundled switching and shared transport originates a call, the U S WEST switch uses the same routing table to determine the availability of an outgoing trunk port for the CLEC's call that would be used by a U S WEST call. Thus, the CLEC has access to the same routing table capabilities, the same trunk ports, and the same mix of direct and tandem-routed interoffice facilities available to U S WEST end users.

Where technically feasible, the CLEC can use custom routing to direct their end user's operator services and/or directory assistance (DA) calls in a different manner than U S WEST routes its own operator services and directory assistance calls. For this application, the CLEC provides U S WEST the information necessary for U S WEST to create a custom routing table that is placed within the U S WEST central office switch.

The FCC defined custom routing in its First Interconnection Order:

> Customized routing will enable a competitor to direct particular classes of calls to particular outgoing trunks, which will permit a new entrant to self-provide, or select among other providers of, interoffice facilities, operator services, and directory assistance.[35]

The proposed U S WEST SGAT, for example, provides for customized routing that enables CLECs to self provide, or select among other providers, operator and /or

[35] First Interconnection Order at para. 418.

DA services.[36] This combination of shared transport for local calls on the U S WEST network, and the opportunity to custom route to unique providers for DA and operator services, as identified in the proposed SGAT, provides a CLEC with the additional flexibility envisioned by the FCC. Customized routing is a software function of the switch that may be ordered with unbundled switching or resale applications.

Due to the complexity of developing and installing line class codes to support custom routing, the service is provided on an ICB in the proposed SGAT.

When a CLEC customer originates a call routed to an interexchange carrier, the only portion of the U S WEST interoffice network that is available via shared transport is the facility from the U S WEST end office to the U S WEST access tandem. Facilities dedicated to an interexchange carrier's use, such as a direct facility from the U S WEST end office or tandem to the interexchange carrier's point of presence, are not part of shared transport. This is consistent with the FCC rules for shared transport:

> On reconsideration, we further clarify that incumbent LECs are not required to provide shared transport between incumbent LEC switches and serving wire centers. We stated above that shared transport must be provided between incumbent LEC switches. Serving wire centers are merely points of demarcation in the incumbent LEC's network, and are not points at which traffic is switched. Traffic routed to a serving wire center is traffic dedicated to a particular carrier. We thus conclude that unbundled access to the transport links between incumbent LEC switches and serving wire centers must only be provided by incumbent LECs on a dedicated basis.[37]

Shared transport will be billed on a minute-of-use basis. The CLEC will receive daily usage reports to facilitate meeting the needs of its end users. Rates for shared transport were not determined in the Arizona cost docket. The rate for shared transport

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[36] SGAT at 10.14.

[37] Third Report and Order at para. 29.

1 was set in the proposed SGAT pending promulgation by the FCC of new UNE rules,
2 and the Eighth Circuit Court's review of the current FCC pricing rules. Specifically, the
3 rate for shared transport was established so that when shared transport, unbundled
4 switching and the unbundled local loop are combined, the resulting rate is consistent
5 with the resale rate for business exchange services.

6 U S WEST is operationally prepared to offer shared transport and has conducted
7 testing of the provisioning systems in combination with unbundled switching. The same
8 process and provisioning flows can be used for shared transport in combination with
9 unbundled switching. For detail on the provision of shared transport please see the
10 affidavit of Mr. Buhler.

11 Maintenance and repair of shared transport facilities are the sole responsibility of
12 U S WEST.

13 In summary, there has been no order activity for unbundled transport in Arizona
14 to report. U S WEST has, however, demonstrated to this Commission that "local
15 transport from the trunk side of a wireline local exchange carrier switch unbundled from
16 switching or other services" is available to CLECs in Arizona. U S WEST has the ability
17 to adequately provide unbundled transport UNEs when they are ordered. U S WEST
18 has satisfied the requirements of the Act for checklist item 5.

Checklist Item 6 -- Unbundled Switching

The Act requires U S WEST to provide "local switching unbundled from transport, local loop transmission or other services."[38]

U S WEST offers line-side ports and switching, including the connection between a line equipment termination at a main distribution frame (MDF) or COSMIC frame and a switch line card. U S WEST's local switching element includes the connection between the trunk-side of the switch (the trunk card) and a termination at the trunk main distribution frame (the trunk-side cross-connect panel).

The proposed SGAT provides that the unbundled switching element includes the line-side and trunk-side cards, plus the features, functions, and basic switching capabilities of the switch.[39] These are the same basic capabilities that are available to U S WEST's customers. Unbundled switching also includes access to all vertical features that the switch is capable of providing, as well as any technically feasible customized routing functions. A CLEC can use a combination of a trunk-side port and custom routing to direct originating traffic to a dedicated trunk such as a directory assistance trunk.

In addition, a CLEC may purchase unbundled switching in a manner that permits it to offer, and bill for, exchange access and termination of local traffic.

The proposed SGAT commits U S WEST to provide the CLEC with the following local switch ports and attributes:

10.13.1.4	Line ports include: Analog Line Port;

[38] See Section 271(c)(2)(B)(vi) of the Act.

[39] SGAT at 10.13.1.

	Digital Line Port.
10.13.1.5	Trunk ports include: DS1 Local Message Trunk Port.
10.13.1.6	The following are attributes of line ports: Telephone Number; Directory Listing; Dial Tone; Signaling (loop or ground start); On/Off Hook Detection; Audible and Power Ringing; Automatic Message Accounting (AMA) Recording; Access to 911, Operator Services, and Directory Assistance; Blocking Options (900 services).

A separate ITP must be ordered for each line-side and trunk-side port to provide the connection from the MDF or trunk main distributing frame to the demarcation point. The line ports are how CLECs access vertical features.

The FCC determined that a BOC must meet the following requests for vertical features.

> A BOC must activate any vertical feature or combination of vertical features requested by a competing carrier unless . . . (it) is not technically feasible"
>
> A BOC can require a requesting carrier to submit a request for such a vertical feature through a predetermined process that gives a BOC an opportunity to ensure it is technically feasible:[40]

The U S WEST SGAT provides CLECs with both of these options. First, a CLEC may order vertical features as separate unbundled network elements provided by U S WEST in association with U S WEST's unbundled switching. The proposed SGAT provides:

> 10.13.1.8 Vertical features are software attributes on end office switches. Vertical features for the Analog Line Side Port are available separately as follows:

[40] BellSouth Louisiana 271 Second Order at 219-20.

- Call Hold
- Call Transfer
- Three Way Calling
- Call Pickup
- Call Waiting
- Cancel Call Waiting
- Distinctive Ringing
- Speed Call Long – Customer Changeable
- Station Dial Conferencing
- Call Forwarding Busy Line
- Call Forwarding Don't Answer
- Call Forwarding Variable
- Call Forwarding Variable Remote
- CLASS Call Waiting ID
- CLASS Calling Name & Number
- CLASS Calling Number Delivery
- CLASS Calling Number Delivery Blocking
- CLASS Continuous Redial
- CLASS Last Call Return
- CLASS Priority Calling
- CLASS Selective Call Forwarding
- CLASS Selective Call Rejection
- CLASS Anonymous Call Rejection
- Call Park (Store & Retrieve)
- Message Waiting Indication A/V

Second, CLECs have access to all vertical features loaded in a U S WEST switch, not just access to the features U S WEST is providing to its retail customers. Specifically, the proposed SGAT states:

> 10.13.2.1 CLEC may purchase all vertical features that are loaded in U S WEST's end office switch. CLEC may request features that are not activated in a U S WEST end office switch utilizing the BFR Process contained in Section 17 of this SGAT. If CLEC requests features that are loaded, but not activated in a U S WEST end office switch, appropriate recurring and nonrecurring charges will apply.

U S WEST's unbundled switch offering includes the option for the CLEC to order custom routing. Custom routing allows a CLEC that obtains unbundled local switching to route its customers' calls to special trunk groups designated by the CLEC. For

example, custom routing allows a CLEC's 411 calls to be routed on the CLEC's directory assistance trunks (rather than on U S WEST's directory assistance trunks). This allows CLECs to route their customers' 411 calls to the CLECs' own directory assistance providers.

Custom routing is an option if the CLEC purchases directory assistance from U S WEST and requests custom "branding" of the directory assistance service with the CLEC's name. Custom routing places the CLEC's directory assistance traffic on different trunks than the U S WEST directory assistance traffic so the U S WEST directory assistance platform can identify the traffic from the two companies, and thereby provide uniquely branded announcements.

There is a capacity limitation to the technical feasibility of offering custom routing in 1A ESS switches. Therefore, in 1A ESS switches custom routing will be offered to competitors on a first-come, first-served basis.

This restriction is in accordance with the FCC's rules, which state that:

> Incumbent LECs provide customized routing as part of the "functionality" of the local switching element . . . only [in] those switches that are capable of performing customized routing. An incumbent LEC must prove to the state commission that customized routing in a particular switch is not technically feasible.[41]

U S WEST offers unbundled tandem switching. For example, the FCC requirement for unbundled tandem switching[42] has been incorporated in the proposed SGAT:

> 10.12.1.1 The local tandem switching element establishes a temporary transmission path between two other switches, but does not include the transport needed to complete the call. The local tandem switching element also includes the functions that are centralized in local tandem switches rather than in separate end office switches.

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41 First Interconnection Order at para. 418.

42 First Interconnection Order at para. 425.

U S WEST will provide requesting telecommunications carriers access to network elements with the rates contained in the CLEC's respective interconnection agreements. The rates in the interconnection agreements for unbundled switching are consistent with the FCC's pricing methodology, and were established in the Arizona Cost Docket No. U-3021-96-448.

The rate for unbundled switching in the proposed SGAT was set pending promulgation by the FCC of new UNE rules, and the Eighth Circuit Court's review of the current FCC pricing rules. Specifically, the rate for unbundled switching was established so that when shared transport, unbundled switching and the unbundled local loop are combined, the resulting rate is consistent with the resale rate for business exchange services.

Exhibits KAS-05 A and C contain high-level process flows of how U S WEST provides local switching and tandem switching unbundled from transport and loop services. The accompanying matrices in KAS-05 B and D describe each task identified in the work flow charts. Detailed information regarding the order processing flow for local and tandem switching is also included in the affidavit of Mr. Buhler. U S WEST has not yet received any orders for unbundled switching in Arizona.

U S WEST has identified external indicators that will be used to measure the level of service provided to the CLEC. These performance measurement indicators are included in the affidavit of Mr. Williams.

In summary, there has been no order activity for unbundled switching in Arizona to report. U S WEST has, however, demonstrated unbundled switching is available to CLECs in Arizona. U S WEST has the processes in place to adequately provision and maintain unbundled switching UNEs when they are ordered. U S WEST has satisfied

1 the requirements of the Act for checklist item 6.

2 **Conclusion**

3 The Supreme Court decision has created uncertainty on what unbundled
4 network elements are required to be offered by U S WEST, the pricing rules that apply
5 to such elements, and which elements, if any, must be provided to CLECs on a
6 combined basis. Such uncertainty will be resolved by the FCC with the establishment
7 of new unbundled network elements and pricing rules pursuant to the Supreme Court
8 decision.

9 U S WEST will continue to provide CLECs access to the UNEs listed in the
10 vacated Rule 319, and will provide a means for CLECs to combine those accessed
11 UNEs, until the FCC develops a lawful list of UNEs to which Rule 315(b) would apply.
12 In the interim, U S WEST will provide requesting telecommunications carriers access to
13 network elements with rates consistent with the FCC's pricing methodology, as
14 contained in the CLEC's respective interconnection agreements.

15 U S WEST provides access to the unbundled network elements that are required
16 by the Act. Additional unbundled network elements are available to CLECs through a
17 bona fide request process. U S WEST provides unbundled network elements in a
18 manner which enables a CLEC to combine these elements to provide
19 telecommunications service.

20 U S WEST has satisfied the requirements of the Act for access to unbundled
21 network elements, including unbundled loops, unbundled switching and unbundled
22 transport, that are prerequisites for U S WEST's entry into the interLATA market in
23 Arizona. These requirements are met through interconnection agreements between

U S WEST and Competitive Local Exchange Carriers (CLECs) in Arizona and the proposed U S WEST SGAT.

U S WEST is currently providing access to unbundled network elements and ancillary services in Arizona, pursuant to Commission approved interconnection agreements. Four CLECs in Arizona are successfully accessing unbundled loops to create telecommunications services for end users.

This affidavit, demonstrates that U S WEST has satisfied the requirements for the following checklist items listed in Section 271 of the Telecommunications Act of 1996:

- Checklist item 2 - access to unbundled network elements and ancillary services,
- Checklist item 4 - unbundled loops,
- Checklist item 5 - local transport unbundled from switching, and
- Checklist item 6 - local switching unbundled from transport and the local loop.

This concludes my affidavit.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

KAREN A. STEWART

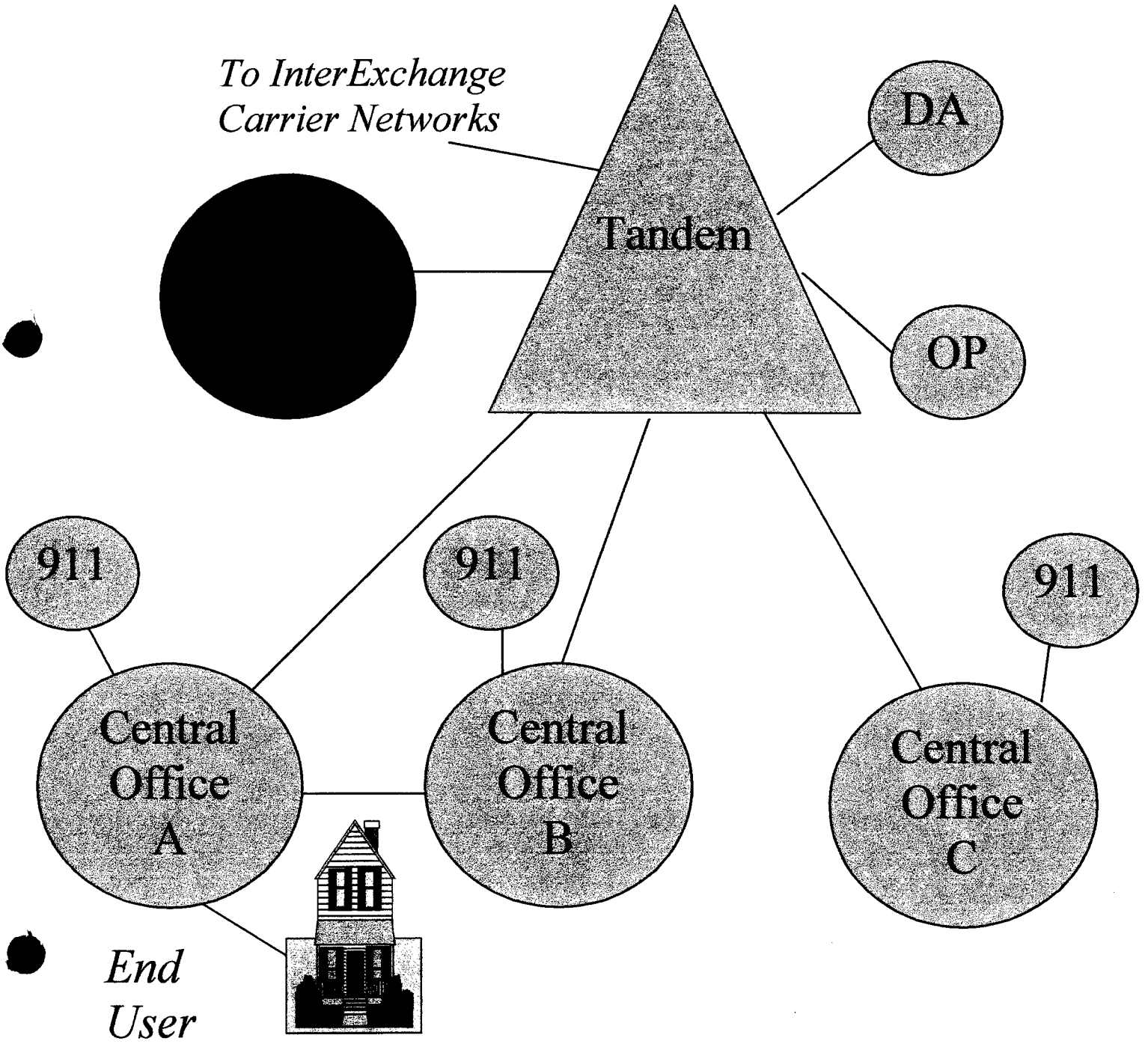
U S WEST COMMUNICATIONS

MARCH 25, 1999

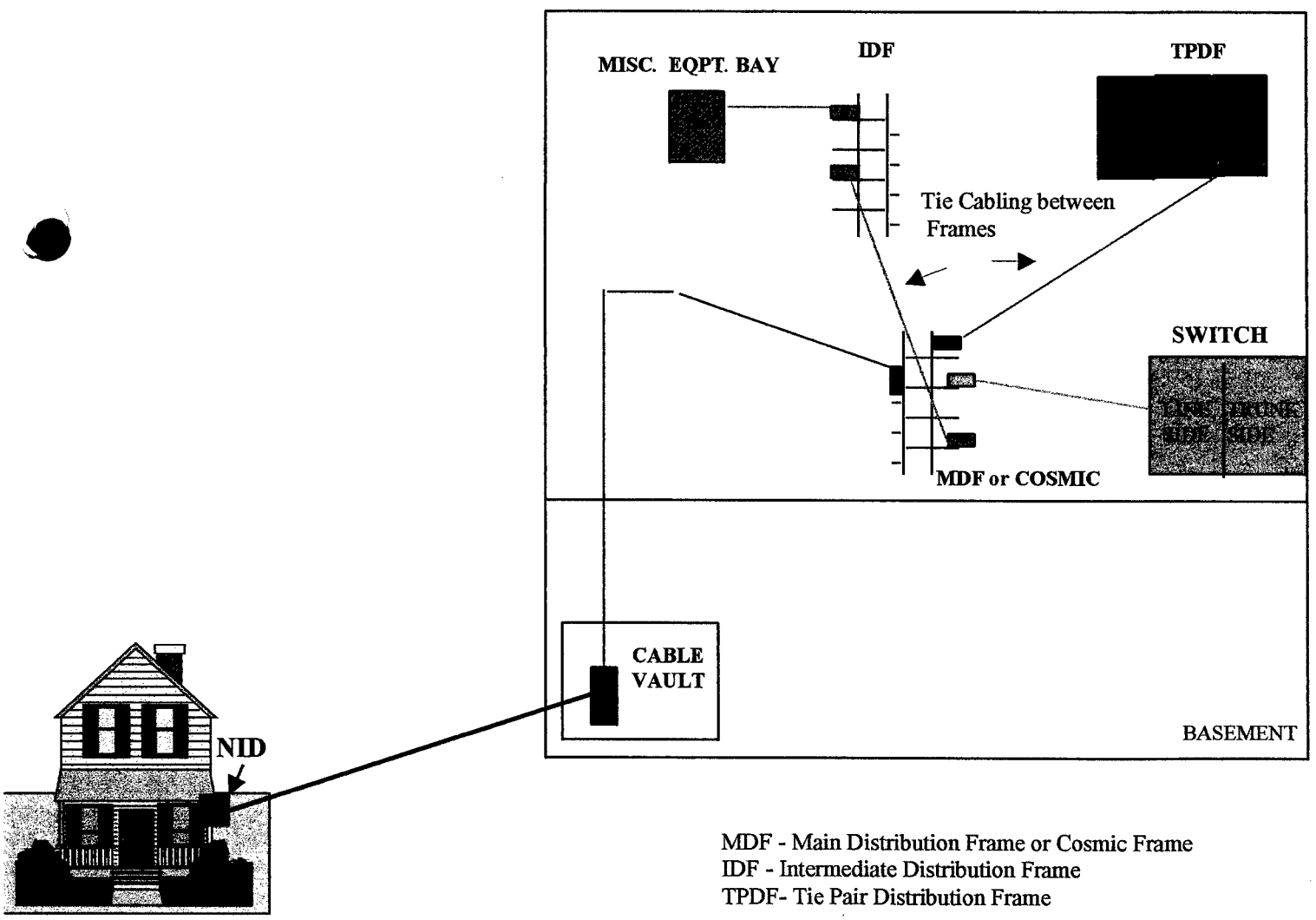
INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
Network Diagrams	KAS-1
U S WEST Local Network	KAS-1 A
Inside a Sample U S WEST Central Office	KAS-1 B
How Cosmic Frames Are Used to Combine the Switch With the Local Loop	KAS-1 C
How a Distribution Frame is Used to Combine Switch Port And Local Loop	KAS-1 D
How CLEC Accesses UNEs and Ancillary Services	KAS-1 E
Local Loop	KAS-1 F
Unbundled Dedicated Interoffice Transport (UDIT)	KAS-1 G
Shared Transport	KAS-1 H
Switching	KAS-1 I
Letter from U S WEST to Lawrence Strickling, FCC	KAS-2
Unbundled Loop Processes	KAS-3 A
Unbundled Loop Processes Task Lists	KAS-3 B
Unbundled Dedicated Interoffice Transport Processes	KAS-4 A
Unbundled Interoffice Transport Processes Task Lists	KAS-4 B
Unbundled Switch Line Port Processes	KAS-5 A
Unbundled Switch Line Port Task Lists	KAS-5 B
Unbundled Switch Trunk Port Processes	KAS-5 C
DS1 Trunk Port Task List	KAS-5 D

U S WEST Local Network

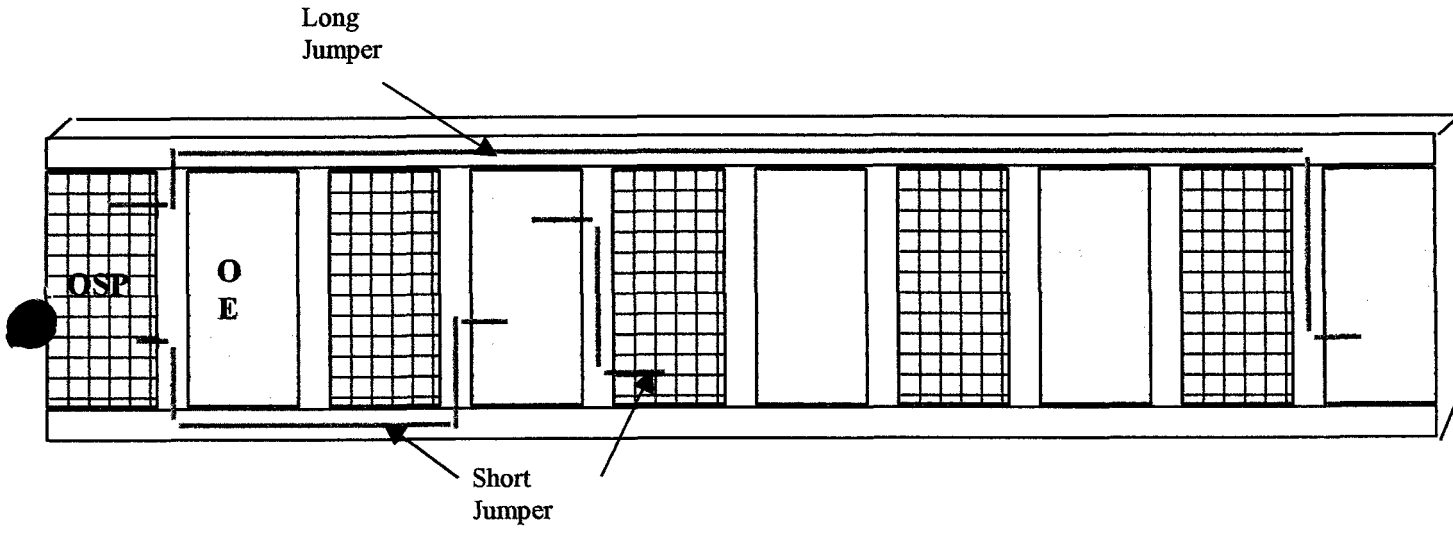


Inside a Sample U S WEST Central Office



MDF - Main Distribution Frame or Cosmic Frame
IDF - Intermediate Distribution Frame
TPDF- Tie Pair Distribution Frame

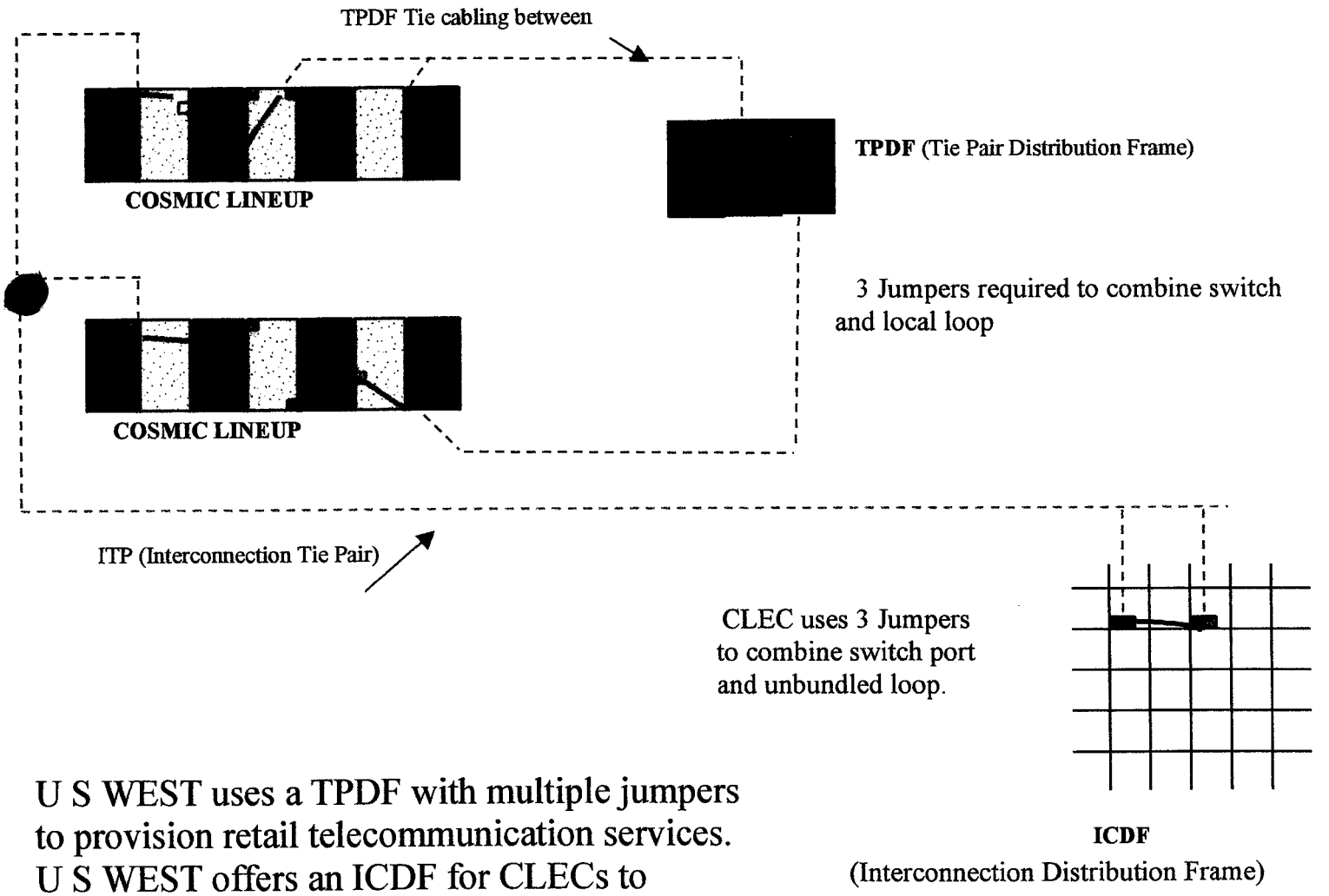
How COSMIC Frames Are Used to Combine the Switch With the Local Loop



U S WEST Central Office Technician (COT) wires a jumper to connect the loop (OSP) to the central office switch (OE) on the COSMIC frame to provide dial tone to a customer.

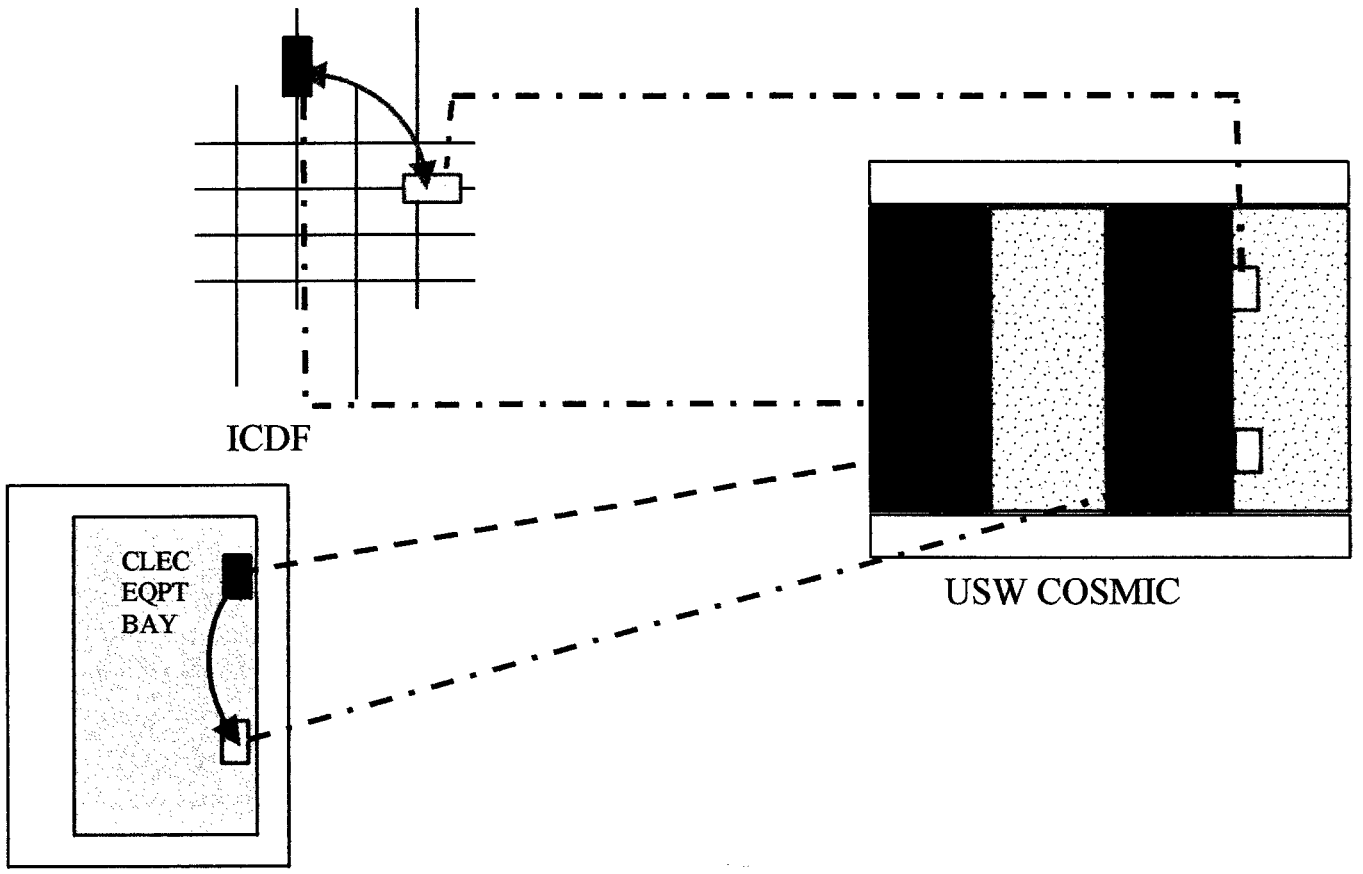
OSP- Outside Plant (i.e. termination of local loops)
OE- Office Equipment (i.e. termination of central office switch)

How a Distribution Frame Is Used to Combine Switch Port and Local Loop



U S WEST uses a TPDF with multiple jumpers to provision retail telecommunication services. U S WEST offers an ICDF for CLECs to perform a similar function.

How CLEC Accesses UNEs and Ancillary Services



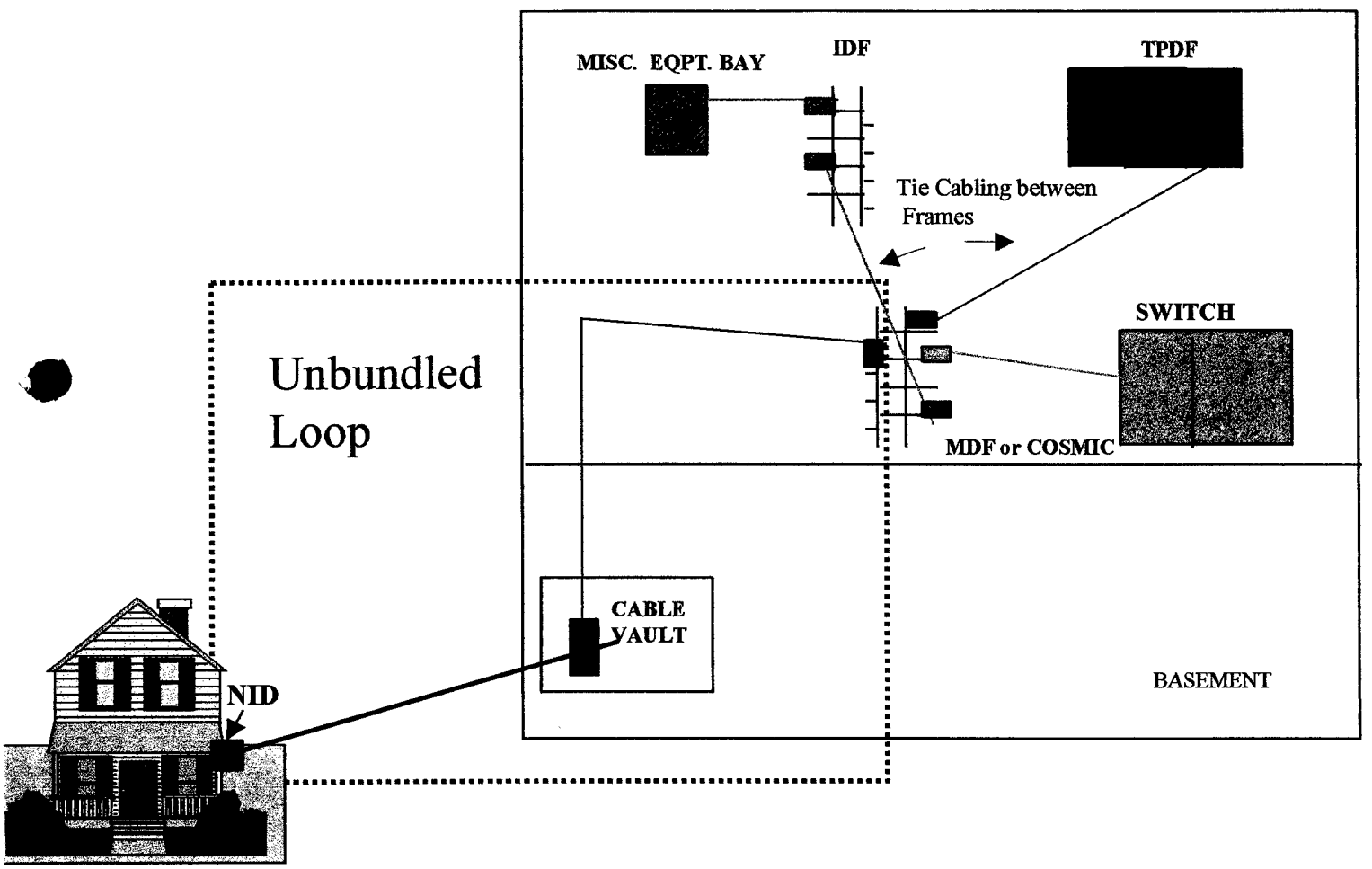
CLEC
COLLOCATION

ITP from COSMIC to ICDF and CLEC Collocation.

CLEC runs the jumper between the ITP Block termination, thereby accessing loop and switch terminations

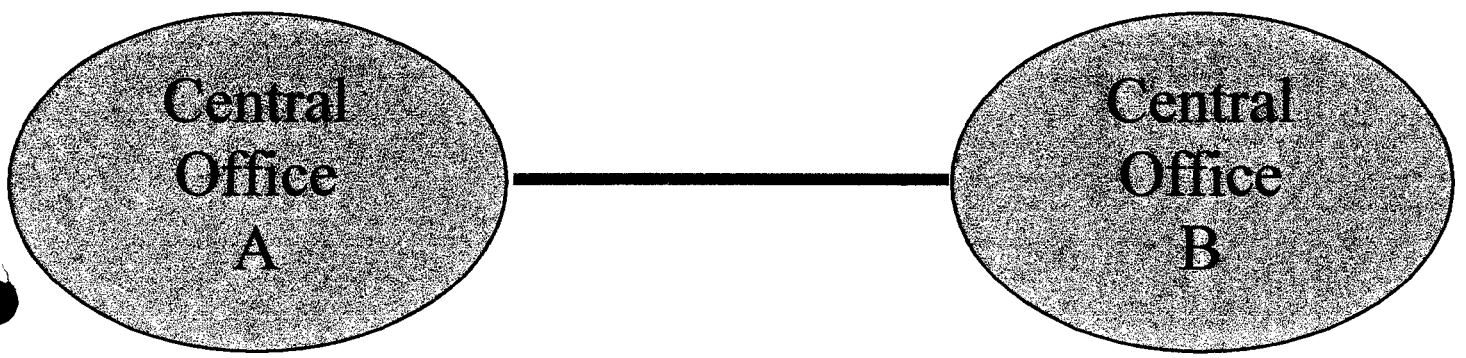
CLEC runs the jumper within their collocation equipment bay, thereby accessing loop and switch terminations.

Local Loop



MDF - Main Distribution Frame or Cosmic Frame
IDF - Intermediate Distribution Frame
TPDF- Tie Pair Distribution Frame

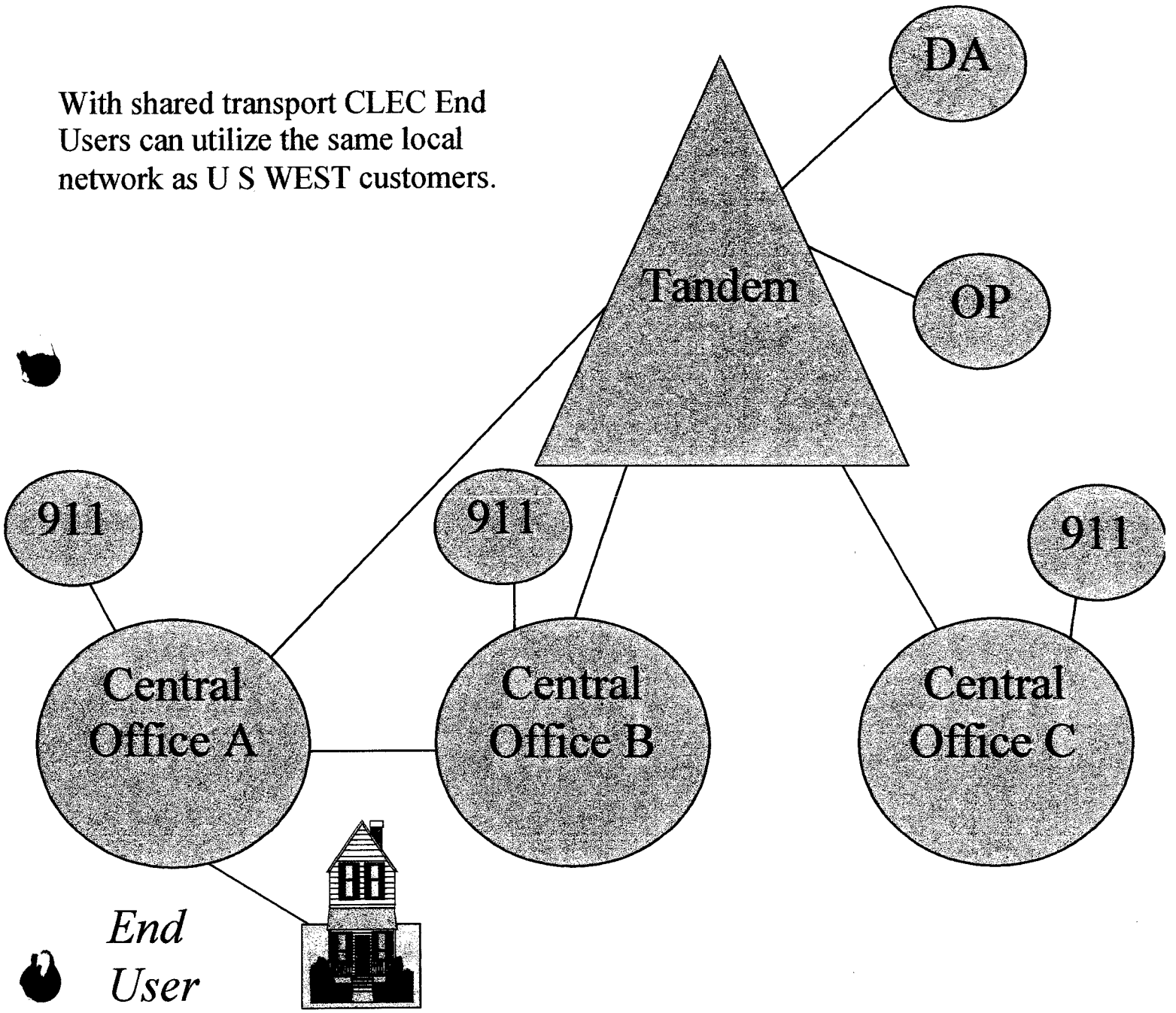
Unbundled Dedicated Interoffice Transport (UDIT)



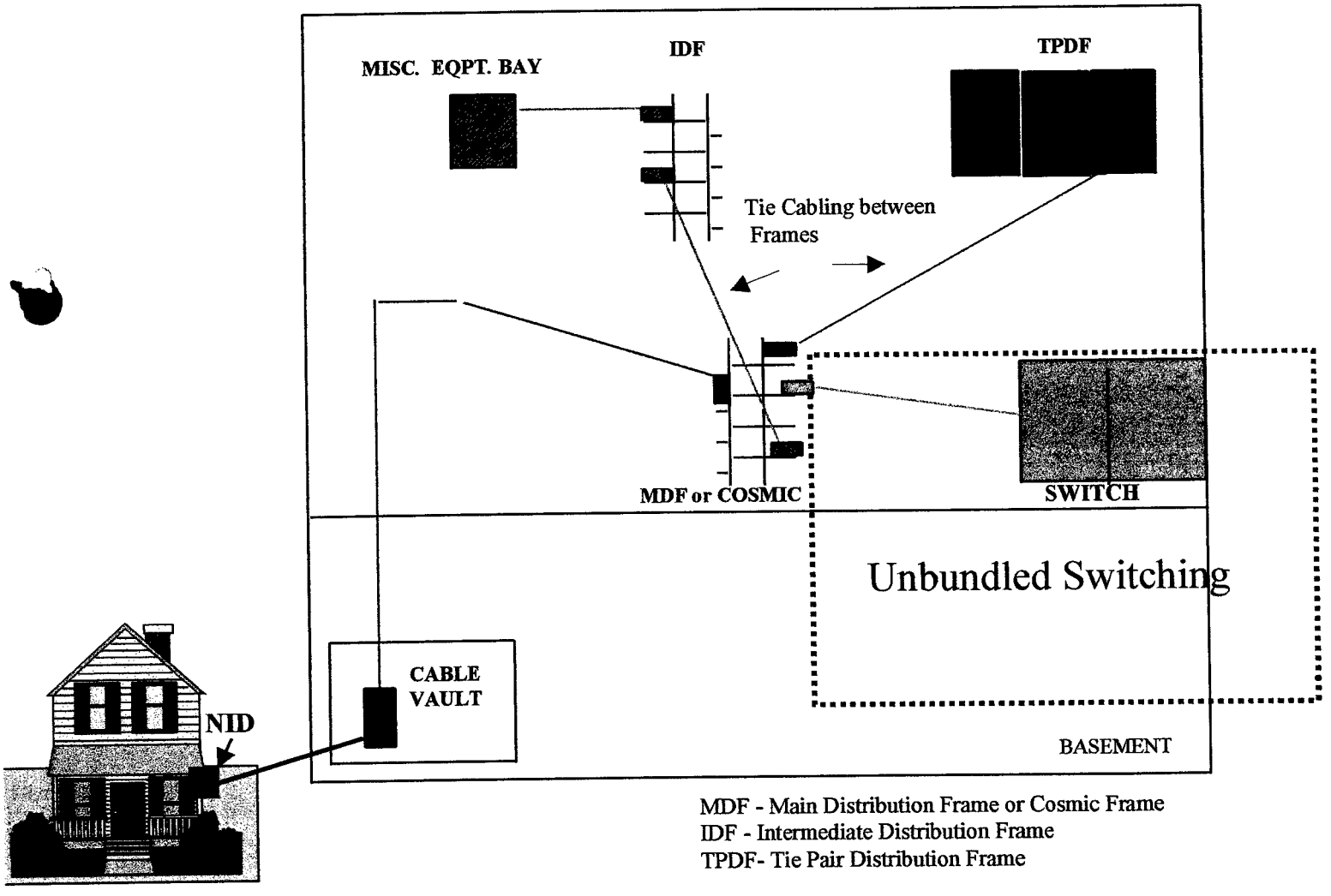
UDIT is offered at DS0, DS1, DS3, and optical levels

Shared Transport

With shared transport CLEC End Users can utilize the same local network as U S WEST customers.



Switching



MDF - Main Distribution Frame or Cosmic Frame
IDF - Intermediate Distribution Frame
TPDF- Tie Pair Distribution Frame

U S WEST, Inc.
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(303) 896-6100

USWEST

Bruce K. Posey
Senior Vice President - Federal Relations & Regulatory Law

Katherine L. Fleming
Acting VP - Interconnect Implementation

February 11, 1999

Mr. Lawrence E. Strickling
Chief of Common Carrier Bureau
Federal Communications Commission
1919 M Street NW, Room 500
Washington, DC 20554

Dear Mr. Strickling:

Following the Supreme Court decision in AT&T v. Iowa Utilities Board, 1999 WL 24568 (January 25, 1999) questions have arisen regarding the status of various interconnection rules, the appropriate definition of unbundled network elements and most importantly the status of existing interconnection obligations between the incumbent local exchange carriers and competitors seeking access to their networks.

U S WEST strongly believes an orderly process is necessary and in the public interest to avoid turmoil and uncertainty for both incumbents and new entrants while the 8th Circuit and the Commission address the full impact of the Supreme Court's decision. In an effort to offer a workable interim solution, U S WEST strongly urges the FCC to conduct an expedited rulemaking addressing the critical need to define and apply the "necessary and impair" standard and not to take any interim actions that would disturb the current relationships between U S WEST and its competitors while that rulemaking is in progress. U S WEST desires to provide stability for the FCC, its competitors and itself during this interim period. Therefore, while the FCC completes its anticipated rulemaking addressing these interconnection issues and related unbundling obligations and in the absence of interim rules, U S WEST commits to the following. First, U S WEST will honor existing contracts with respect to the availability and pricing of unbundled network elements until the FCC adopts its order setting forth new interconnection rules, network element definitions and ILEC obligations. Second, any new competitive carriers seeking interconnection during this period may opt into our existing contracts subject to appeals or dispute resolution. Also, U S WEST will extend the term of any contracts that are about to expire until the end of the year in order to allow time for the FCC's new rules to be in place.

Finally, U S WEST will continue to negotiate in good faith new interconnection agreements consistent with the terms of the Act.

Please contact us if you have any questions regarding these interim commitments in conjunction with our proposal.

Sincerely,

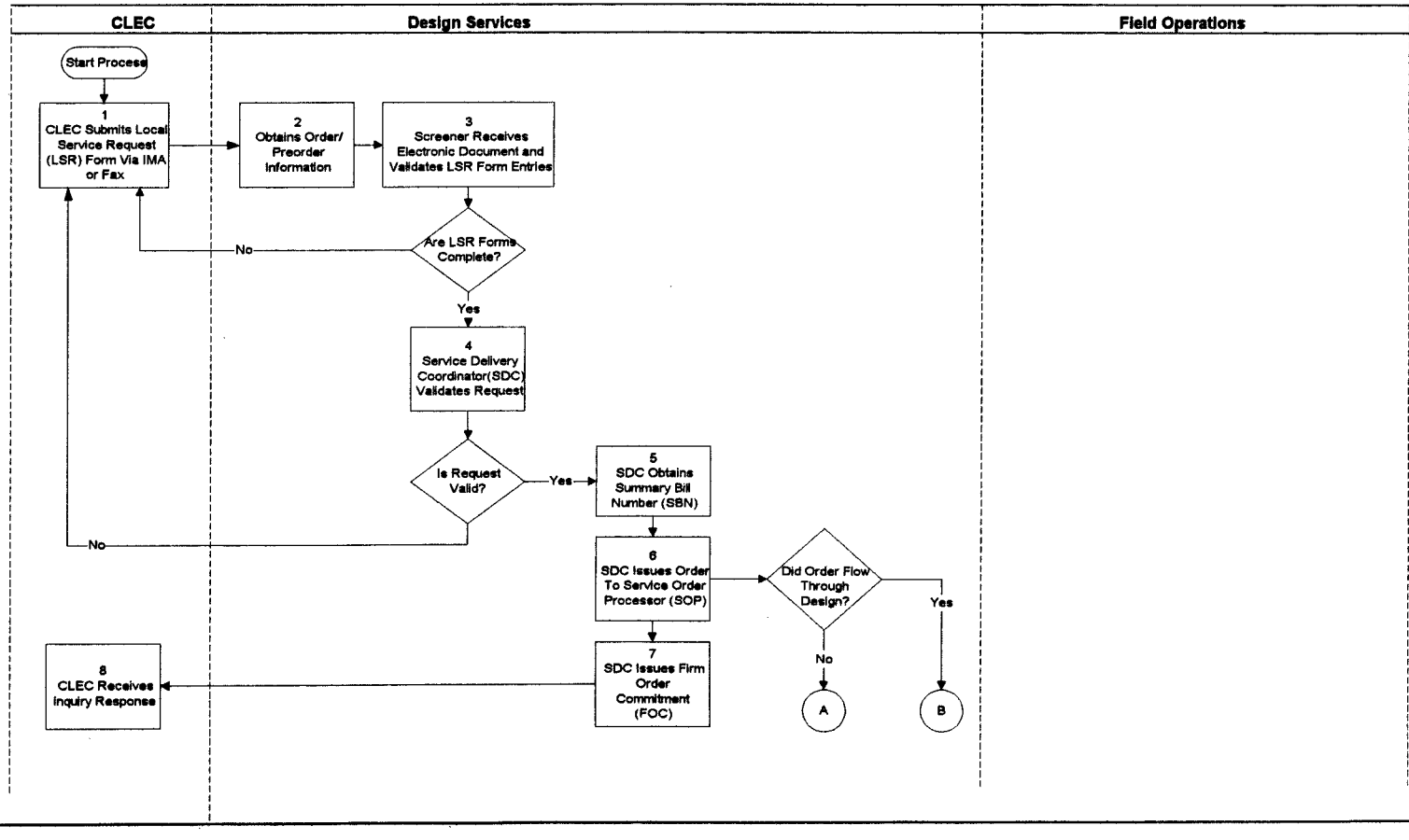
Bruce K. Posey

Bruce K. Posey
Senior Vice President
Federal Relations & Regulatory Law

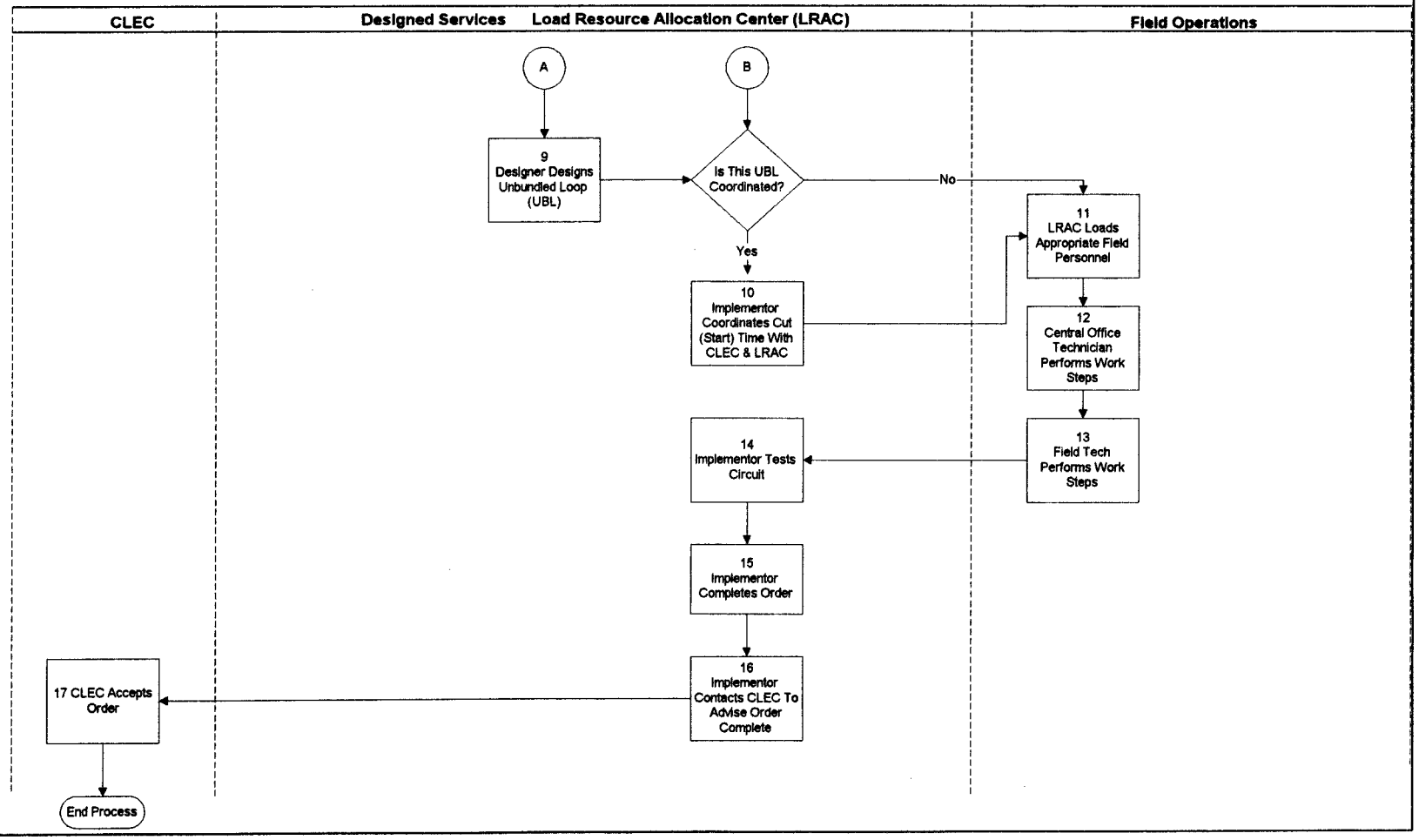
Katherine L. Fleming

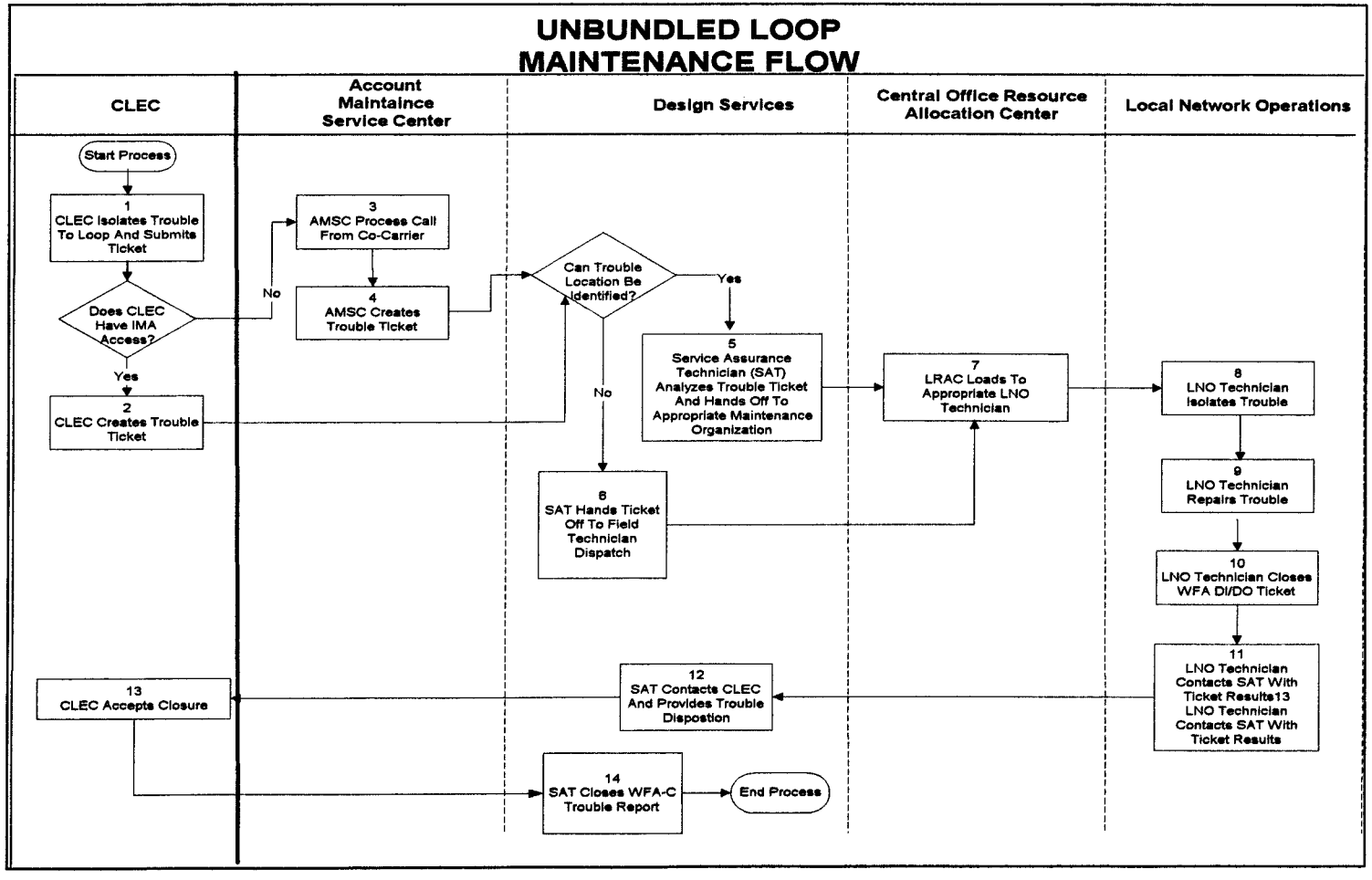
Katherine L. Fleming
Acting Vice President
Interconnect Implementation

UNBUNDLED LOOP PROVISIONING FLOW



UNBUNDLED LOOP PROVISIONING FLOW




UNBUNDLED LOOP MAINTENANCE FLOW
CLEC
Account Maintaince Service Center
Design Services
Central Office Resource Allocation Center
Local Network Operations
Start Process
1 CLEC Isolates Trouble To Loop And Submits Ticket
Does CLEC Have IMA Access?
No
Yes
2 CLEC Creates Trouble Ticket
3 AMSC Process Call From Co-Carrier
4 AMSC Creates Trouble Ticket
Can Trouble Location Be Identified?
Yes
No
5 Service Assurance Technician (SAT) Analyzes Trouble Ticket And Hands Off To Appropriate Maintenance Organization
6 SAT Hands Ticket Off To Field Technician Dispatch
7 LRAC Loads To Appropriate LNO Technician
8 LNO Technician Isolates Trouble
9 LNO Technician Repairs Trouble
10 LNO Technician Closes WFA DI/DO Ticket
11 LNO Technician Contacts SAT With Ticket Results13 LNO Technician Contacts SAT With Ticket Results
12 SAT Contacts CLEC And Provides Trouble Dispostion
13 CLEC Accepts Closure
14 SAT Closes WFA-C Trouble Report
End Process

Unbundled Local Loop Provisioning Task List

Assoc. Task #	Process
2-Wire & 4-Wire Voice Grade Analog, Coord Option	
Note: * items are used for coordinated cuts.	
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ICS)
2 and 3	Obtain preorder/order information and review LSR and associated forms for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	Verifies that facilities are available to service address
2.4	CLEC Termination Point verified
2.5	Network Channel (NC) and Network Channel Interface (NCI) codes verified
2.6	CLEC interval validated
4	Determines if the request is accurate; resolves questions and problems
5	Summary Billing number for account obtained
6	Service Order is issued into Service Order Processor (SOP).
7 and 8	Firm Order Commitment (FOC) is issued to CLEC
9	Unbundled Loop is designed
10*	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC), Central Office Technician (COT), Field Technician. ***=If CLEC orders the coordinated installation option this step is used otherwise this step is omitted.**
11	Provisioning work request received in Network Operations
12	Word Doc issued and Central Office work performed
13	Word Doc issued and field work at end user's premise performed if required

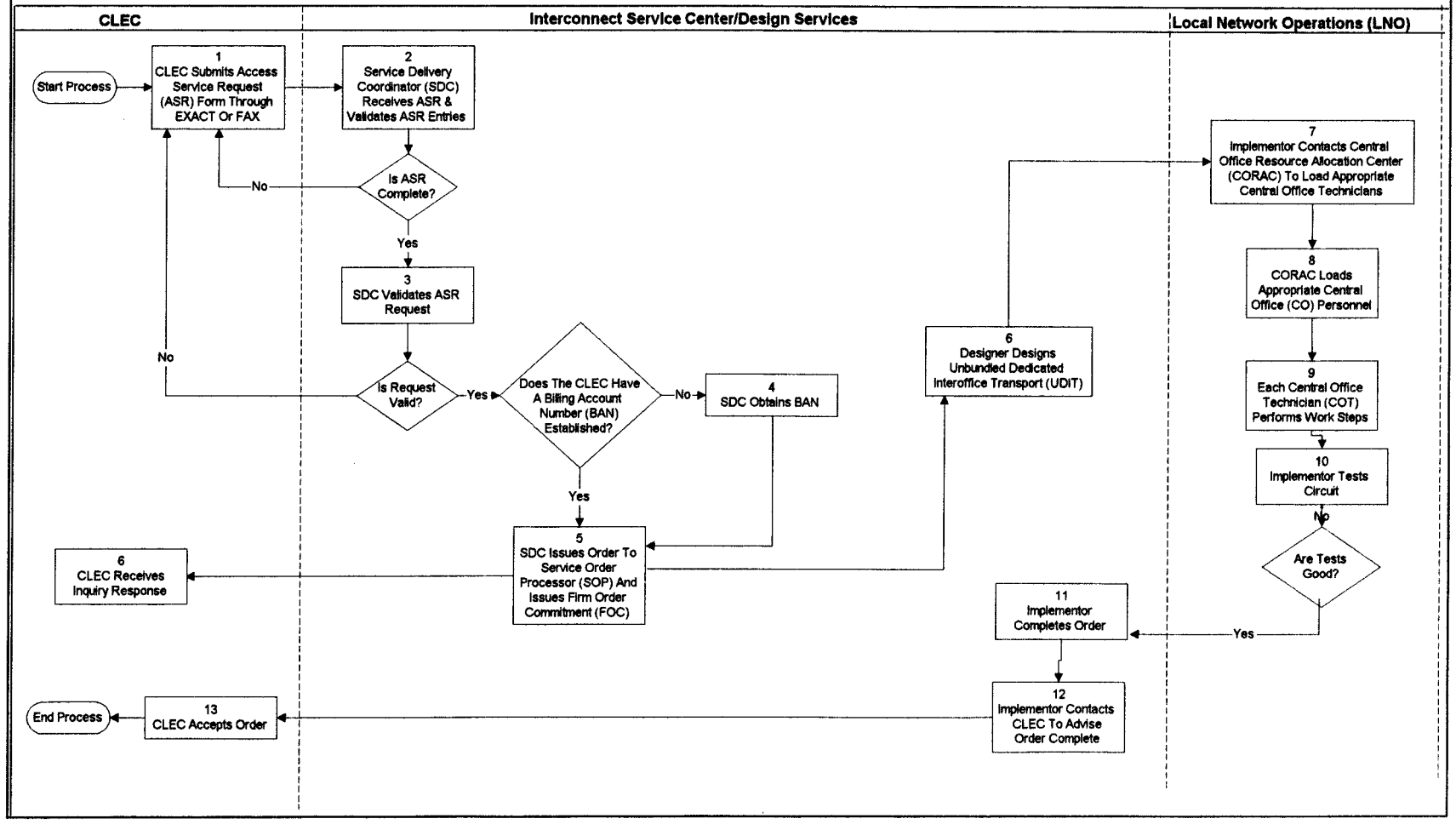
Unbundled Local Loop Provisioning Task List

Assoc. Task #	Process
14	Circuit is tested (If provisioning option is basic and circuit is reused, task not performed.)
15	Order completed
16	CLEC notified via phone call to accept service and begin billing
17	Billing established

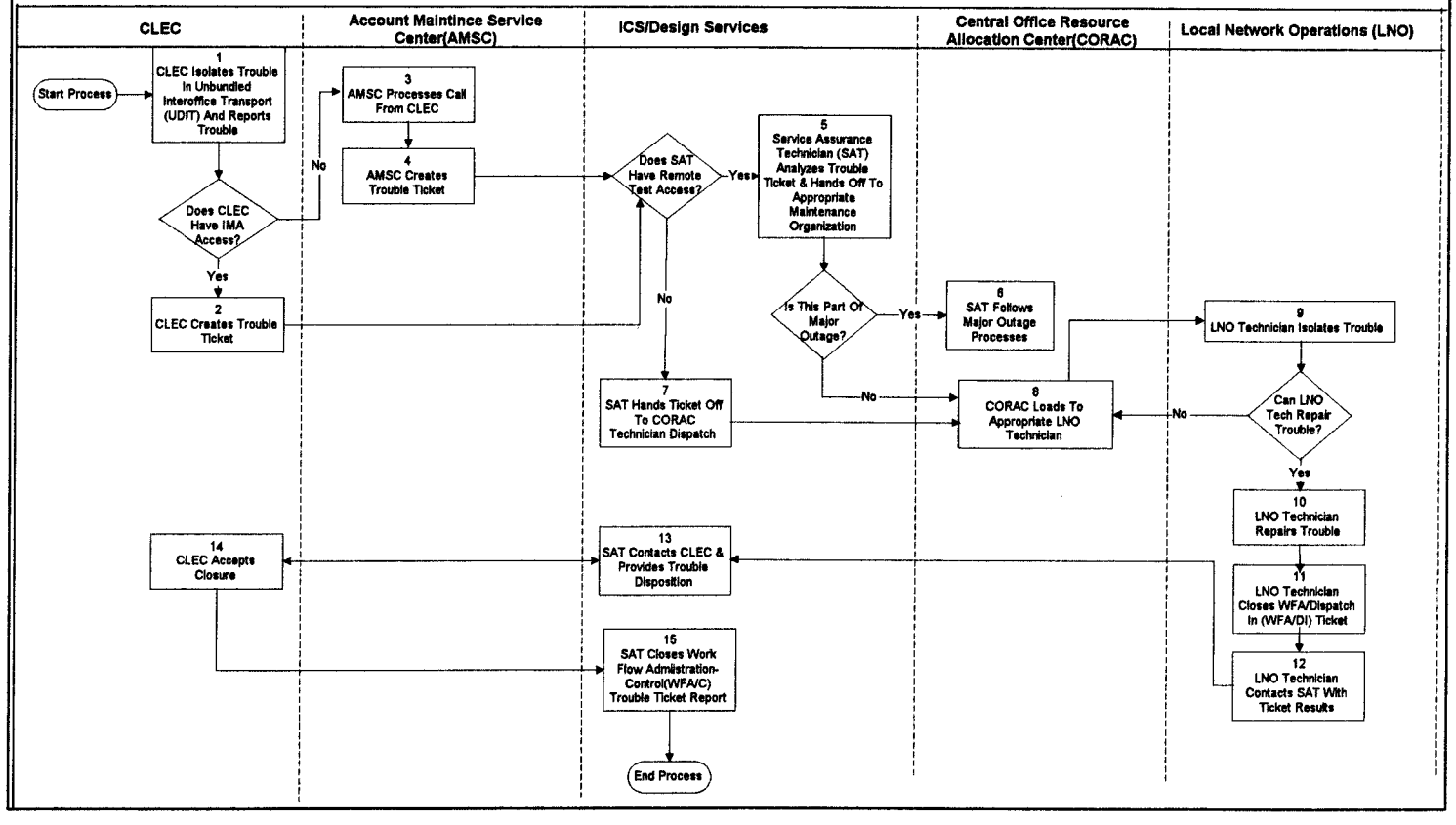
Unbundled Local Loop Maintenance Task List

Assoc. Task #	Process
2-Wire & 4-Wire Voice Grade Analog, Coord Option	
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 2 and 3 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	When trouble location cannot be identified, ticket assigned to Installation & Maintenance Technician
7	Trouble ticket received in Network Operations
8	Trouble is isolated
9	Trouble repaired
10	Trouble ticket updated
11	Contact SAT with ticket results
12	CLEC notified
13 and 14	CLEC accepts service and Trouble ticket closed

UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) PROVISIONING FLOW



UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) MAINTENANCE FLOW



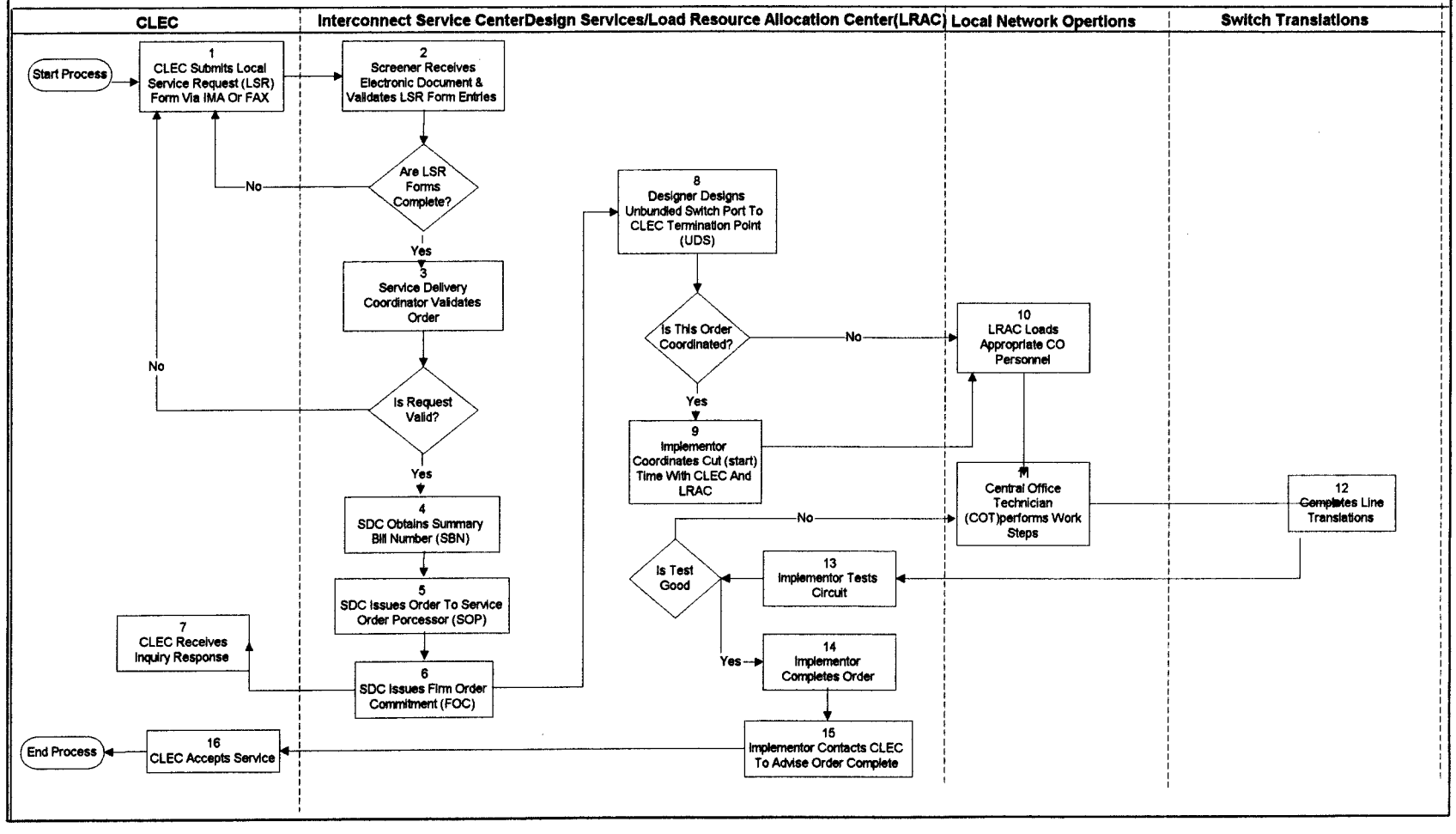
Unbundled Interoffice Transport Provisioning Task List

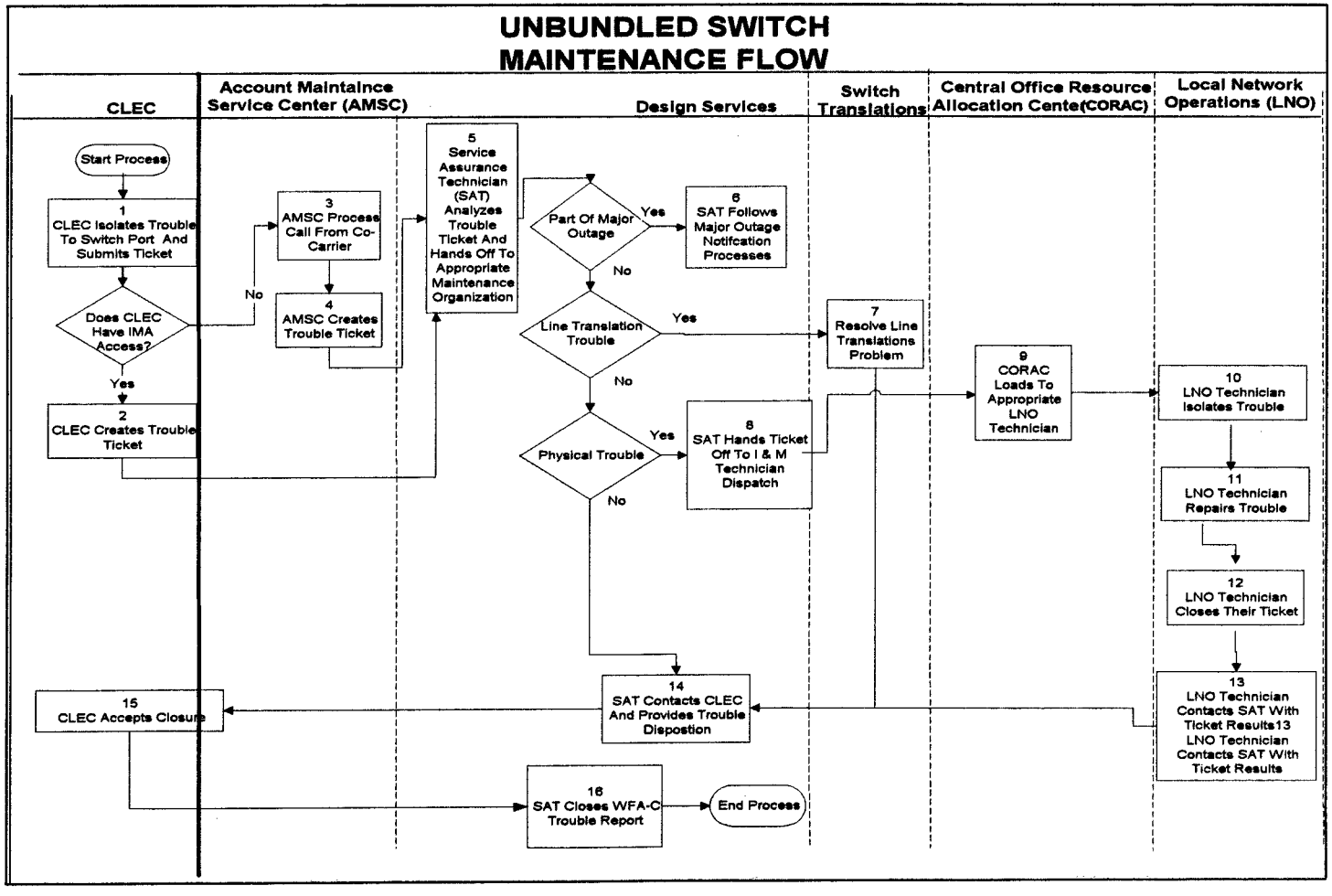
Assoc. Task #	Process
1	Access Service Request (ASR) form submitted to Denver Interconnect Service Center (ICS)
2	ASR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	Facilities verified
2.4	CLEC Carrier Facility Assignment (CFA) verified
2.5	Network Channel (NC) and Network Channel Interface (NCI) codes verified
2.6	CLEC interval validated
3	Determines if the request is accurate; resolves questions
4	Summary Billing number for account obtained
5	Firm Order Commitment (FOC) issued to CLEC and Service Order is issued into Service Order Processor (SOP).
6	Unbundled Loop is, if required, designed
7	Implementor Contacts Central Office Resource Allocation Center(CORAC)
8	CORAC loads appropriate Central Office Personnel
9	Central Office Technician (COT) performs work steps
10	Implementor tests circuit
11	Order completed
12	CLEC notified
13	Billing established

Unbundled Interoffice Transport Maintenance Task List

Assoc. Task #	Process
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 3 and 4 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	If trouble is related to a major outage SAT follows major outage notification processes
7	If trouble location can not be identified by SAT the SAT hands off tkt to CORAC to dispatch technician
8	CORAC loads to appropriate LNO Technician
9	Trouble is isolated
10	Trouble repaired
11	Trouble ticket updated
12	Contact SAT with ticket results
13	CLEC notified
14 and 15	CLEC accepts service and Trouble ticket closed

UNBUNDLED SWITCH LINE PORT PROVISIONING FLOW




UNBUNDLED SWITCH MAINTENANCE FLOW
CLEC
Account Maintaince Service Center (AMSC)
Design Services
Switch Translations
Central Office Resource Allocation Cente(CORAC)
Local Network Operations (LNO)
Start Process
1 CLEC Isolates Trouble To Switch Port And Submits Ticket
Does CLEC Have IMA Access?
No
Yes
2 CLEC Creates Trouble Ticket
3 AMSC Process Call From Co-Carrier
4 AMSC Creates Trouble Ticket
5 Service Assurance Technician (SAT) Analyzes Trouble Ticket And Hands Off To Appropriate Maintenance Organization
Part Of Major Outage
Yes
No
6 SAT Follows Major Outage Notifcation Processes
Line Translation Trouble
Yes
No
7 Resolve Line Translations Problem
Physical Trouble
Yes
No
8 SAT Hands Ticket Off To I & M Technician Dispatch
9 CORAC Loads To Appropriate LNO Technician
10 LNO Technician Isolates Trouble
11 LNO Technician Repairs Trouble
12 LNO Technician Closes Their Ticket
13 LNO Technician Contacts SAT With Ticket Results13 LNO Technician Contacts SAT With Ticket Results
14 SAT Contacts CLEC And Provides Trouble Dispostion
15 CLEC Accepts Closure
16 SAT Closes WFA-C Trouble Report
End Process

Switch Line Port Provisioning Task List

Assoc. Task #	Process
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ICS)
2	LSR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions
4	Summary Billing number for account obtained
5	Service Order is issued into Service Order Processor (SOP).
6	Firm Order Commitment (FOC) is issued to CLEC
7	Make Assignment and issues response to CLEC
7.1	Load USOCs and assign as business class of service
7.2	Identify Available Office Equipment
8	Order designed
9	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC),
10	Load Central Office work steps
11	COT performs work
12	Provision Line Translations

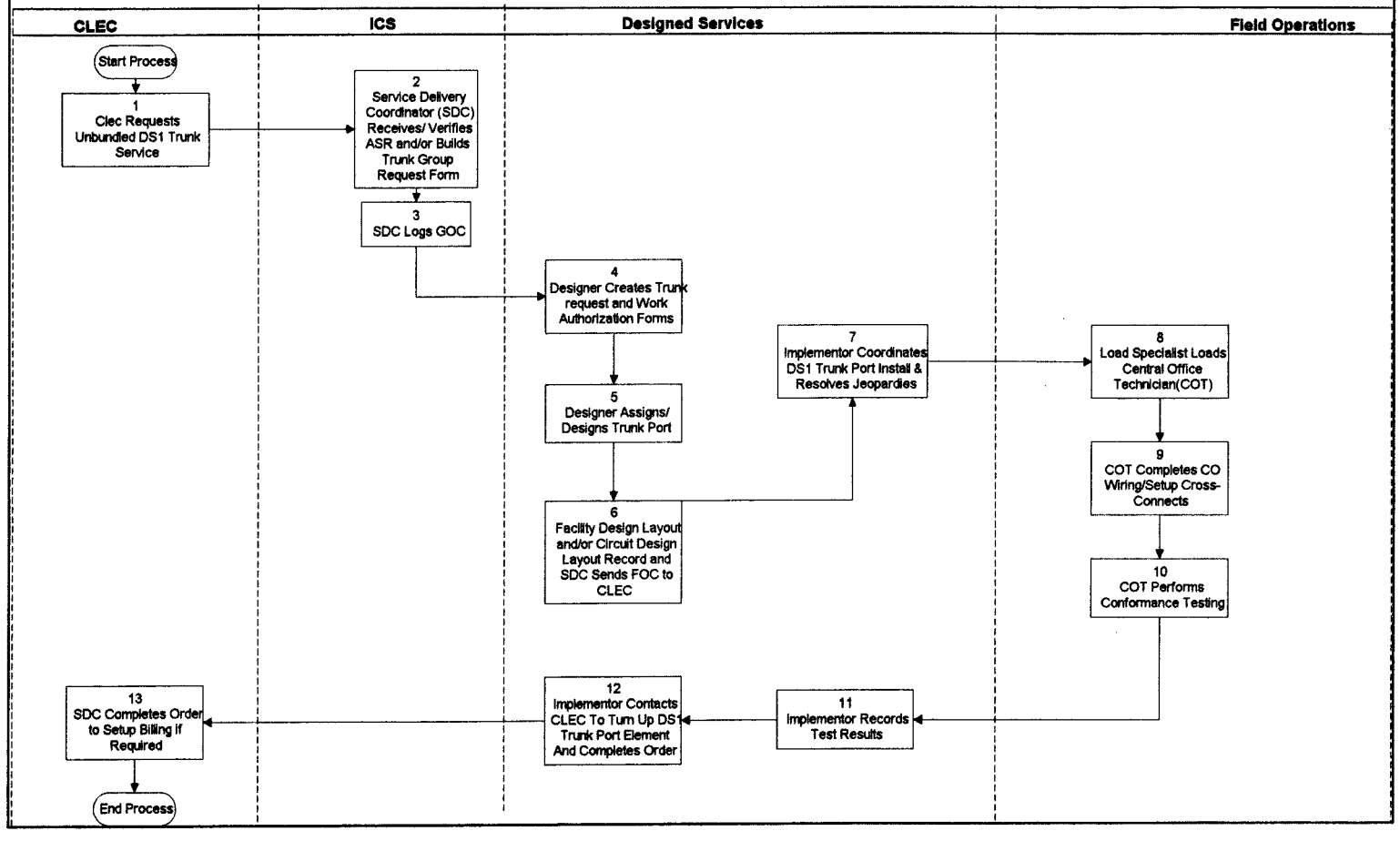
Switch Line Port Provisioning Task List

Assoc. Task #	Process
13	Circuit is tested
14	Order completed
15	CLEC notified
16	Billing established

Switch Line Port Maintenance Task List

Assoc. Task #	Process
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 3 and 4 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	If part of major outage SAT follows major outage notification processes **Note: then skip to step 13**
7	Translations Trouble is resolved **Note: then skip to step 13**
8	SAT hands off physical trouble to network operations
9	CORAC loads to appropriate LNO Technician
10	Trouble is isolated
11	Trouble repaired
12	Trouble ticket updated
13	Contact SAT with ticket results
14	CLEC notified
15 and 16	CLEC accepts service and Trouble ticket closed

UNBUNDLED SWITCH TRUNK PORT PROVISIONING PROCESS FLOW



DS1 Trunk Port Provisioning Task List

Assoc. Task #	Process
1	Access Service Request (ASR) form submitted to Denver Interconnect Service Center (ICS)
2	ASR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions and logs order
3.1	Summary Billing number for account obtained
3.2	Service Order is issued into Service Order Processor (SOP).
4	Build Trunk DRI and WA
5	Design Trunk Port

DS1 Trunk Port Provisioning Task List

Assoc. Task #	Process
6	Firm Order Commitment (FOC) is issued to CLEC
7	Trunk port installation is coordinated
8	Load Central Office work steps
9	Order issued and central work performed
10	Circuit is tested
11	Order completed
12	CLEC notified
13	Billing established

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF KAREN A. STEWART**
STATE OF OREGON	)	
	)	**:SS**
COUNTY OF MULTNOMAH	)	

Karen A. Stewart, of lawful age being first duly sworn, deposes and states:

1. My name is Karen A. Stewart. I am Director, Markets-Regulatory Strategy of U S WEST Communications in Portland, OR.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

OFFICIAL SEAL
JANICE KAY KERR
NOTARY PUBLIC-OREGON
COMMISSION NO. 046143
MY COMMISSION EXPIRES SEPT. 17, 1999

Karen A Stewart
Karen A. Stewart

SUBSCRIBED AND SWORN to before me this 15th day of March, 1999.

Janice Kay Kerr
Notary Public

My Commission Expires:

9/17/99

AFFIDAVIT OF BUMGARNER

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

MARGARET S. BUMGARNER

U S WEST COMMUNICATIONS

MARCH 25, 1999

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Identification of Affiant

I, Margaret S. Bumgarner, am employed by U S WEST Communications (U S WEST) as a Manager – Federal Regulatory Issues in the Public Policy organization. My business address is Room 2803, 1600 7th Avenue, Seattle, Washington, 98191. Exhibit MSB-1 is a statement of my qualifications.

Purpose of Affidavit

The purpose of my affidavit is to demonstrate that U S WEST has satisfied the requirements of the Telecommunications Act of 1996 (Act) and the related FCC regulations for five of the checklist items: access to Basic 911and E911 emergency services (checklist item No. 7.I), numbering administration (checklist item No. 9), access to call-related databases and associated signaling (checklist item No. 10), number portability (checklist item No. 11), and local dialing parity (checklist item No. 12). My affidavit will review how U S WEST has met the needs of competitive local exchange carriers (CLECs) for these checklist items as required by the Act.

My affidavit will demonstrate that U S WEST's proposed Statement of Generally Available Terms and Conditions (SGAT) will establish legally binding obligations for U S WEST to provide access to 911/E911, numbering administration, access to call-related databases and signaling, number portability, and local dialing parity in conformance with the Act. Similar obligations are contained in the existing Commission-approved interconnection agreements that U S WEST has entered into with CLECs in Arizona.

Executive Summary

U S WEST has satisfied the 911/E911, numbering administration, access to call-related databases and associated signaling, number portability, and local dialing parity requirements of the Telecommunications Act of 1996 (Act) that are prerequisites for U S WEST's entry into the interLATA long distance market in Arizona. My affidavit reviews the checklist requirements found in Section 271 of the Act and related FCC regulations for access to 911 and E911 emergency services (checklist item No. 7.I), numbering administration (checklist item No. 9), access to call-related databases and associated signaling necessary for call routing and completion (checklist item No. 10), number portability (checklist item No. 11), and local dialing parity (checklist item No. 12). These requirements are met through legally binding commitments included in the various Commission-approved interconnection agreements and the proposed Statement of Generally Available Terms and Conditions (SGAT) in Arizona. A list of the interconnection agreements and the proposed SGAT have been included as exhibits to Mr. Wayne Allcott's affidavit.

Access to 911 and E911 Services

The Act and the FCC's rules require U S WEST to provide CLECs with non-discriminatory access to Basic 911 (911) and Enhanced 911(E911) services. Such access includes the various components of a 911/E911 system, including 911/E911 trunking, 911/E911 routing, and the E911 database and associated database updates. U S WEST provides such non-discriminatory access through the terms of its proposed SGAT and through the terms of Commission-approved interconnection agreements. U S WEST provides access to 911/E911 services to CLECs in the same manner as

U S WEST obtains such access. U S WEST has provided E911 service to ten facility-based CLECs in Arizona by providing E911 trunking between the CLECs' switches and the U S WEST selective router. U S WEST has also provided 911/E911 services to thirty resellers in Arizona, who obtain 911/E911 services using the same facilities as U S WEST's end user customers. U S WEST also stands ready to provide 911/E911 services to CLECs who purchase unbundled switching through its proposed SGAT and interconnection agreements, although there is no demand for unbundled switching at this time. U S WEST will provide CLECs with performance indicators that demonstrate the non-discriminatory provisioning of 911/E911 trunking and E911 database updates. The processes and detailed procedures for providing access to 911/E911 services have been documented for the CLECs.

Numbering Administration

The Act requires that until the FCC established its guidelines, plan or rules, U S WEST was to provide nondiscriminatory access to telephone numbers. The FCC established a transition plan to transfer the numbering administration functions to an independent third party administrator. Prior to that transfer, the FCC established two requirements for nondiscriminatory access to telephone numbers: it required a Local Exchange Carrier (LEC) administrator to charge a uniform fee and to use standard assignment procedures for all carriers, including itself. U S WEST is no longer the Central Office Code Administrator in its region. The responsibility for numbering administration transitioned to Lockheed Martin IMS on September 1, 1998. Prior to the transfer of these functions, U S WEST provided nondiscriminatory access to telephone numbers through the assignment of central office codes (NXXs) to itself and other carriers using

1 the national industry guidelines and forms. U S WEST assigned NXX codes to other
2 carriers, at no charge, and in the same manner as it assigned codes to itself, using the
3 same industry guidelines now applied by Lockheed Martin.

4 **Access to Call-Related Databases and Associated Signaling**

5 The Act and the FCC's rules require U S WEST to provide non-discriminatory access to
6 U S WEST's signaling network and call-related databases. U S WEST's signaling
7 network consists of signaling links, signal transfer points (STPs), and call-related
8 databases, including the Local Number Portability (LNP) database, the toll free service
9 (800/888) database, the Line Information Database (LIDB), the InterNetwork Calling
10 Name database (ICNAM), and the Advanced Intelligent Network (AIN) databases.
11 U S WEST's proposed SGAT as well as the Commission-approved interconnection
12 agreements provide for non-discriminatory access to U S WEST's signaling network
13 and call-related databases. Several carriers operating in Arizona have interconnected
14 with U S WEST's signaling network and, in addition, there are third party signaling
15 network providers interconnected to U S WEST's signaling network providing access for
16 other carriers. The processes and detailed procedures for access to U S WEST's
17 signaling network and call-related databases have been documented for the CLECs.

18 **Number Portability**

19 The Act and the resulting FCC rules required U S WEST to deploy long-term
20 (permanent) number portability (LNP) in the Phoenix and Tucson metropolitan statistical
21 areas (MSAs). U S WEST has successfully deployed long-term number portability in
22 the Phoenix and Tucson MSAs, pursuant to the FCC's rules, making LNP available to

1 approximately 90 percent of U S WEST's access lines in Arizona. For exchanges
2 outside the Phoenix and Tucson MSAs, U S WEST must make interim number
3 portability (INP) serving arrangements available until the exchanges are converted to
4 LNP based on bona fide requests. U S WEST provides four methods of interim number
5 portability (INP) for those exchanges outside the Phoenix and Tucson MSAs. In March
6 1999, U S WEST received bona fide requests to convert sixteen additional exchanges
7 to LNP in Arizona. U S WEST's specific contractual agreements and its proposed
8 SGAT in Arizona make number portability, both INP and LNP, available to the CLECs.
9 The end-to-end processes for implementation are complete and detailed procedures
10 have been documented for the CLECs. As of February 28, 1999, U S WEST has
11 ported 43,294 numbers in Arizona.

12 **Local Dialing Parity**

13 The Act, and the resulting FCC rules, requires U S WEST to provide access to such
14 services or information necessary to allow local dialing parity. Local dialing parity is the
15 ability of all local exchange customers to dial the same number of digits to make any
16 given local call. U S WEST customers and CLEC customers dial the same number of
17 digits to make local calls. These local calls include calls to other customers regardless
18 of their local service provider, and calls to operator services, directory assistance, and
19 provisions for directory listings. There are no unreasonable dialing delays because any
20 given local call is made in the same manner with the same number of dialed digits by
21 U S WEST customers and CLEC customers.

22 In summary, this affidavit demonstrates that U S WEST has satisfied five of the
23 checklist requirements that were established as a prerequisite of U S WEST's entry into

1 the interLATA long distance market in Arizona. Specifically, U S WEST has satisfied
2 the checklist requirements for access to 911/E911 services, numbering administration,
3 access to call-related databases and associated signaling necessary for call routing and
4 completion, number portability, and local dialing parity. U S WEST provides access to
5 these services and capabilities in accordance with the requirements of the Act and the
6 FCC's rules. The Arizona Commission should therefore find that U S WEST has
7 satisfied these checklist requirements.

Checklist Item No. 7.I - 911 and E911 Services

Overview

U S WEST, in accordance with the requirements of the Act, provides CLECs with access to emergency services, known as Basic 911 (911) and Enhanced 911 (E911). Such access is available whether a CLEC resells U S WEST's retail services (a reseller), or whether a CLEC is facilities-based, either through the use of the CLEC's own end office switch or though the CLEC's use of unbundled switching provided by U S WEST. U S WEST's Commission-approved interconnection agreements and the proposed SGAT make access to 911/E911 services available to CLECs in Arizona. U S WEST has provided nondiscriminatory access to 911/E911 service to both facility-based CLECs and resellers in Arizona.

Requirements of the Act and the FCC

The Act requires U S WEST to provide "[n]ondiscriminatory access to – (I) 911 and E911 Services."[1] In its Ameritech Michigan Order, the FCC found that "section 271 requires a BOC to provide competitors access to its 911 and E911 services in the same manner that a BOC obtains such access, *i.e.*, *at parity*."[2] Specifically, the FCC found that BOCs must provide "unbundled access to . . . 911 interconnection, including the provision of dedicated trunks from the [CLEC's] switching facilities to the 911 controlling office [selective router] at parity with what [the BOC] provides itself."[3]

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1 Section 271(c)(2)(B)(vii) of the Act.
2 Ameritech Michigan Order, 12 FCC Rcd at 20679.
3 Id.

U S WEST Satisfies the Requirements of the Act and the FCC

U S WEST has provided E911 service to ten facility-based CLECs (who operate their own switch) in Arizona, by providing E911 trunking between the CLECs' switches and the U S WEST selective router. U S WEST has also provided 911/E911 services to thirty resellers, who obtain 911/E911 services using the same facilities as the U S WEST end user customers. U S WEST also stands ready to provide 911/E911 services to CLECs who purchase unbundled switching through its proposed SGAT and approved interconnection agreements, although there is no demand for unbundled switching at this time.

U S WEST provides both Basic 911 and Enhanced 911 services in Arizona. Basic 911 (911) and Enhanced 911 (E911) both route 911 calls from an end user to the appropriate PSAP. Enhanced 911 (E911) also provides the name and address of the calling party to the PSAP.

U S WEST has methods and procedures for access by the CLECs to the 911/E911 services. These processes are documented for the CLECs in the Interconnect and Resale Resource Guide.[4] Exhibit MSB-2 provides the process flows for CLECs to implement access to U S WEST's 911/E911 services and make database updates.

The 911 and E911 services U S WEST provides include the following components. The U S WEST's 911/E911 network is illustrated in Exhibit MSB-3.

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[4] Interconnect and Resale Resource Guide website: http//www.uswest.com/carrier.

911 Trunking – These trunks interconnect an end office switch – whether owned by U S WEST or a CLEC – to the government agency that answers emergency calls. Basic 911 trunks extend directly from the end office switch to the emergency agency. Enhanced 911 (E911) trunks extend from an end office switch to a selective router, with separate E911 trunks extending from the selective router to the emergency agency.

E911 Selective Router – The E911 selective router acts as a tandem switch in the E911 network. It is connected, by E911 trunks, to each of the end office switches in the geographical area served by the router. The selective router is also connected by E911 trunks to each of the government agencies served by the router. On a given E911 call, the selective router connects an incoming E911 trunk from an end office to an outgoing E911 trunk to the appropriate emergency agency.

Public Safety Answering Point (PSAP) – The PSAP is the name for the government agency that answers emergency calls. The PSAP may be connected directly to a particular end office switch through Basic 911 (911) trunks or, alternatively, the PSAP may be connected to an end office switch through a selective router for Enhanced 911 (E911).

E911 Database – The E911 database contains the automatic number identification (ANI), customer name, street address, and local service provider for each subscriber for the geographic area it serves. The E911 database provides the PSAP with the name and street address of the

calling party. Where U S WEST provides E911 services, the E911 database is owned and managed by SCC. SCC is a third party database manager that provides E911 database management services for U S WEST, other local exchange carriers, and CLECs.

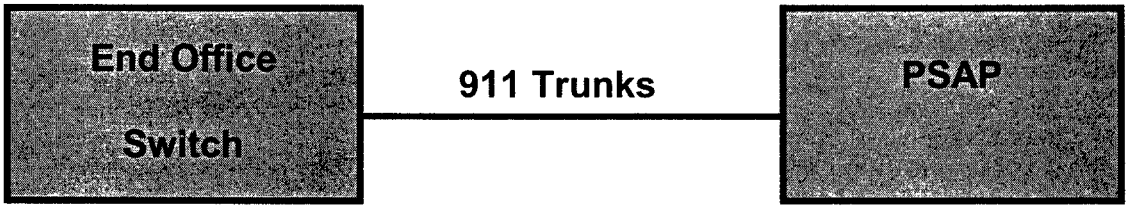
911 Database Updates – The 911 database must be updated when a subscriber changes local service provider, telephone number, name, or street address.

The following will describe how U S WEST provides access for each type of CLEC to the components of the Basic 911 and Enhanced 911 services:

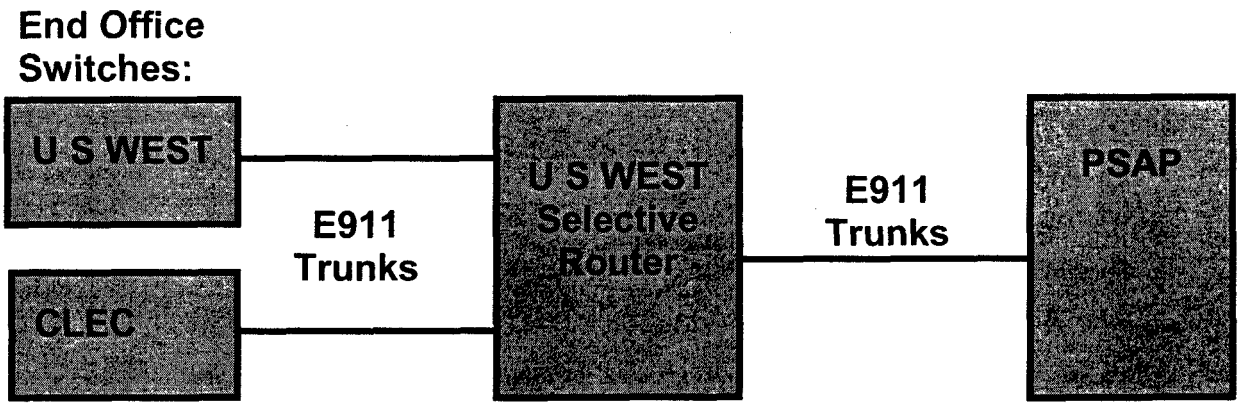
911/E911 Trunking

A facility-based CLEC which operates its own end office switch must be connected to the 911/E911 network by establishing 911 or E911 trunks. The trunk requirements are dependent on whether the 911 services are Basic 911 (911) or Enhanced 911 (E911).

In a typical Basic 911 arrangement, a facility-based CLEC must establish 911 trunks from its end office switch directly to the PSAP. Each 911 call is forwarded by the CLEC over these trunks to the PSAP, whose attendants answer the emergency calls. There is no direct involvement by U S WEST in such an arrangement, although, if requested by the CLEC, U S WEST will provide the 911 trunks between the CLEC switch and the PSAP.

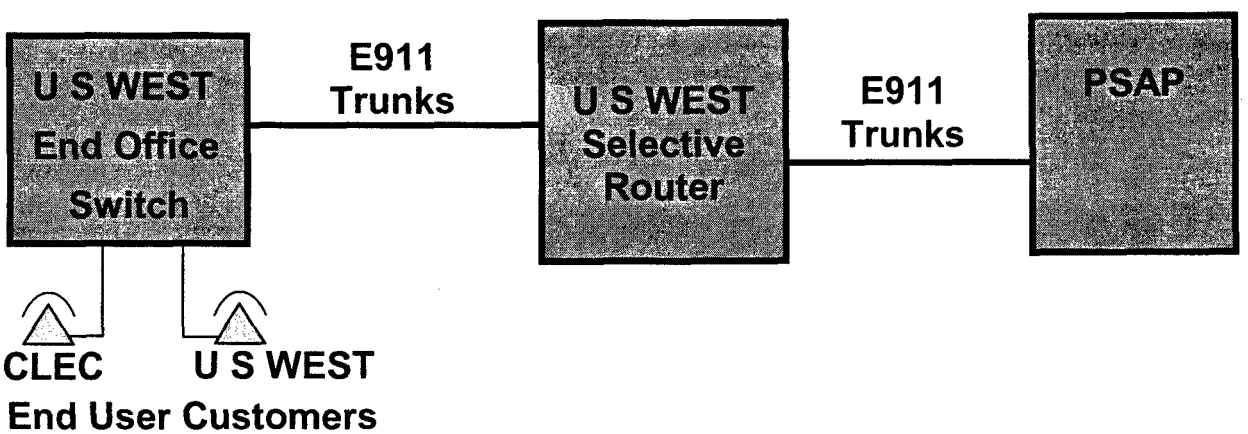


In a typical E911 arrangement, a facilities-based CLEC must establish E911 trunks from its end office switch to the U S WEST selective router in the same manner that U S WEST connects its end office switches to the selective router.



Facility-based CLECs may establish 911/E911 interoffice trunk facilities between the CLEC's end office switch and the PSAP or selective router either by self-provisioning the facility, or by obtaining the facility from U S WEST. U S WEST will also provide 911 trunk terminations at the selective router.

If a CLEC's end users are served by a U S WEST end office switch, either through resale of U S WEST's retail services or through unbundled switching, the CLEC's 911 calls are routed from the U S WEST end office switch to the E911 selective router on the same E911 trunks used for U S WEST's end user customers.



In conformance with the Act and the FCC's rules, U S WEST's proposed SGAT obligates U S WEST to provide 911/E911 trunks to facility-based CLECs in a non-discriminatory manner. For example, the proposed SGAT requires:

> For a facility-based CLEC, U S WEST shall provide 911 interconnection, including the provision of dedicated trunks from CLEC end office switch to the 911 control office, at parity with what U S WEST provides itself.[5]

CLECs who serve their end users through U S WEST's unbundled switching or through resale of U S WEST's services will utilize the same 911/E911 trunking as U S WEST's retail customers.

Where Enhanced 911 service is offered, U S WEST will provide access to the shared transport of 911 call delivery for facility-based CLECs and CLECs who purchase unbundled switching or resale affording the same arrangements, standards and elements used by U S WEST. These arrangements will utilize trunking already in place between the U S WEST E911 selective routers and the PSAP locations for areas served by U S WEST.

To ensure an appropriate grade of service for 911/E911 service provided to end users, U S WEST and facility-based CLECs must monitor the traffic level on 911/E911 trunks, and install additional trunks as required. In the event a 911/E911 call is blocked, such blockage must be detected at the originating end office switch. That is because the blocked call does not go beyond the originating end office switch. U S WEST and the facility-based CLEC must therefore each perform monthly studies on their own 911/E911 trunks to determine if sufficient trunks are in place to handle the emergency

call volume. This blockage data is shared and discussed with the PSAP operator to ensure mutual agreement on the E911 trunk group sizing requirements between the end office switches and the selective router or between the end office switches and the PSAP if no selective router is used.

If a CLEC determines, with approval by the PSAP operator, that its 911/E911 trunk quantities are insufficient to handle its emergency call volume, the CLEC may place an order with U S WEST for additional 911 trunks. Trunk additions are made for the CLEC on the same terms that U S WEST adds 911/E911 trunks for itself. For example, the proposed SGAT requires U S WEST to provide trunking to CLECs, including taking corrective action to alleviate 911/E911 trunk blockages, on a non-discriminatory basis:

> If required by CLEC, U S WEST shall interconnect direct trunks from CLEC's network to the Basic 911 PSAP, or the E911 tandem. Such trunks may alternatively be provided by CLEC. If provided by U S WEST, such trunks will be provided on a non-discriminatory basis. . . .
>
> For CLEC-identified 911 trunk blockages, U S WEST agrees to take corrective action using the same trunking service procedures used for U S WEST's own E911 trunk groups.[6]

911/E911 Trunk Circuit Protection

Proper circuit identification and protection for 911/E911 trunk circuits is essential. Consequently, U S WEST has provided 911 trunk circuit protection for itself and independent local exchange carriers for many years. Furthermore, U S WEST provides the same protection for CLEC 911 circuits. U S WEST's procedures for protecting 911 circuits are to attach red tags or labels to every appearance of a 911 circuit in the

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[5] See Section 10.3.7.4 of U S WEST's proposed SGAT.

central office to guard against accidental intrusive access. The protected appearances include the Digital Signal 1 Cross-connect (DSX) panels, carrier channel units, and any other access points.

U S WEST also has procedures in place to ensure that a facility-based CLEC's 911 or E911 trunks are not deactivated without adequate notice. Before any 911/E911 trunk can be deactivated by a U S WEST employee, the U S WEST 911 Care Center in Minneapolis must verify that a valid deactivation service order request has been submitted by the CLEC. These deactivation procedures apply uniformly to both U S WEST and CLEC 911/E911 trunks.

Because all 911 circuits are protected, regardless of the identity of the local service provider, U S WEST's protection of 911 circuits is nondiscriminatory. Furthermore, U S WEST has provided this protection to independent telephone companies' 911/E911 circuits for years, and it works well. Therefore, U S WEST provides nondiscriminatory access to 911/E911 interconnection and the protection of all 911/E911 circuits.

911/E911 Routing

Public agencies determine whether Basic 911 or Enhanced 911 service will be used in a particular geographic area, and how each end office switch will access the Public Safety Answering Points (PSAPs). In some cases, the public agency may choose to establish 911 trunks directly between end office switches and the PSAP. In many cases, public agencies have chosen to use a selective router to terminate E911 trunk

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[6] See Sections 10.3.7.1-10.3.7.2 of U S WEST's proposed SGAT.

1 groups from many end office switches and to establish a single E911 trunk group from
2 the selective router to the PSAP.

3 The public agency also determines the quantity of trunks that are required in each
4 911/E911 trunk group to serve their communities. Therefore, the public agency is the
5 primary decision-maker for trunk group design, size and routing -- not U S WEST or the
6 CLEC.

7 If the CLEC routes its emergency traffic from its end office switch over E911 trunks to
8 the U S WEST selective router, the CLEC must forward the Automatic Number
9 Identification (ANI) of the calling party on the E911 trunk group on each E911 call.
10 When the emergency call arrives at the selective router, a selective routing table will
11 identify the PSAP associated with the end user's ANI. The selective router then
12 forwards the E911 call along with the calling party's ANI to the designated PSAP over
13 the E911 trunks between the selective router and the PSAP. If the PSAP has been
14 equipped for E911, it will interrogate the 911 database, which returns the end user
15 address that is associated with the ANI to the emergency service attendant. Exhibit
16 MSB-2 illustrates the 911/E911 processes for CLEC provisioning and repair.

17 The routing of an emergency call from a U S WEST end office and a CLEC end office
18 to the selective router and from the selective router to the PSAP is identical. The same
19 selective router is used for both U S WEST and CLEC emergency traffic, and
20 U S WEST and CLEC traffic share the same E911 trunks between the selective router
21 and the PSAPs. As demonstrated in the previous section of my affidavit, U S WEST
22 provides such 911/E911 trunking in a non-discriminatory manner.

If a CLEC serves its customers through the use of U S WEST's end office switch, either through unbundled switching or resale, the CLEC's end users access the PSAP through the same E911 trunks between the U S WEST end office and the selective router, the same selective router, and the same E911 trunks between the selective router and the PSAPs as U S WEST uses.

E911 Database Management

The E911 database provides the PSAP with the name and street address of the caller to ensure the rapid and accurate dispatch of the police, an ambulance, or a fire truck as required. The E911 database contains the name, street address, ANI (Automatic Number Identification), and local service provider of each telephone subscriber in the geographic area served by the E911 database. The E911 database is also known as the Automatic Location Identification/Data Management System (ALI/DMS).

Where U S WEST provides Enhanced 911 services, the E911 database is owned and administered by an independent third party -- SCC. Database updates are required whenever a customer's name, ANI, street address or service provider is changed. The responsibility for providing E911 database updates to the database administrator varies, depending on whether a CLEC resells U S WEST's retail services, or whether the CLEC is a facilities-based provider.

For resellers, U S WEST provides E911 database updates on behalf of the CLEC using the same procedures U S WEST uses to update the E911 database for U S WEST's own end users. Facility-based CLECs, whether the CLEC's end users are served by the CLEC's end office switch or through use of unbundled switching, must provide their

own E911 database updates directly to the E911 database administrator. Facility-based CLECs must perform their own E911 database updates because U S WEST does not have the ANI, customer name, or street address for customers of facility-based CLECs.

When an end user changes service providers from U S WEST to a CLEC, and the CLEC serves its new end user through unbundled switching or resale, if there is no change in the customer's telephone number, name or address, it is not necessary to send a disconnect order to the E911 database. The previous E911 database entry will continue to contain the same ANI, name and address information. The service provider information will be updated from the completed service order.

When a customer moves from U S WEST to a facilities-based CLEC, both U S WEST and the CLEC update the database. The E911 database will receive a disconnect order from U S WEST and a connect order from the CLEC. This is true whether interim number portability (INP) or long-term number portability (LNP) is used to port the customer's telephone number to the facilities-based CLEC.

Where interim number portability (INP) is still in place, it is not technically possible for the CLEC's switch to use the same ANI that the U S WEST switch used, even though the customer's dialed telephone number remains the same. Consequently, the end user's ANI will change when served by the CLEC's switch. Therefore, it is essential that the CLEC place the customer's new ANI, with its associated name and street address, in the E911 database prior to the time the customer will utilize the CLEC's service. Similarly, U S WEST must remove the customer's disconnected ANI from the E911 database.

1 Where long-term number portability (LNP) is in place, the customer's ANI does not
2 change, but the CLEC is still responsible for updating the E911 database record for its
3 customer. The facilities-based CLEC must update the record to indicate that it is now
4 the service provider for this customer. In addition, U S WEST will no longer have
5 records of this customer's name, address or ANI. Therefore, U S WEST sends a
6 disconnect order, and the CLEC sends a connect order to the E911 database
7 administrator, who then knows that future updates for this record should only be
8 generated by the CLEC.

9 To ensure a customer's record is not removed from the ALI database prematurely, SCC
10 will institute a new industry developed procedure that will delay the removal of a
11 customer's record in the E911 database after a disconnect order has been received.
12 By including the identity of the CLEC on the disconnect order, SCC will create an
13 "unlocked record" in the E911 database. The "unlocked record" will remain unchanged
14 in the E911 database until the CLEC sends a corresponding connect order to SCC. As
15 the owner of the account, the CLEC is then responsible for updating the E911 database
16 record and "locking" the customer's record. These new procedures will ensure that a
17 customer's ANI will not be removed from the E911 database prematurely. SCC expects
18 to implement these new industry procedures during second quarter of 1999.

19 If a CLEC resells U S WEST's retail services, U S WEST will update the E911
20 database at the same time as U S WEST updates its own customers' records. In fact,
21 the U S WEST records and the reseller CLEC records are sent together in the same
22 batch update that is sent every night on the data link to SCC. The batch updates
23 include all the completed service records for that day. There is no way to identify which

1 records are for U S WEST customers versus the customers of the CLECs. E911
2 database entries for resold services flow directly from U S WEST to SCC in the
3 identical way and at the same time that updates for U S WEST retail customer records
4 flow to SCC. I will discuss performance indicators and reports to demonstrate
5 U S WEST is providing accurate and timely E911 database updates in a later section of
6 my affidavit.

7 U S WEST has implemented preventive measures to ensure that E911 database errors
8 are minimized. For resold services, U S WEST has implemented an edit function in the
9 service order process to assist in determining errors in the customer record data prior to
10 processing. For example, when an end user changes service providers through resale,
11 a comparison is made on the customer's address information, telephone prefix and
12 class of service for consistency to ensure the record can be loaded into the 911 system
13 in a timely and accurate fashion. If U S WEST detects an error made by the CLEC,
14 U S WEST will attempt to correct it or return the service order to the CLEC. The third
15 party administrator's current practice is to begin resolution of database errors for
16 U S WEST retail and resold services within 24 hours after receipt. Although errors
17 affect the accuracy of the 911 database, the provisioning of the order is not affected
18 and the customer will be able to make calls to the 911 system.

19 In the case of facility-based CLECs, the third party administrator will interface directly
20 with the CLEC to resolve record errors. SCC analysts are available to CLECs to
21 reconcile all error files during normal business hours of operation. The CLEC and SCC
22 may negotiate a variety of arrangements to address error detection and correction
23 based on the individual needs of each company. Each facility-based CLEC has its own

1 data link to SCC to update its customers' records, therefore, SCC has the capability to
2 report speed and accuracy results separately for U S WEST and facility-based CLECs,
3 as well as other independent local exchange carriers.

4 **Performance Indicators**

5 U S WEST will provide CLECs with performance indicators designed to demonstrate
6 that U S WEST provides access to 911/E911 services in a non-discriminatory manner.
7 The performance indicators are included in U S WEST's proposed SGAT in Section 20
8 – Service Performance. Detailed descriptions of these performance indicators are
9 included in the affidavit of Mr. Mike Williams.

10 The FCC requires that a BOC "must maintain the 911 database entries for competing
11 LECs with the same accuracy and reliability that it maintains the database entries for its
12 own customers."[7] The FCC also requires that, for facilities-based carriers, the BOC
13 must provide "unbundled access to [its] 911 database . . . at parity with what [the BOC]
14 provides to itself."[8]

15 The 911 database entries for all CLECs are maintained with the same accuracy and
16 reliability as database entries for U S WEST. U S WEST's proposed SGAT obligates
17 U S WEST to provide database entries for facility-based CLECs at the same accuracy
18 and reliability that U S WEST provides for its own customers:

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[7] Ameritech Michigan Order, 12 FCC Rcd at 20679.
[8] Id.

> U S WEST will ensure that the 911 database entries for CLEC will be maintained with the same accuracy and reliability that U S WEST maintains for U S WEST's own customers.[9]

U S WEST's proposed SGAT also ensures that resellers of U S WEST's services will have 911 database updates at the same level of accuracy and reliability as U S WEST provides for its end users:

> For resold services, U S WEST, or its designated database provider, will provide updates to the [911] database in a manner that is at the same level of accuracy and reliability as such updates are provided for U S WEST's end-users. For resold accounts, CLEC shall provide U S WEST with accurate customer location information to be updated to the [911] database. U S WEST shall use its current process to update and maintain end user information in the [911] database.[10]

U S WEST's performance indicator ES-1 is designed to demonstrate that U S WEST provides E911 database updates for resellers in a non-discriminatory manner. Performance indicator ES-1, ALI Data Base Updates Completed within 24 hours, provides a measure of the timeliness of E911 database updates performed by U S WEST on behalf of CLECs. The indicator measures the degree to which updates for the E911 database are transmitted by U S WEST to the E911 database administrator, SCC, within 24 hours. The ES-1 measures the percentage of batch updates to the ALI Database accomplished within 24 hours of service order completion.

Results of the ES-1 performance indicator for the months of July 1998 through January 1999 are that 100% of the E911 – ALI Database updates were accomplished within 24 hours. These results demonstrate that U S WEST provides database updates for resellers in a nondiscriminatory manner.

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[9] See Section 10.3.4.1 of U S WEST's proposed SGAT.

U S WEST's ES-2 performance indicator is designed to demonstrate that U S WEST provides 911/E911 trunking in a non-discriminatory manner. Performance indicator ES-2, 911/E911 Emergency Service (ES) Trunk Installation Interval, provides a measure of the timeliness of U S WEST's installation of 911/E911 trunks. The indicator measures the average time (in business days) between the application date and the completion date for 911/E911 trunks ordered by CLECs.

Results of the 911/E911 ES-2 Emergency Services Trunk Installation Interval performance measure for the month of December 1998 indicates that there were no requests from CLECs for trunk installations. U S WEST is tracking this activity, and as U S WEST receives requests for 911/E911 trunk installations, U S WEST will be able to report the installation intervals and demonstrate that they are reasonable.

An additional performance report will be developed to demonstrate the non-discriminatory provision of database updates by the database administrator SCC. U S WEST has established an obligation to measure the E911 accuracy. The provision of a measure of E911 database accuracy is established as a U S WEST obligation in the proposed SGAT:

> E911 Database accuracy shall be measured jointly by the PSAPs and U S WEST's database provider in a format supplied by U S WEST. The reports shall be forwarded to CLEC by U S WEST's database provider when relevant and will indicate incidents when incorrect or no ALI data is displayed. The reports provided to CLEC shall contain CLEC-specific information regarding CLEC's accounts. [11]

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[10] See Section 10.3.5.1 of U S WEST's proposed.SGAT.
[11] See Section 10.3.6.1 of U S WEST's proposed SGAT.

To demonstrate that CLEC and U S WEST database updates are performed in the same timeframes and with the same level of accuracy by SCC, U S WEST has requested that SCC provide reports to U S WEST and CLECs on SCC's performance. To facilitate SCC reports that distinguish between U S WEST and CLEC 911 database updates, the 911 database must contain an identification of the CLEC. For end users served by a CLEC through resale, an "RSID" (reseller identification) must be included in the 911 database. For end users served by a facilities-based CLEC, a "ZSID" (Facility-based CLEC identification) must be included in the 911 database. SCC must recognize the RSID and ZSID as a means to sort 911 database entries for reporting purposes. U S WEST anticipates that SCC will have this capability in January 2000 in conformance with the National Emergency Number Association (NENA) III standards. U S WEST is preparing to implement the NENA III standards by modifying the record entries it sends to SCC for input to the ALI Database. The NENA III standards are expected to be finalized by the end of 1999. Currently, there is no way for U S WEST or SCC to determine which records belong to U S WEST and which belong to a reseller. When the RSID is available, SCC will report each reseller's results separate from U S WEST's results. The industry E911 standards are available on the NENA website.[12]

In December 1998, SCC started producing reports on the speed and accuracy of the database updates for U S WEST, which is aggregated with the reseller data, and individual company data for the other facility-based local service providers. Exhibit MSB-4 is a summary of the reports for December 1998 through January 1999. Until the

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[12] National Emergency Number Association website: http://www.nena9-1-1.org/.

new service provider identifiers (RSID and ZSID) are implemented, a reseller CLEC may request a non-routine manual audit on selected records for its customers.

Cost Recovery

The 911/E911 services offered by U S WEST to other carriers, including independent telephone companies, do not traditionally involve payments going from carrier to carrier. The proposed SGAT and contracts negotiated in Arizona do not charge CLECs for access to 911/E911 service.[13] The management of the E911 database is performed by SCC who may assess charges to both U S WEST and CLECs for updates to the E911 database and for other services, such as providing copies of the Master Street Address Guide.

U S WEST generally recovers the cost of facilities it deploys to provide CLECs with access to 911 and E911 services by billing the PSAP operator. U S WEST bills its customers a 911/E911 surcharge which is remitted to the PSAP operator. U S WEST presumes that CLECs will bill a similar surcharge to their customers on behalf of the PSAP operator.

Summary

In accordance with the checklist and resulting FCC requirements, U S WEST provides CLECs with non-discriminatory access to Basic and Enhanced 911 services. Commission-approved interconnection agreements in Arizona and the proposed SGAT make access to Basic and Enhanced 911 services available to CLECs. U S WEST has

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[13] See section 10.3.7.1 of U S WEST's proposed SGAT.

1 documented the processes and procedures for CLECs to access the 911 and E911
2 services. CLECs have the ability to offer their customers the same access to 911and
3 E911 services as the customers of U S WEST utilize.

1 **Checklist Item No. 9 - Numbering Administration**

2 **Overview**

3 The FCC, pursuant to the Act, established its requirements for provision of
4 nondiscriminatory access to telephone numbers and established a transition plan to
5 transfer the numbering administration functions to an independent third party
6 administrator. For U S WEST, this checklist requirement effectively expired
7 September 1, 1998, with the FCC's transfer of the numbering administration
8 responsibilities to Lockheed Martin IMS. U S WEST is no longer the numbering
9 administrator in its region. Prior to the FCC's transfer of the numbering administration
10 functions to the new North American Numbering Plan Administrator (NANPA),
11 U S WEST provided CLECs access to telephone numbers in a nondiscriminatory
12 manner according to the Act and the FCC's rules. The FCC established two
13 requirements for LECs administering central office codes (NXXs): 1) charge uniform
14 fees and 2) apply identical standard assignment procedures. U S WEST did not charge
15 for the assignment or use of central office codes (NXXs) and U S WEST processed all
16 NXX code requests, U S WEST's and CLEC's, in accordance with the industry
17 guidelines. Therefore, U S WEST satisfied the FCC's two requirements for
18 nondiscriminatory access to telephone numbers.

19 **Requirements of the Act and the FCC**

20 The Act requires that "[u]ntil the date by which telecommunications numbering
21 administration guidelines, plan, or rules are established, nondiscriminatory access to

1 telephone numbers for assignment must be provided to [a CLEC's] telephone exchange
2 service customers. After that date, compliance with such guidelines, plan or rules."[14]

3 In July 1995, the FCC ordered that numbering administration of NPAs and NXXs be
4 centralized at the national level and transferred to an independent third party
5 administrator.[15] The FCC also created a federal advisory committee, the North
6 American Numbering Council (NANC), to provide advice and recommendations
7 regarding numbering administration and to have oversight for the selection and
8 transition to the new independent third party administrator.

9 The FCC adopted regulations, pursuant to the Act, to govern the assignment of NXX
10 codes. In its Second Interconnection Order, the FCC established two requirements.[16]
11 Any telecommunications carrier performing central office code administration:

12 (1) shall charge uniform fees for the assignment or use of central office codes,
13 including to itself and its affiliates; and,

14 (2) shall apply identical standards and procedures for processing central office
15 code requests and assigning such codes.

16 **U S WEST Satisfies the Requirements of the Act and the FCC**

17 U S WEST is no longer responsible for central office number administration. These
18 functions transferred to the new North American Numbering Plan Administrator

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[14] See Section 271(c)(2)(B)(ix) of the Act.
[15] Report and Order, CC Docket 92-237, Administration of the North American Numbering Plan, released July 13, 1995.
[16] See 47 C.F.R. Section 52.15(c).

(NANPA), Lockheed Martin IMS on September 1, 1998, in accordance with the FCC's rules.[17]

Prior to the FCC's transfer of the numbering administration responsibilities to Lockheed Martin, U S WEST provided nondiscriminatory access to telephone numbers for assignment by CLECs in compliance with the Act and FCC rules. U S WEST met the FCC's two requirements by:

1) not charging any fees for the assignment or use of central office codes; and

2) using the industry's central office code assignment guidelines and forms as the uniform standards and procedures to process NXX code requests and assignment of those codes. U S WEST applied the same guidelines and procedures for requests for NXX codes whether the request originated from U S WEST or a CLEC. These are the same guidelines and forms now used by Lockheed Martin to process NXX code requests.

Central office codes (NXXs) were assigned based on the Central Office Code Assignment Guidelines developed by the national Industry Numbering Committee (INC), formerly the Industry Carriers Compatibility Forum (ICCF), and published as INC 95-0407-008. These guidelines were developed by the industry in response to a 1991 FCC request. The guidelines are available on the FCC's North American Numbering Council (NANC) website and NANPA's website.[18]

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[17] Report and Order, CC Docket 92-237, Administration of the North American Numbering Plan, released July 13, 1995

[18] FCC NANC website: www.fcc.gov/ccb/Nanc/ and the NANPA website: www.nanpa.com.

U S WEST assigned all CLEC NXX codes within 10 working days of the date of receipt of a request, as required by Section 5.2.2 of the industry's guidelines. U S WEST assigned 37 NXX codes to CLECs in Arizona during the twelve months prior to the FCC's transfer of these functions to the new administrator. U S WEST averaged 3.8 days to assign NXX codes for CLECs and averaged 5.0 days to assign NXX codes to itself. Exhibit MSB-2 shows NXX assignments by U S WEST for Arizona from September 1997 through August 1998.

U S WEST will continue to comply with the industry guidelines and FCC rules as applied by the North American Numbering Plan Administrator, Lockheed Martin. U S WEST has committed to comply with these guidelines and FCC rules, including the provision of its NXX data, when requested by Lockheed Martin or the FCC, in the proposed SGAT:

> Central Office Code Administration has now transitioned to Lockheed Martin. Both Parties agree to comply with Industry guidelines and commission rules, including those sections requiring the accurate reporting of data to the Central Office Code Administrator.[19]

Summary

U S WEST is no longer responsible for numbering administration in its region. Prior to the FCC's transfer of this function to the new administrator, U S WEST provided nondiscriminatory access to telephone numbers according to the Act and FCC regulations. U S WEST had interconnection agreements in place in Arizona making telephone numbers available to CLECs and there were no complaints to the FCC or

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[19] See Section 13.2 of U S WEST's proposed SGAT.

Commission regarding U S WEST's central office code administration in Arizona. U S WEST did not charge for the assignment of central office codes (NXXs) and assigned NXXs to other carriers in exactly the same manner as it assigned codes to itself, using the industry developed guidelines and forms. Thus, U S WEST satisfied the FCC's two requirements for numbering administration.

Checklist Item No. 10 – Call-Related Databases and Associated Signaling

Overview

U S WEST, in accordance with the requirements of the Act and the FCC rules, provides CLECs with nondiscriminatory access to its signaling network and call-related databases. U S WEST's proposed SGAT, as well as the Commission-approved interconnection agreements, provide for non-discriminatory access to U S WEST's signaling network and call-related databases. There are several carriers operating in Arizona that are interconnected to U S WEST's signaling network. In addition, there are third party signaling network providers interconnected to U S WEST's signaling network providing access to other carriers. The processes and detailed procedures have been documented for the CLECs.

Requirements of the Act and the FCC

The competitive checklist of Section 271 requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."[20] However, in its First Interconnection Order,[21] the FCC also determined that unbundled signaling and access to call-related databases constituted UNEs under Section 251(c)(3). As will be discussed later, the U.S. Supreme Court recently vacated this rule for failing to follow the Act. The FCC's vacated rules regarding nondiscriminatory access to signaling links allowed CLECs to use U S WEST's signaling network for signaling between their switches, signaling to

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[20] See Section 271(c)(2)(B)(x) of the Act.

U S WEST's switches and signaling to other networks interconnected to U S WEST's signaling network in the same manner as U S WEST provides access to itself. The FCC's vacated rules provided for nondiscriminatory access to the call-related databases used for transmission, routing, billing and collection, or other aspects of providing a telecommunications service, e.g., the Line Information Database (LIDB), the Toll Free Calling (800/888) database, the Local Number Portability (LNP) database, and the Advanced Intelligent Network (AIN) database. The FCC's vacated rules also provided for unbundled access to U S WEST's Service Management Systems (SMS) to create, modify, or update information in the call-related databases in a manner that complies with Section 222 of the Act regarding the use and disclosure of customer information.

The U.S. Supreme Court recently issued a decision reinstating some of the FCC's Local Competition rules and vacating others. The decision has several important implications for U S WEST's interconnection with CLECs for signaling and access to call-related databases. Most importantly, the decision vacated the FCC's rule[22] that defined the list of unbundled network elements ("UNEs"), which defined signaling and access to call-related databases as unbundled elements. The Supreme Court determined that the FCC failed to properly apply the requirements of Section 251(d)(2) of the Act. Thus, as of today, signaling and databases are not considered Section 251(c)(3) unbundled network elements.

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[21] See 47 C.F.R. Section 51.319(e)(1-3).
[22] See 47 C.F.R. Section 51.319.

1 The Supreme Court's decision also determined that the FCC had jurisdiction to issue
2 pricing rules for unbundled network elements, which may eventually include unbundled
3 signaling and access to call-related databases. The FCC's pricing rules[23] are presently
4 before the Eighth Circuit Court to determine whether they comport with the Act. The
5 Eighth Circuit has not yet decided whether it will allow the pricing rules to take effect
6 while the Eighth Circuit Court revisits them. Thus, the pricing rules are not currently in
7 effect. Given this set of circumstances, it is premature to determine the prices that will
8 ultimately apply to signaling and call-related databases. Nonetheless, U S WEST's
9 pricing for unbundled signaling and access to call-related databases are generally
10 consistent with the FCC's pricing methodology contained in its pricing rules.

11 Thus, even if the FCC concludes that unbundled signaling and call-related databases
12 qualify as a Section 251 unbundled network element, U S WEST's pricing complies with
13 the Act. Irrespective of whether the FCC finds signaling and databases to be Section
14 251(c)(3) unbundled network elements, U S WEST must make those elements
15 available pursuant to Section 271 of the Act (the competitive checklist). U S WEST has
16 included interconnection with its signaling network and call-related databases as an
17 ancillary service to its proposed SGAT, and has agreed to provide the same access
18 pursuant to existing interconnection agreements.

19 In the event unbundled signaling and call-related databases do not qualify as a Section
20 251 unbundled network element, the FCC's pricing rules would not apply to these
21 services. That is because Section 252(d)(2) states that the FCC's pricing rules only

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[23] See 47 C.F.R. Section 51.501-51.515, 51.601-51.611, 51.701-51.717.

apply to Section 251(c)(3) unbundled network elements. While U S WEST's pricing for signaling and access to call-related databases in its interconnection agreements and its proposed SGAT generally comply with the FCC's pricing rules, it is premature to conclude that conformance with these rules will be required to satisfy the Section 271 checklist.

U S WEST Satisfies the Requirements of the Act and the FCC

U S WEST provides nondiscriminatory access to its signaling network and call-related databases through the terms of its proposed SGAT as well as the terms of Commission-approved interconnection agreements. U S WEST has provided access directly to several carriers operating in Arizona and to others through third party signaling network (hub) providers. CLECs may interconnect with U S WEST's signaling network to facilitate signaling between their switches and U S WEST's end office and tandem switches. Terms and conditions for access to the U S WEST signaling network are contained in the proposed SGAT in Section 10.15 – Access to Signaling. CLECs may also interconnect with U S WEST's signaling network to facilitate signaling to other carriers' switches that are connected to U S WEST's signaling network and to gain access to U S WEST's call-related databases. Terms and conditions for access to the AIN, LIDB, 800/888 and Calling Name databases are contained in Sections 10.16, 10.17, 10.18 and 10.19 of the proposed SGAT. Access to U S WEST's number portability database is available pursuant to U S WEST's interstate tariff according to the FCC's requirements.

1 The processes and detailed procedures for access to U S WEST's signaling network
2 and call-related databases have been documented for the CLECs.[24] Exhibit MSB-6
3 provides the process flows for CLEC access to U S WEST's signaling network and call-
4 related databases. Exhibit MSB-7 illustrates U S WEST's signaling network and CLEC
5 interconnection to the signaling network. The following is a description of U S WEST's
6 signaling network and call-related databases.

7 **Description of the U S WEST Signaling Network and Call-Related Databases**

8 The U S WEST network consists of end office switches, tandem switches and call-
9 related databases. The U S WEST network is interconnected with other networks,
10 including the switches of interexchange carriers, other local exchange carriers and
11 CLECs. Each of these switches and call-related databases, regardless of provider, can
12 be considered a "node" on the Public Switched Telephone Network (PSTN). Each
13 node in the PSTN must exchange information with other nodes to facilitate the
14 completion of a local or long distance telephone call. The exchange of information
15 between network nodes is referred to as signaling.

16 A simple use of signaling is the establishment of a call between two end office switches.
17 The originating switch must send to the terminating switch the called telephone number.
18 The terminating switch must send the originating switch the equivalent of ringing (if the
19 called line is available) or busy tone (if the called line is busy). To complete the call, the
20 two end offices must agree on the trunk that will be used to carry the conversation.

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[24] Interconnect and Resale Resource Guide website: http//www.uswest.com/carrier.

1 Finally, if the called party hangs up, the terminating end office must inform the
2 originating office to release the trunk for reuse and to terminate billing, if required.

3 More complex types of calls also require signaling. For example, a call may traverse a
4 tandem switch, or require the interrogation of a call-related database, or involve two or
5 more interconnected networks such as two local exchange carriers and an
6 interexchange carrier.

7 The signaling network facilitates communication between end office switches, tandem
8 switches, interexchange carrier switches, CLEC switches and other local exchange
9 carrier switches for establishing voice grade trunk connections. The signaling network
10 also facilitates communication between these switches and the various call-related
11 databases that are associated with the signaling network. For example, an end office
12 switch may communicate with the toll free service (800/888) database through the
13 signaling network to acquire the routing information for a particular 800 telephone
14 number. Likewise, an operator system may communicate with a Line Information
15 Database (LIDB) to validate billing information on an operator handled call, e.g., collect,
16 calling card and bill to third party.

17 Signaling on the Public Switched Telephone Network is now almost universally
18 performed through a separate signaling network using the Signaling System 7 (SS7)
19 protocol. The signaling network is a packet switched communication network that
20 allows call control messages to be transported on a dedicated high-speed data network
21 that is separate and distinct from the voice communication network.

22 The U S WEST signaling network consists of the following components:

Signaling Links – Signaling links connect a network node, such as an end office, tandem, or call-related database to the signaling network.

Signal Transfer Point (STP) – STPs are the "tandem switches" of the signaling network. Signaling links from network nodes are terminated at the STP. A network node will deliver a signaling message via its signaling link to the STP. Depending on the destination of that signaling message, the STP delivers the signaling message to another signaling link for delivery to the terminating network node.

Call-Related Databases – Call-related databases are databases that are used in the routing of voice traffic on the PSTN. There are several call-related databases, including the 800/888 toll-free service database, the Line Information Database (LIDB), the Local Number Portability (LNP) database, the Calling Name database, and the Advanced Intelligent Network (AIN) database. I will describe each of these databases in additional detail in a later section of my affidavit. Call-related databases are connected, like other network nodes, to a STP via a signaling link.

Service Management System (SMS) – SMS is a system that is used to update the contents of a call-related database.

The Act's checklist requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."[25] U S WEST provides such access, pursuant to its proposed SGAT:

> U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and signaling transfer points. Access to U S WEST's signaling network provides for the exchange of signaling information between U S WEST and CLEC necessary to exchange traffic and access call-related databases. Signaling networks enable CLEC the ability to send signals between its switches and U S WEST's switches, and between its switches and those third party networks with which U S WEST's signaling network is connected. CLEC may access U S WEST's signaling network from each of its switches via a signaling link between its switch and the U S WEST STP. The connection between CLEC's switch and the U S WEST signaling network will be provided in substantially the same manner as U S WEST connects one of its own switches to the STP.[26]

Signaling Network

Exhibit MSB-7 illustrates how CLECs may gain access to U S WEST's signaling network. CLECs may interconnect their switches directly to U S WEST's STPs or CLECs may interconnect their own STPs with U S WEST's STPs. In either case, the CLEC's call routing and database queries are handled in the same manner as U S WEST's call routing and database queries. Finally, CLECs may also interconnect with U S WEST's signaling network through a third party signaling network provider.

Even though the FCC's requirements were vacated by the Supreme Court, U S WEST satisfies the vacated rules through its proposed SGAT. For example, the FCC required U S WEST to provide:

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[25] See Section 271(c)(2)(B)(x) of the Act.
[26] See Section 10.15.1.1 of U S WEST's proposed SGAT.

> Nondiscriminatory access to . . . signaling links and Signaling Transfer Points (STPs) on an unbundled basis.[27]

U S WEST provides such non-discriminatory access to signaling links and STPs on an unbundled basis through the terms of U S WEST's proposed SGAT:

> U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and signaling transfer points. . . .[28]

The FCC's vacated rules also stated that when a CLEC "purchases unbundled switching capability from an incumbent LEC, the incumbent LEC shall provide access to its signaling network from that switch in the same manner in which it obtains such access itself."[29] U S WEST provides such access to its signaling network to purchasers of unbundled signaling pursuant to its proposed SGAT:

> Local switch ports include CLEC use of U S WEST's signaling network for traffic originated from the line-side switching port. CLEC access to the U S WEST signaling network shall be of substantially the same quality as the access that U S WEST uses to provide service to its own customers.[30]

Therefore, when a CLEC orders unbundled switching, the CLEC's signaling traffic is routed over the U S WEST signaling network in the exact same manner as U S WEST's signaling traffic is routed.

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27 First Interconnection Order at para. 479; 47 C.F.R. §51.319(e)(1)(i).
28 See Section 10.15.1.1 of U S WEST's proposed SGAT.
29 47 C.F.R. Section 51.319 (e)(1)(ii).
30 See Section 10.13.2.2 of U S WEST's proposed SGAT.

Call-Related Databases

Call-related databases store data that is used in the routing of traffic on the PSTN. If a call-related database is required for a given call, the end office switch or tandem switch will send a query, over the signaling network, to the appropriate call-related database, which will return information useful in processing the call. Examples of call-related databases include local number portability (LNP), toll-free calling (800/888), Line Information Database (LIDB), and Advanced Intelligent Network (AIN).

The local number portability (LNP) database stores the identification of the end office switch that serves a particular telephone number. The LNP database facilitates number portability by allowing a customer to retain a telephone number, while changing local service providers. U S WEST has deployed a LNP database that serves the Phoenix and Tucson metropolitan areas. On a local call within Phoenix, for example, the originating end office can query this LNP database to identify the terminating central office associated with the called telephone number.

The Line Information Database (LIDB) provides screening and validation on alternately billed services for operator handled calls, including billed-to-third, collect, and calling card calls. For example, the records in LIDB can be used by a local service provider to determine whether a particular end user will accept a collect call. The records in LIDB include both U S WEST and CLEC end users.

Access to the 800/888 database enables a CLEC to determine where an originating 800/888 toll-free call should be routed. On such a call, a CLEC will send the 800-NXX-XXXX or 888-NXX-XXXX telephone number dialed by its end user to the U S WEST

800/888 database through use of the U S WEST signaling network. The 800/888 database provides call routing information for the specific 800 or 888 toll-free telephone number that the CLEC transmitted to the database. The database transmits the call routing information to the CLEC over the same signaling network on which the request was received. The CLEC uses this routing information to forward the call to the appropriate network for call completion.

The InterNetwork Calling Name (ICNAM) database enables a CLEC to query for the listed name information for the calling number in order to deliver that information to the CLEC's end user (called number). The ICNAM database contains the current listed name data by working telephone number served or administered by U S WEST, including listed name data provided by other carriers participating in the Calling Name Delivery Service arrangement.

The Advanced Intelligent Network (AIN) database is the brand name for a type of call-related database that can be used to provide new features for an end user. The capabilities of an AIN database are activated through AIN triggers. A trigger is a point in the call processing where a database query must be made to determine the action to be taken. For example, an end user on a U S WEST end office switch may establish a restricted calling list that will not allow calls to be placed from the end user's telephone line to specific telephone numbers. The list will be stored in an AIN database and an AIN trigger will be established in the switch to notify the call processing equipment to check this list on every call originated from this end user's line. Then, when a call is originated from this line, the end office switch will analyze the called telephone number and find the AIN trigger that will instruct the switch to query an AIN database. A query

will be sent to the designated database and the restricted dialing list will be reviewed. If the dialed number is on the list, the call will be directed to an intercept announcement. On the other hand, if the called number is not on the restricted list, then the call will be sent to the appropriate destination for call completion.

U S WEST protects the customer proprietary information that is included in call-related databases. For LIDB service, U S WEST is implementing a service provider identifier applied to each end user line record in the database. This identifier will designate the owner of each line record to ensure the records of one provider are not shared with another provider. LIDB database management is considered a "safe harbor" in U S WEST. Access to the database is limited to a specific group of employees responsible for managing the LIDB database. By providing only restricted access to the database, U S WEST ensures that the privacy of customer records is maintained. Customer proprietary information is protected because service providers cannot store or use this data for marketing or other purposes.

The AIN database will also include a unique identifier in each customer record that will designate the "responsible organization" or the record owner. As with LIDB, the AIN database is restricted to a specific group of U S WEST employees, in a safe harbor environment, responsible for maintaining the database. This restriction is intended to preserve the privacy of customer records. The service provider for each customer record can be identified and is used to dictate the availability of information. This prevents the records of one provider from being shared with another provider.

The Act's checklist requires that U S WEST provide "nondiscriminatory access to databases and associated signaling necessary for call routing and completion."[31] The FCC's vacated rules require U S WEST to provide non-discriminatory access to call-related databases, as follows:

> Nondiscriminatory access on an unbundled basis to . . . call-related databases for the purpose of switch query and database response through the Signaling System 7 (SS7) network, e.g. LIDB, the Toll Free Calling Database and Number Portability downstream databases, by means of physical access at the STP linked to the unbundled database.[32]

The FCC rules also required U S WEST to provide access to AIN databases:

> Access to AIN databases via a STP for those call-related databases used in the incumbent LEC's AIN.[33]

Even though these rules are vacated, U S WEST again satisfies the above requirements through the terms of its proposed SGAT:

> U S WEST will provide CLEC with nondiscriminatory access to signaling networks, including signaling links and signaling transfer points. Access to U S WEST's signaling network provides for the exchange of signaling information between U S WEST and CLEC necessary to exchange traffic and access call-related databases.[34]

Service Management System

U S WEST provides access, on an unbundled basis, to the U S WEST Service Management Systems (SMS) that will allow CLECs to create, modify or update information in U S WEST's call-related databases.

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31 See Section 271(c)(2)(B)(x) of the Act.
32 First Interconnection Order at para. 484; 47 C.F.R. Section 51.319(e)(2)(ii).
33 First Interconnection Order at para. 486; 47 C.F.R. Section 51.319(e)(2)(ii).
34 See Section 10.15.1.1 of U S WEST's proposed SGAT.

CLECs may choose to store their end user telephone number information in the U S WEST LIDB. CLECs may provide line record updates in accordance with the terms identified in their respective interconnection agreements. The Service Order Provisioning Interface (SOPI) system is the route U S WEST internal service orders follow to update the LIDB data. CLECs transmit updates to the U S WEST LIDB via an e-mail or facsimile process. This process can be used for multiple updates daily. The e-mail files will be loaded into the Line Validation Administration System (LVAS) which loads data into the LIDB.

For AIN service, U S WEST provides two forms of access for CLECs. First, a CLEC may use the AIN SMS process (which is largely manual) to update a record in an existing U S WEST AIN database for a service such as Remote Access Forwarding. Second, a CLEC may use the U S WEST Service Creation process to create a new AIN service to be placed in a U S WEST AIN database for CLEC use.

For Service Creation, U S WEST provides access to the Creation Environment, allowing CLECS the use of U S WEST's service application development process on a non-discriminatory basis to design, create and test AIN-based services. The elements of service creation and testing are combined to meet the individual needs of the CLEC. The service logic can be established in the U S WEST AIN database after Service Creation. Currently, the service creation process is manual, built by a U S WEST AIN technician, and is the same manual process used for U S WEST service creation.

The Service Management process involves building and maintaining the CLEC end user line record in the U S WEST AIN database for provisioning and call processing. The CLEC may populate end user data into an electronic file for loading by a

1 U S WEST AIN technician into the database. U S WEST is currently developing
2 standards for the development of a gateway or a mediated access capability to further
3 mechanize the processing of CLEC records.

4 The FCC has also proposed a rule that would require U S WEST to offer CLECs the
5 ability to modify or create database records for AIN-based services within a U S WEST
6 AIN database. Such services would be established through CLEC access to a "Service
7 Management System" or SMS:

8 Access, on an unbundled basis, to the service management systems
9 (SMS), to create, modify, or update information in call-related databases[35]

10 U S WEST fulfills the above requirement in Section 10.16 of its proposed SGAT.

11 **Summary**

12 U S WEST meets all of the conditions for Section 271(c)(2)(B)(x) relative to
13 nondiscriminatory access to call-related databases and associated signaling.
14 U S WEST has Commission-approved interconnection agreements in place in Arizona
15 as well as the proposed SGAT, which require U S WEST to make access to its
16 signaling network and call-related databases available to CLECs in a non-discriminatory
17 manner. Moreover, CLECs actually operating in Arizona are interconnected with
18 U S WEST's signaling network and are using U S WEST's call-related databases.

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[35] First Interconnection Order at para. 493; 47 C.F.R. §51.319(e)(3).

Checklist Item No. 11 - Number Portability

Overview

Number portability allows end users to retain, at the same location, their existing telephone numbers when changing to another local service provider. The Act and the FCC rules required U S WEST to deploy long-term (permanent) number portability (LNP) in the Phoenix and Tucson metropolitan statistical areas (MSAs). U S WEST has successfully deployed long-term number portability (LNP) in the Phoenix and Tucson MSAs, according to the FCC's rules, making LNP available to approximately 90 percent of U S WEST's access lines in Arizona.

The Act and the FCC rules allowed for the use of interim number portability (INP) arrangements until long-term number portability is deployed according to the FCC's schedule. INP is available to CLECs for the exchanges outside the Phoenix and Tucson MSAs, until they are converted to LNP based on bona fide requests. In March 1999, U S WEST received bona fide requests to convert sixteen additional exchanges to LNP in Arizona. U S WEST provides INP using four options: remote call forwarding (RCF); direct inward dialing (DID); route indexing, both direct (DNRI) and tandem (PH-RI) routed; and also provides for NXX migration.

U S WEST has legally binding commitments to provide number portability, both interim number portability (INP) and long-term number portability (LNP), available to CLECs through its approved interconnection agreements and the proposed SGAT in Arizona. The end-to-end processes for implementation are complete and detailed procedures

have been documented for the CLECs. As of February 28, 1999, U S WEST has ported 43,294 telephone numbers in Arizona, 11,009 with INP and 32,285 with LNP.

Requirements of the Act and the FCC

The Act requires that "[u]ntil the date by which the Commission issues regulations pursuant to section 251 to require number portability, interim telecommunications number portability through remote call forwarding, direct inward dialing trunks, or other comparable arrangements, with as little impairment of functioning, quality, reliability, and convenience as possible. After that date, full compliance with such regulations."[36]

Both the Act and the FCC define number portability as the ability of customers to retain, at the same location, existing telephone numbers when switching from one service provider to another.[37]

The FCC issued its requirements for both interim and long-term number portability (also referred to as local or permanent number portability) in its First Report and Order and Further Notice of Proposed Rulemaking in CC Docket 95-116 released July 2, 1996. Further requirements and clarifications have been included in subsequent orders released by the FCC regarding deployment and cost recovery in CC Docket 95-116.

For long-term number portability (LNP), the FCC regulations required deployment in the 100 largest metropolitan statistical areas (MSAs) according to a phased implementation schedule that extended through December 1998. The FCC's LNP schedule included

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[36] See Section 271(c)(2)(B)(xi) of the Act.
[37] See Section 3(a)(46) (47 U.S.C. 153) and 47 C.F.R. Section 52.1(k).

1 ten MSAs in U S WEST's region, including the Phoenix and Tucson MSAs.[38] For
2 exchanges outside the top 100 MSAs, beginning January 1, 1999, LECs are to make
3 LNP available within six months after a bona fide request is received.[39]

4 The FCC's rules for interim number portability (INP), like the Act, require U S WEST
5 and all other LECs to "provide transitional measures, which may consist of Remote Call
6 Forwarding (RCF), Flexible Direct Inward Dialing (DID), or any other comparable and
7 technically feasible method, as soon as reasonably possible upon receipt of a specific
8 request from another telecommunications carrier, until such time as the LEC
9 implements a long-term database method for number portability in that area."[40]

10 **U S WEST Satisfies the Requirements of the Act and the FCC**

11 U S WEST has specific legal obligations to make number portability available in its
12 various approved interconnection agreements for Arizona and pursuant to its proposed
13 SGAT in Section 10.1 Interim Number Portability and Section 10.2 Local Number
14 Portability.

15 U S WEST provides long-term number portability (LNP) using the Location Routing
16 Number (LRN) architecture. LRN is an addressing and routing method that allows the
17 re-homing of individual telephone numbers to other switches through use of a
18 database. With LRN, each public network switch is assigned a unique ten-digit LRN,
19 the first six digits of which identify the address of that switch. Each customer's
20 telephone number is matched in a regional database with the LRN for the switch that

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38 See 47 C.F.R. Section 52.23(b)(1).
39 See 47 C.F.R. Section 52.23(c).
40 See 47 C.F.R. Section 52.27.

currently serves that telephone number. The Western Region Number Portability Administration Center (NPAC) database is currently provided and administered by Lockheed Martin IMS as a neutral third party administrator. Unlike interim number portability methods, LNP does not operate by routing a telephone call through the U S WEST central office switch that originally served the specific telephone number. An Advanced Intelligent Network (AIN) trigger, the Office Code Trigger (OCT), causes a query to be launched to a local LNP database to determine the new routing address and send the call to the switch that currently serves that telephone number for call completion. Exhibit MSB-8 illustrates the long-term number portability (LNP) serving arrangements. U S WEST's proposed SGAT in Section 10.2 describes the terms and conditions for providing LNP. The following are portions of the proposed SGAT that contain the general commitments by U S WEST for providing LNP:

> U S WEST will provide number portability in a non-discriminatory manner. U S WEST will coordinate number portability with unbundled loop cutovers in a reasonable amount of time and with minimum service disruption. . . .
>
> U S WEST will offer Local Number Portability, also known as long term number portability (LNP), in compliance with the FCC's rules and regulations. Deployment of LNP will be in accordance with the FCC's implementation schedule. The publication of LNP capable switches and the schedule and status for future deployment will be identified in the Local Exchange Routing Guide (LERG), the Western Region LNP Website at http://lnp.gstworld.net/lnp, and the U S WEST Website at www:uswest.com/com/disclosures/netdisclosure414/indexcontent.html in accordance with industry guidelines. . . .
>
> Upon implementation of LNP pursuant to FCC regulations, both Parties agree to conform to and provide such LNP. Both Parties will conform to LNP industry guidelines, as identified in CC Docket No. 95-116, the North American Numbering Council LNP Architecture and Administrative Plan,

> the LNP Western Region Requirements and Operations Team guidelines, as published in the Western Region LNP website, and state guidelines.[41]

U S WEST provides interim number portability (INP) through remote call forwarding (RCF); direct inward dialing trunks (DID); and route indexing, both direct routed Directory Number Route Indexing (DNRI) and tandem routed, also called Portability Hub-Route Indexing (PH-RI). In addition, U S WEST provides for NXX migration, also called Local Exchange Routing Guide (LERG) reassignment. The INP service is described in the proposed SGAT at Section 10.1. The INP serving arrangements for RCF, DID and route indexing are illustrated in Exhibit MSB-9. The following are the portions of the proposed SGAT that contain the general description and commitment by U S WEST for providing INP:

> Interim Number Portability ("INP") service is a service arrangement that allows an end user customer to retain its dialed telephone number when switching to another service provider. INP service can be provided by U S WEST to CLEC or by CLEC to U S WEST. For purposes of this section, the Party porting traffic to the other Party shall be referred to as the "INP Provider" and the Party receiving INP traffic for termination shall be referred to as the "INP Requestor. . . .
>
> INP applies to those situations where an end user elects to transfer to a new service provider and such end user also wishes to retain its existing telephone number. INP consists of INP Provider's provision to the INP Requestor the capability to route calls placed to telephone numbers assigned to the INP Provider's switches to the INP Requestor's switches. INP is available only for working telephone numbers assigned to the INP Provider's end users who request to transfer to the INP Requestor's service. Local Interconnect Service (LIS) is required for INP. . . .
>
> INP is available as INP-Remote Call Forwarding ("INP-RCF"), Direct Inward Dialing ("DID"), Directory Number Route Index ("DNRI") and NXX Migration. DNRI is available as either direct to an end office or through a tandem, also referred to as DNRI Tandem ("RIPH") or portability hub. NXX Migration, or

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[41] See Sections 10.2.1-10.2.3 of U S WEST's proposed SGAT.

> Local Exchange Routing Guide Reassignment, reassigns the entire central office code (NXX) to the CLEC switch if the code is used solely for one customer.[42]
>
> U S WEST and CLEC will provide INP in a non-discriminatory manner and with as little impairment of functioning, quality, reliability and convenience as possible.[43]

Remote call forwarding (RCF) interim number portability operates by routing a telephone call through the U S WEST central office switch that originally served the customer. The switch forwards the incoming call to the ported number using remote call forwarding technology to the customer's "destination" telephone number assigned by the CLEC. In effect, each terminating call will be treated as two separate calls. The first call, which may be local, toll, or interstate, is from the originating party to the U S WEST switch. The second call is from the U S WEST switch to the CLEC switch. The RCF serving arrangement is illustrated in Exhibit MSB-9. RCF is described in the proposed SGAT, as follows:

> RCF permits a call to an INP Provider's assigned telephone number to be translated to the INP Requestor's dialable local number. With the RCF solution, a permanent RCF is established in U S WEST's switch forwarding any incoming call to the number assigned and maintained in the CLEC switch.[44]

Direct inward dialing (DID) interim number portability also operates by routing a telephone call through the U S WEST central office switch that originally served the customer. The CLEC will establish a DID trunk group from the U S WEST end office to the CLEC end office and the individual telephone numbers will be assigned to that trunk

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42 See Section 10.1.1.1 – 10.1.1.3 of U S WEST's proposed SGAT.
43 See Section 10.1.2.1 of U S WEST's proposed SGAT.
44 See Section 10.1.1.4.1 of U S WEST's proposed SGAT.

group. When the U S WEST end office receives an incoming call to a ported telephone number assigned to the DID type trunk group, the call will be forwarded to the CLEC for call completion over that DID trunk group. The DID serving arrangement is illustrated in Exhibit MSB-9. DID is described in the proposed SGAT, as follows:

> DID permits incoming calls to be ported to the INP Requestor's switch via a DID trunk configuration. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between U S WEST's End Office and CLEC's switch. The traffic on these trunks cannot overflow to other trunks. In addition, inter-switch signaling for DID is limited to multi-frequency (MF). This precludes passing the Calling Line ID to the CLEC switch. With DID, there is no SS7 capability causing CLASS feature limitations. For DID, the INP Provider will deliver the dialed telephone number to the INP Requestor's Central Office.[45]

Route indexing interim number portability also operates by routing a telephone call through the U S WEST central office switch that originally served the customer. There are two types of route indexing – direct trunked, Directory Number Route Indexing (DNRI), and tandem routed, Portability Hub Route Indexing (PH-RI). A permanent route index is assigned to the end user's ported number in the U S WEST switch. The route index points the call to a specific trunk group assigned to the CLEC. If the call is to be sent on a direct trunk group to the CLEC's switch, the dialed 7 digits will be forwarded to the CLEC. If the call is to use an existing U S WEST common trunk group to a local tandem switch, a "pseudo NPA" will first be added to the dialed 7 digits. The 10 digit number (pseudo NPA plus dialed 7 digit number) will be forwarded to the local tandem. The pseudo NPA provides the tandem switch with a code to identify the specific CLEC that the call is destined for. The local tandem will delete the pseudo

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[45] See Section 10.1.1.5 of U S WEST's proposed SGAT.

NPA and forward the dialed 7 digits to the CLEC for call completion. The route indexing serving arrangement is illustrated in Exhibit MSB-9. Route indexing is described in the proposed SGAT, as follows:

> DNRI permits incoming calls to be ported to the INP Requestor's switch via a route index. A permanent route index is assigned to the end user's ported number in the INP Provider's switch. The INP Provider will deliver the dialed seven digit telephone number to the INP Requestor's Central Office. INP Requestor may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible. The INP Requestor will need to specify the number of simultaneous calls to be forwarded for each number ported. DNRI tandem routing requires an additional 30 day lead time to establish technical requirements for routing the ported calls.[46]

U S WEST also makes available NXX migration, often referred to as Local Exchange Routing Guide (LERG) reassignment, in its interconnection agreements and in the proposed SGAT. NXX migration can be used in instances where an NXX assigned to U S WEST is assigned exclusively to one customer, and that customer chooses to be served by a CLEC. In that instance, the entire NXX (10,000 telephone numbers) can be reassigned to the CLEC switch, permitting carriers to route traffic directly to the CLEC switch. This avoids the need for other interim number portability arrangements since all calls to the NXX will route directly to the CLEC rather than to U S WEST. NXX migration is provided for in Section 10.1.1.7 the proposed SGAT.

U S WEST provides long-term number portability (LNP) in Arizona. U S WEST's deployment of LNP was successfully completed and made available for commercial use in all of the Phoenix MSA on August 3, 1998 and in all of the Tucson MSA on November 2, 1998. U S WEST's deployment of LNP in the Phoenix and Tucson MSAs

met the dates specified in the FCC's LNP schedule for the 100 largest MSAs, as revised by approved waiver requests.[47]

Long-term number portability (LNP) is now available to approximately 90 percent of U S WEST's access lines in Arizona. Exhibit MSB-10 is a list of all of U S WEST's switches in Arizona showing the status of LNP deployment.

In March 1999, U S WEST received bona fide requests to convert sixteen additional exchanges outside the Phoenix and Tucson MSAs in Arizona. The schedule for deployment of LNP in additional exchanges for which bona fide requests have been received, are posted on U S WEST's Network Disclosure website[48] and included in the national Local Exchange Routing Guide.

U S WEST has deployed LNP using the Location Routing Number technology in conformance with the FCC's criteria and the industry's guidelines.[49] The industry guidelines were developed by the Local Number Portability Administration working group (LNPA) of the FCC's North American Numbering Council (NANC) as adopted by the FCC, and additional guidelines and agreements have been made by the Western Region's LNP Operations and Technical committee. The LNP guidelines and technical requirements are available on a national website and the Western Region's website.[50]

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46 See Section 10.1.1.6 of U S WEST's proposed SGAT.

47 Orders, CC Docket 96-116, NSD File No. L-98-32, Telephone Number Portability, Petitions for Extension of the Deployment Schedule, released March 31, 1998 and May 15, 1998.

48 U S WEST's Network Disclosure website for scheduled LNP conversions: www.uswest.com/com/disclosures/netdisclosure414/indexcontent.html.

49 Second Report and Order, CC Docket 95-116, RM 8535, Telephone Number Portability, Released August 18, 1997.

50 Local Number Portability technical requirements and guidelines website: www.ported.com. Western Region LNP Operations' website: http://lnp.gstworld.net/lnp.

1 As of February 28, 1999, U S WEST has ported 43,294 telephone numbers in Arizona.
2 U S WEST ported 11,009 telephone numbers using interim number portability (INP)
3 technology and 32,285 telephone numbers have been ported using long-term number
4 portability (LNP). Exhibit MSB-11 shows how many numbers have been ported monthly
5 using INP and LNP in Arizona.

6 The FCC requires that when LNP has been deployed in an area, then interim methods
7 can no longer be used.[51] Interim number portability (INP) is no longer available for
8 ordering by CLECs in the Phoenix and Tucson MSAs. U S WEST is working with the
9 individual CLECs to coordinate the transition of existing INP arrangements to LNP in
10 the Phoenix and Tucson MSAs. As of February 28, 1999, 4,326 INP numbers were
11 converted to LNP service.

12 The deployment of long-term number portability (LNP) in the Phoenix and Tucson
13 MSAs makes LNP available to approximately 90 percent of U S WEST's access lines in
14 Arizona. To date, no orders for interim number portability have been received for
15 exchanges outside the Phoenix and Tucson MSAs, as shown in Exhibit MSB-11. Very
16 few orders for interim number portability are expected in the future.

17 U S WEST has provided documented procedures to CLECs for ordering, provisioning,
18 maintenance and repair of number portability arrangements. Documentation on the
19 methods and procedures for number portability, both INP and LNP, are included in the
20 Interconnect Resale and Resource Guide which is available on U S WEST's website[52]

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[51] See 47 C.F.R. Section 52.27(d); Second Memorandum Opinion and Order on Reconsideration, CC Docket 95-116, Telephone Number Portability, released October 20, 1998.

[52] Interconnect and Resale Resource Guide website: http://www.uswest.com/carrier.

and are described in the proposed SGAT in Sections 10.1 and 10.2. Manual and electronic ordering are available for both INP and LNP, as described in the proposed SGAT in Sections 10.1, 10.2, and 12, and in Mr. Dean Buhler's affidavit. An illustration and brief description of the process flows are included as Exhibit MSB-12. U S WEST has also hosted several number portability workshops covering deployment, testing, network technical requirements and operations, INP to LNP transition, service ordering, provisioning, maintenance and repair. A LNP workshop was held in Arizona on July 23-24, 1998.

U S WEST has processes in place to manage the provisioning of interim number portability (INP) and has continued to evolve those processes to provide the service with as little impairment of quality, reliability, and convenience as possible. U S WEST has proactively project managed the overall provisioning process and coordination of the disconnect and reconnect service orders for INP, including calls to the CLEC 48 hours prior to and on the due date to confirm that the CLEC and customer will be ready on the due date and specified time of day. U S WEST has extended its normal hours of operation for the work centers to process number portability orders from 7:00 a.m. to 7:00 p.m., plus provided for both coordinated and non-coordinated INP out-of-hours conversions to minimize the out-of-service impacts on customers. The provisions for coordinated and non-coordinated INP out-of-hours conversions are included in the Interconnect and Resale Resource Guide and in the proposed SGAT. The following are the general provisions in the proposed SGAT for out-of-hours cuts with further details provided in Section 10.1.3.7.4 for non-coordinated out of hours cuts and Section 10.1.3.7.5 for coordinated out of hours cuts.

> Out of hours cuts permit a CLEC to select either a coordinated or non-coordinated cut for INP service outside of U S WEST's normal business hours. For planning purposes, CLEC shall provide U S WEST with a forecast of out of hours coordinated cuts at least two weeks prior to a CLEC placing an order in a particular state. Forecasts should include the anticipated Frame Due Times and volumes to be ported out of hours.[53]

Performance Indicators

U S WEST has developed performance indicators for the number portability service. The performance measures for are described in the proposed SGAT in Section 20 – Service Performance. A more detailed description of these performance indicators are included in Mr. Mike Williams' affidavit. The nine performance measures related to number portability are:

1. Installation Commitments Met – INP (percent) [OP-3]
2. Installation Interval – INP (average) [OP-4]
3. Installation Trouble Reports – INP (percent) [OP-5]
4. Coordinated Cutover Intervals – INP (average) [OP-8]
5. Out of Service Cleared within 24 hours (percent) [MR-3]
6. All Troubles Cleared within 48 hours (percent) [MR-4]
7. Mean Time to Restore (average) [MR-6]
8. Repair Repeat Report Rate (percent) [MR-7]
9. Trouble Rate (percent) [MR-8][54]

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53 See Section 10.1.3.7.1 of U S WEST's proposed SGAT.
54 See Section 20.2.1 of U S WEST's proposed SGAT.

Cost Recovery

The FCC established two competitive neutrality guidelines for interim number portability (INP) cost recovery. These guidelines require that any state mechanism:

1) not give one carrier an appreciable, incremental cost advantage over another carrier, when competing for a specific subscriber; or
2) not have a disparate effect on the ability of CLECs to earn a normal return on their investment.

The FCC also required sharing of the terminating access revenue by the carrier forwarding a call and the carrier terminating the call to a ported number.

U S WEST charges CLECs for INP service in a competitively neutral manner as determined by the Arizona Commission.[55] The rate elements for INP are described in the proposed SGAT at Section 10.1.5 and the specific rates are shown in the proposed SGAT in Exhibit A. U S WEST is negotiating with the individual CLECs on their share of the terminating access revenues.

The FCC provided for long-term number portability (LNP) cost recovery through two federally tariffed charges:[56]

1) a monthly end-user surcharge to take effect no earlier than February 1, 1999, and to last no longer than five years; and,

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[55] Arizona Consolidated Cost Docket No. U-3021-96-448 et al, Decision No. 60635, issued January 30, 1998.

1 2) an inter-carrier charge for query services provided to other carriers.

2 U S WEST filed its federal LNP tariffs January 26, 1999, which are in effect but subject
3 to a pending FCC tariff investigation.

4 **Summary**

5 The Act, and the resulting FCC rules, permit U S WEST to satisfy the number portability
6 checklist item through the provision of interim number portability until the FCC issues
7 regulations for permanent (long-term) number portability, and then after that date,
8 compliance with such regulations. Contractual agreements approved in Arizona and
9 the proposed SGAT make number portability available to CLECs. U S WEST
10 successfully completed deployment of long-term number portability (LNP) in the
11 Phoenix and Tucson MSAs, according to the FCC's rules and schedule, making LNP
12 available to 90 percent of U S WEST's access lines in Arizona. For exchanges outside
13 the Phoenix and Tucson MSAs in Arizona, if any orders for number portability are
14 received prior to implementation of LNP, U S WEST will provide interim number
15 portability (INP) through four different alternatives: remote call forwarding, direct inward
16 dialing, route indexing (direct and tandem routed), and NXX migration (also referred to
17 as Local Exchange Routing Guide reassignment). U S WEST has documented
18 processes and procedures for implementation of number portability and has ported over
19 43,000 telephone numbers to CLECs in Arizona. I have shown that U S WEST
20 provides number portability in Arizona that satisfies the requirements of the Act and the
21 FCC.

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[56] Third Report and Order, CC Docket 95-116, RM 8535, Telephone Number Portability, Released

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May 12, 1998. 47 C.F.R. Section 52.32 - 52.33.

1 **Checklist Item No. 12 - Local Dialing Parity**

2 **Overview**

3 U S WEST complies with the local dialing parity checklist requirements. The Act, and
4 the resulting FCC rules, require that customers be able to dial the same number of
5 digits to make any given local call without regard to the local service provider of the
6 calling or called party. All customers - regardless of whether local service is provided
7 by a CLEC or U S WEST - are able to dial the same number of digits to originate local
8 calls.

9 **Requirements of the Act and the FCC**

10 The Act requires U S WEST to provide nondiscriminatory access to such services or
11 information as are necessary to allow the requesting carrier to implement local dialing
12 parity in accordance with the requirements of Section 251(b)(3) of the Act.[57] Section
13 251(b)(3) of the Act requires all LECs to provide dialing parity to competing providers of
14 telephone exchange service and telephone toll service, and have the duty to permit all
15 such providers to have nondiscriminatory access to telephone numbers, operator
16 services, directory services, directory assistance, and directory listing, with no
17 unreasonable dialing delays.

18 The Act defines "dialing parity" to mean that a person that is not an affiliate of a local
19 exchange carrier is able to provide telecommunications services in such a manner that
20 customers have the ability to route automatically, without the use of any access code,

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[57] See Section 271(c)(2)(B)(xii) of the Act.

1 their telecommunications to the telecommunications services provider of the customer's
2 designation from among two or more telecommunications services providers (including
3 such local exchange carrier).[58]

4 The FCC in its Second Interconnection Order established the requirement for local
5 dialing parity that customers within a local calling area are able to dial the same number
6 of digits to make a local telephone call notwithstanding the identity of the customer's or
7 the called party's service provider.[59]

8 **U S WEST Satisfies the Requirements of the Act and the FCC**

9 U S WEST has specific legal obligations to make local dialing parity available in its
10 various interconnection agreements and pursuant to the proposed SGAT. The
11 proposed SGAT states:

12 The Parties shall provide local dialing parity to each other as required under
13 Section 251(b)(3) of the Act. U S WEST will provide local dialing parity to
14 competing providers of telephone exchange service and telephone toll
15 service, and will permit all such providers to have non-discriminatory
16 access to telephone numbers, operator services, directory assistance, and
17 directory listings, with no unreasonable dialing delays.[60]

18 There are no differences in the number of digits U S WEST or CLEC customers must
19 dial to complete a given local call to any other local customer or to access operator
20 services or directory assistance.

21 U S WEST does not impose any requirement or technical constraint that requires CLEC
22 customers to dial any access codes or greater number of digits than U S WEST

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58 See Section 3(a)(39) (47 U.S.C. 153) of the Act.
59 See 47 C.F.R. Section 51.207.
60 See Section 14.1 of U S WEST's proposed SGAT.

customers to complete the same call, or that causes CLEC customers to experience inferior quality with post-dialing delays. Originating calls from CLECs to a U S WEST central office are processed in accordance with technical requirements for local switching and incur no unreasonable dialing delay.[61] Dialed digits transmitted or received by U S WEST's switches utilize the same translations and routing tables for completing a call, regardless of whether the call originates on another carrier's network. A call originating from a CLEC's network is treated the same as a call originating from within U S WEST's network, because U S WEST's switches can not distinguish between such calls.

There are no charges for local dialing parity.

Although toll dialing parity is not a Section 271 checklist requirement, U S WEST completed implementation of toll dialing parity (1+ equal access dialing) for intraLATA calls in Arizona as of April 20, 1996. U S WEST's intraLATA toll dialing parity implementation was made pursuant to an implementation plan approved by the Arizona Commission.[62]

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[61] Technical Requirements LSSGR TR-NWT-000505 Call Processing and Special Report SR-TSV-002275, BOC Notes on the LEC Networks.

[62] Arizona Docket No. R-0000-95-499, IntraLATA Equal Access Rules, Decision No. 59452, issued December 21, 1995.

Summary

The Act, and the related FCC rules, require that U S WEST provide local dialing parity such that telephone exchange service customers dial the same number of digits to make a local telephone call without regard to the local service provider of the calling or called party. There are contractual agreements in place in Arizona and the proposed SGAT making local dialing parity available to CLECs. For the factors related to local dialing parity (telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays), the dialing patterns or use of the services are the same, regardless of whether the customer uses U S WEST's service or a CLEC's service.

Conclusion

My affidavit addressed the requirements of the Telecommunications Act of 1996 for five of the checklist items: access to 911/E911 emergency services, numbering administration, access to signaling and call-related databases, number portability, and local dialing parity. I described how U S WEST has met the requirements found in the Act and the related FCC regulations in terms of our various approved interconnection agreements and proposed SGAT in Arizona, and how U S WEST fulfills those requirements. Therefore, I recommend that the Commission find that U S WEST has satisfied the requirements of Section 271(c)(2)(B)(vii) 911 and E911 Services, Section 271(c)(2)(B)(ix) Numbering Administration, Section 271(c)(2)(B)(x) Databases and Associated Signaling, Section 271(c)(2)(B)(xi) Number Portability, and Section 271(c)(2)(b)(xii) Local Dialing Parity checklist items.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

MARGARET S. BUMGARNER

U S WEST COMMUNICATIONS

MARCH 25, 1999

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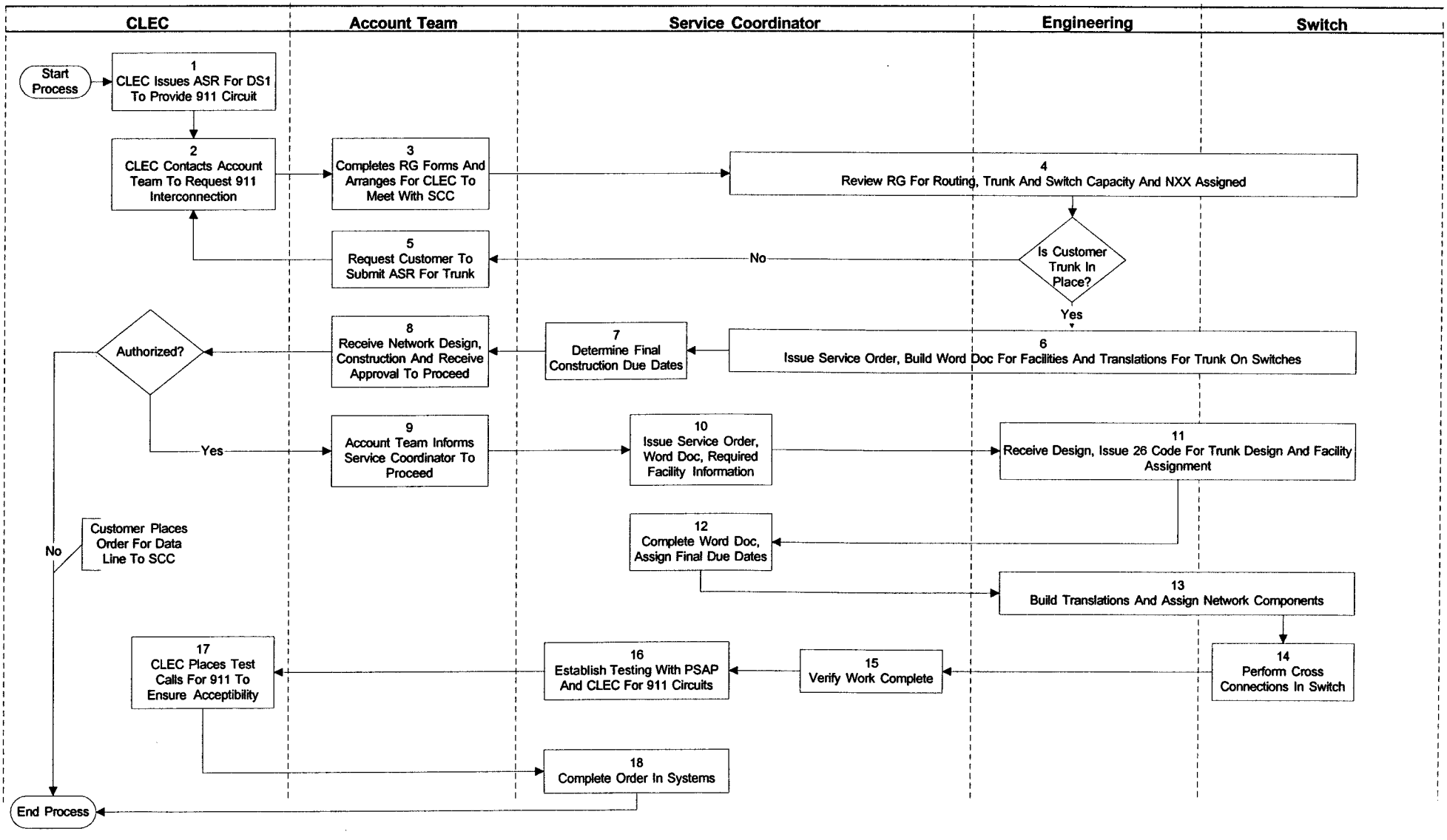
Witness Qualification Statement

I, Margaret S. Bumgarner, am currently employed by U S WEST Communications (U S WEST) as a Manager - Federal Regulatory Issues in the Public Policy organization.

In 1973, I received a Bachelor of Science Degree in Education/Biological Sciences from Washington State University, Pullman, Washington. In 1973, I started working for Pacific Northwest Bell as a supervisor in the network organization. I held several management positions in the network organization including installation, assignment, installation and repair service centers, network budget analysis, switching operations and network administration staff. In 1982, I began working in the Planning and Engineering department doing divestiture network planning, prepared the network equal access compliance plan, and I supervised the staff for switch engineering and network design. In 1986, I became U S WEST's representative to the national industry fora addressing technical network compatibility issues and numbering issues. I also managed the network planning groups responsible for numbering and common channel signaling. For the past four years, I have had responsibility for a wide range of federal public policy issues, including numbering, access reform, and interconnection.

911 FACILITY BASED PROCESS FLOW

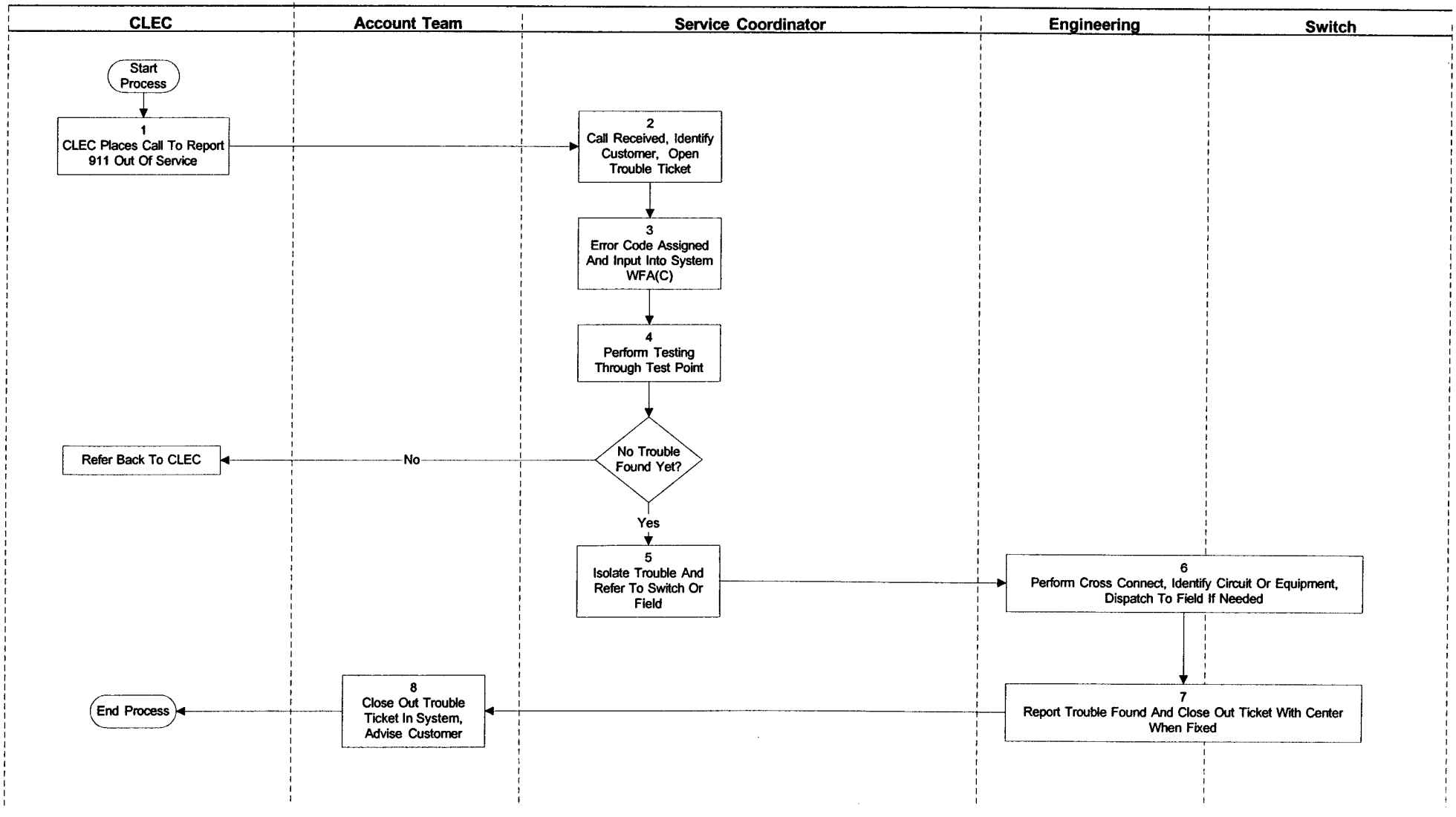


911 Facility Based Process

Task List

Assoc Task #	Process
1	CLEC must have DS1 in place via ASR process for 911 circuits.
2 and 3	Obtain preorder/order information and network requirements. Account team completes RG2900929.
4	Network (O&T) verifies that facilities are available to 911 router location(s).
5	If no trunking in place, CLEC must issue ASR.
6	Service order issued by 911 Center. Word Doc issued for facilities and circuit paths.
7	CLEC interval validated based on network critical dates.
8	Account team provides final due date and refers CLEC to SCC for Database administration. Service order issued for data link between the CLEC and SCC for 911 record update transmissions to ALI database.
9	Account team confirms authorization to proceed with 911 Center.
10	Service order is issued into Service Order Processor (SOP). Final network designs issued.
11	Firm Order Commitment (FOC) is issued to CLEC. Trunk design, facility assignments, and translations are determined.
12 & 13	Complete Word Doc and final translations are made.
14	Network connections in switch and facilities are made.
15	Verification of work is performed to determine if ready for testing.
16 & 17	911 Center coordinates testing with the CLEC and PSAP to ensure 911 calls can be made according to standards.
18	CLEC approves work is complete and accepted. Orders are completed in all systems.

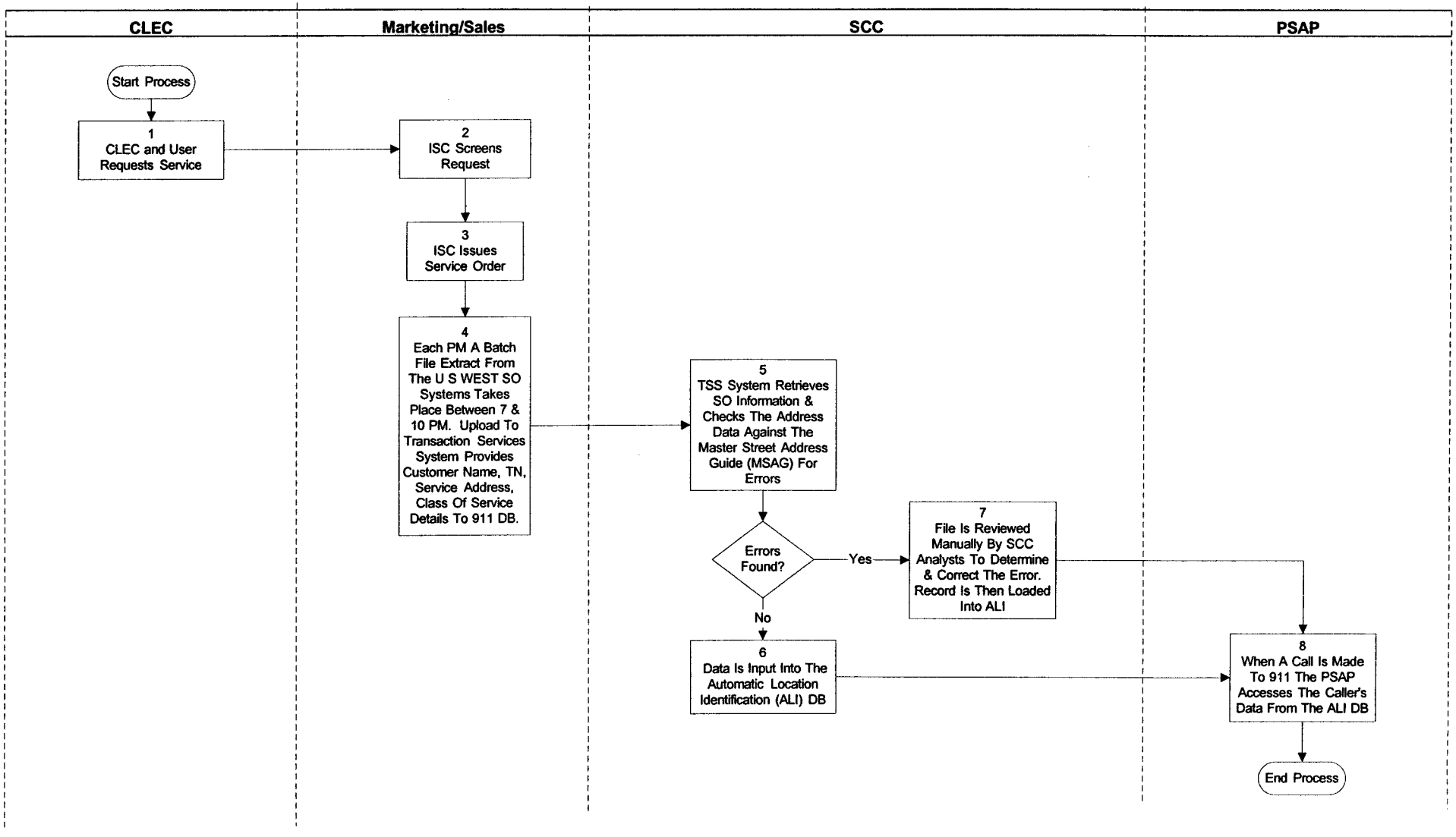
911 FACILITY BASED REPAIR FLOW



911 Facility Based Repair
Task List

Assoc. Task #	Process
1 & 2	Trouble ticket submitted. CLEC must report trouble to the 911 Care Center(**1-800-357-0911**). With the trouble, state the company they represent and provide a circuit ID #. (This is the same procedure required by U S WEST for its retail (PSAP) customers.)
3	Process ticket received from CLEC. Open trouble ticket in Work Force Administration system (WFA-C) and enter error codes.
4	Trouble ticket created. Begin system tests to isolate through circuit test points if available.
5	Analyze trouble ticket, identify location, and assign to appropriate organization for repair.
6	When trouble location cannot be identified, ticket assigned to Installation & Maintenance Technician. This may require a dispatch of personnel to Central Office (Switch) locations or to the field.
7	Trouble ticket received in Network Operations. Trouble is isolated. Trouble repaired. Trouble ticket updated for status to center and customer, or closed out in the system with results of problem and corrective action or work performed noted. Customer is notified to ensure acceptability and verify that service is restored.
8	911 Center closes out trouble ticket in the system and final acceptance by customer is verified.

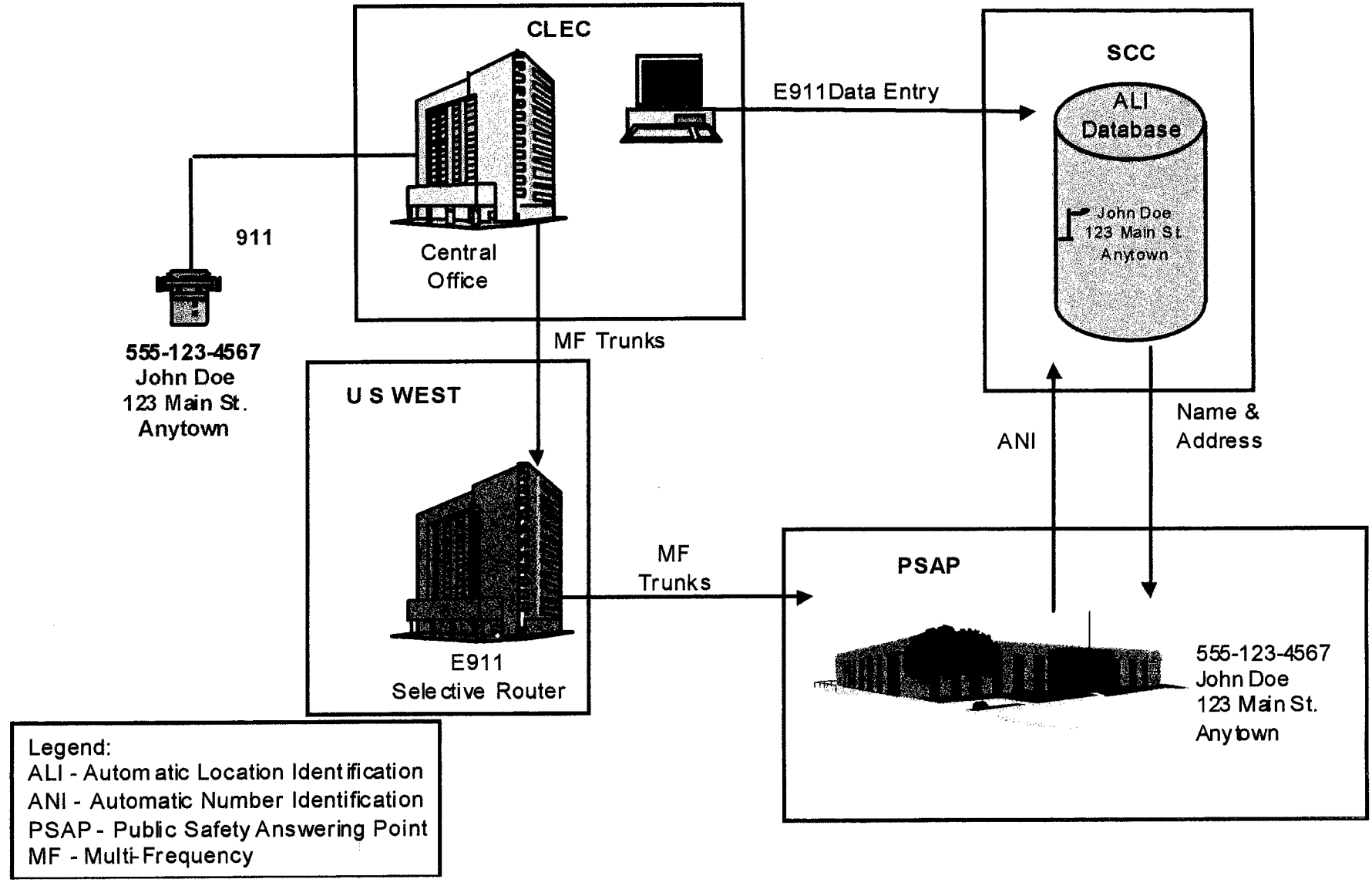
911 RESALE PROCESS FLOW



911 Resale
Task List

Assoc. Task #	Process
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ICS).
2 and 3	Obtain preorder/order information and review LSR and associated forms for completeness.
4	Service Order is issued into Service Order Processor (SOP).
5	Service is provisioned and order is completed in SOP.
6	Transaction Services System (TSS) electronically searches each SOP for completed orders and batch uploads between 7 & 10 PM each business day.
7	TSS electronically reviews customer record for any 911 relevant data fields; check format and matches address information against the MSAG for accuracy. If OK record is entered by TSS into ALI – DB. If not, record errors out for analyst to resolve discrepancy.
8	When record loaded in ALI, SCC maintains the record for future use should a 911 call be made. At the time of a 911 call, a query from the selective router causes the ALI records associated with a particular telephone number to be sent to the caller's PSAP.

ENHANCED 911



Summary
SCC TSS E911 System Performance Report
Arizona

		Records Processed	Records in Error		Process Time	Cum. TSS Error Database	
Month	Company	Count	Count	Percent of Service Order Records	Average Minutes	Count	Percent of TSS TNs
December, 1998	ICOs (18)	12,003	2,170	18.08%	83.39	110	0.11%
	U S WEST (+ Resale)	194,381	22,387	11.52%	391.18	6,476	0.23%
	Default Report Group	21	21	100.00%	60	95	0.00%
Total		**206,405**	**24,578**	**11.91%**	**373.25**	**6,681**	**0.23%**
January, 1999	ICO (17)	17,431	5,615	32.21%	100.88	2	0.00%
	U S WEST (+ Resale)	160,149	11,727	7.32%	154.15	2,712	0.10%
	Default Report Group	46	46	100.00%	31.09	4,518	0.00%
Total		**177,626**	**17,388**	**9.79%**	**148.89**	**7,232**	**0.25%**
February, 1999	ICO (17)	12,504	4,317	34.52%	207.03	3	0.00%
	U S WEST (+Resale)	223,359	20,907	9.36%	501.61	2,544	0.09%
	Default Report Group	84	84	100.00%	8.39	2,292	0.17%
Total		**235,947**	**25,308**	**10.73%**	**485.82**	**4,839**	**0.17%**

ICO = Independent Company.
TSS = Transaction Service System

U S WEST C.O. CODE ASSIGNMENTS

(September 1997 - August 1998)

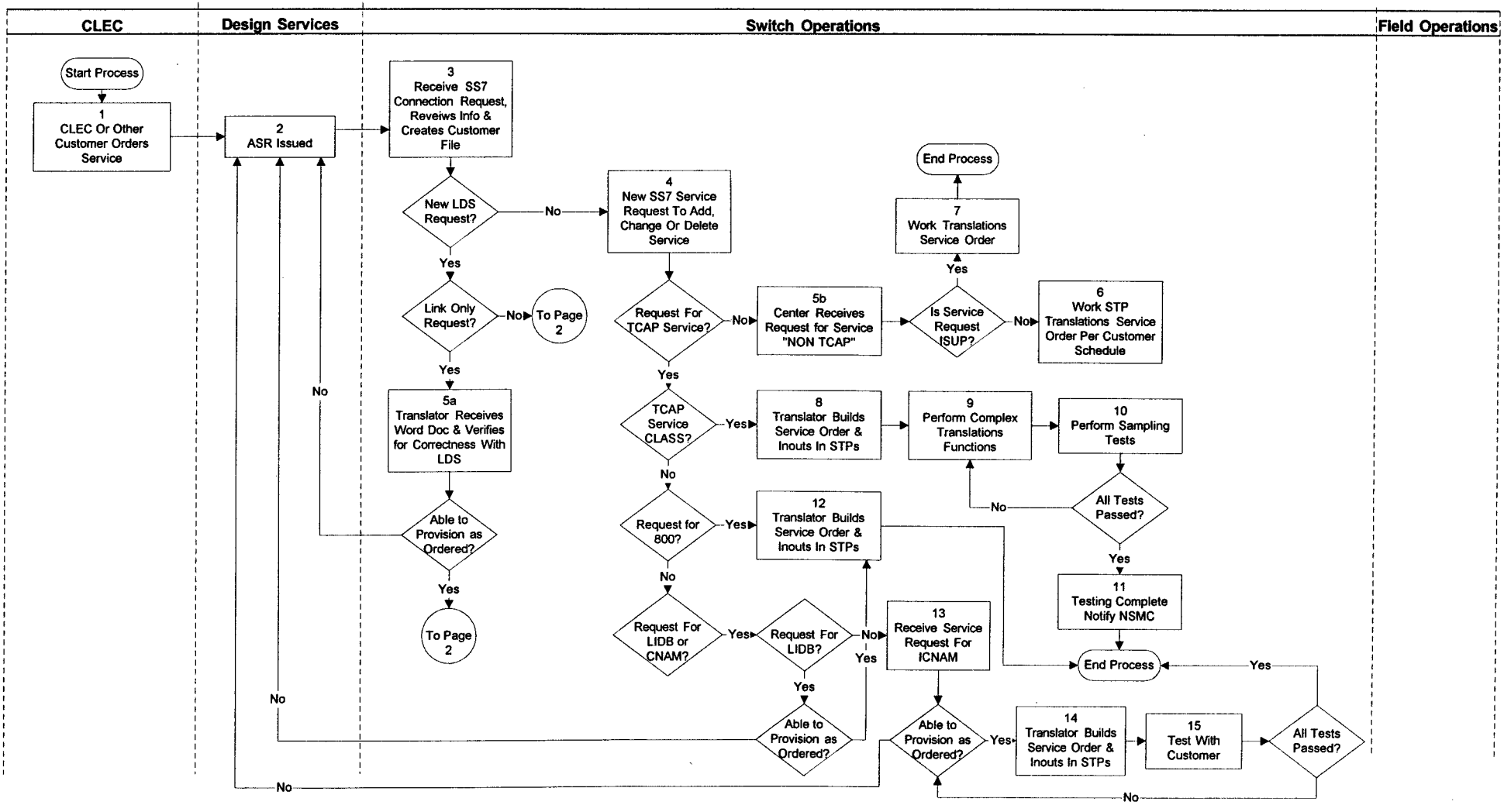
ARIZONA

SWITCH ID/POI	Rate Center	CO.	APP. DATE	REC. DATE	RESP. DATE	EFF. DATE	NPA	NXX	Days Rec to Resp	Sat Sun Adj
1997										
PHNAAZ04DS0	Phoenix	CLEC	11/07/97	11/08/97	11/18/97	01/07/98	602	648	10	6
PHNAAZ04DS0	Cameron	CLEC	11/07/97	11/11/97	11/20/97	01/07/98	520	945	9	7
PHNAAZ04DS0	Campe Verd	CLEC	11/07/97	11/11/97	11/20/97	01/07/98	520	946	9	7
PHNZAZ87DS0	Phoenix	CLEC	11/11/97	11/14/97	11/26/97	01/17/98	602	889	12	8
PHNYAZUXDS	Phoenix	CLEC	11/20/97	12/04/97	12/05/97	02/10/98	602	760	1	1
PHNZAZDMDS	Casa Grande	CLEC	11/03/97	12/10/97	12/10/97	02/10/98	520	582	0	0
TCSMAZEEDS	Nogales	CLEC	11/03/97	12/10/97	12/10/97	02/10/98	520	802	0	0
TCSMAZEEDS	Sierra Vista	CLEC	11/03/97	12/10/97	12/10/97	02/10/98	520	895	0	0
PHNZAZDMDS	Yuma	CLEC	12/10/97	12/10/97	12/10/97	02/10/98	520	982	0	0
PHNXAZMADS	PHOENIX	CLEC	12/19/97	12/31/97	01/07/98	02/23/98	602	472	7	4
1998										
PHNZAZDMDS	GILA BEND	CLEC	01/27/98	01/27/98	02/06/98	03/27/98	520	482	10	8
TCSMAZEEDS	TUCSON	CLEC	01/22/98	01/30/98	02/04/98	03/12/98	520	202	5	3
TCSMAZEEDS	TUCSON	CLEC	01/22/98	01/30/98	02/04/98	03/12/98	520	901	5	3
PHNZAZDMDS	PHOENIX	CLEC	01/22/98	01/30/98	02/02/98	03/12/98	602	682	3	1
PHNZAZDMDS	PHOENIX	CLEC	01/22/98	01/30/98	02/02/98	03/12/98	602	792	3	1
SCDLAZQFDS	PHOENIX	CLEC	03/31/98	04/28/98	04/29/98	07/28/98	602	343	1	1
SCDLAZQFDS	PHOENIX	CLEC	04/07/98	04/28/98	04/29/98	08/04/98	602	344	1	1
SCDLAZQFDS	PHOENIX	CLEC	04/07/98	04/28/98	04/29/98	08/04/98	602	346	1	1
SCDLAZQFDS	PHOENIX	CLEC	03/31/98	04/28/98	04/29/98	07/28/98	602	349	1	1
CHDNAZ79DS	PHOENIX	CLEC	04/27/98	05/12/98	05/20/98	07/15/98	602	659	8	6
PHNYAZUXDS	PHOENIX	CLEC	07/22/98	07/22/98	07/31/98	09/26/98	602	626	9	7
SCDLAZQFDS	COTTONW	CLEC	07/29/98	08/04/98	08/11/98	10/03/98	520	340	7	5
SCDLAZQFDS	PRESCOTT	CLEC	07/29/98	08/04/98	08/14/98	10/03/98	520	350	10	8
TCSNAZDZDS	TUCSON	CLEC	07/30/98	08/04/98	08/11/98	09/01/98	520	545	7	5
SCDLAZQFDS	WINSLOW	CLEC	07/29/98	08/04/98	08/11/98	10/03/98	520	588	7	5
SCDLAZQFDS	PAYSON	CLEC	07/29/98	08/04/98	08/11/98	10/03/98	520	596	7	5
PHNXAZMADS	PHOENIX	CLEC	08/04/98	08/04/98	08/14/98	09/01/98	602	293	10	8
SCDLAZQFDS	GLOBE	CLEC	07/29/98	08/06/98	08/14/98	10/03/98	520	351	8	6
SCDLAZQFDS	TUCSON	CLEC	07/29/98	08/06/98	08/14/98	10/03/98	520	352	8	6
SCDLAZQFDS	WINSLOW	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	589	3	3
SCDLAZQFDS	PAYSON	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	599	3	3
SCDLAZQFDS	COTTONW	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	641	3	3
SCDLAZQFDS	PRESCOTT	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	756	3	3
SCDLAZQFDS	GLOBE	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	813	3	3
SCDLAZQFDS	TUCSON	CLEC	07/29/98	08/11/98	08/14/98	10/03/98	520	989	3	3
PHNXAZMADS	FLAGSTAFF	CLEC	08/12/98	08/19/98	08/22/98	10/19/98	520	221	3	3
TCSNAZMADS	TUCSON	CLEC	08/12/98	08/19/98	08/23/98	10/19/98	520	239	4	4
										3.76

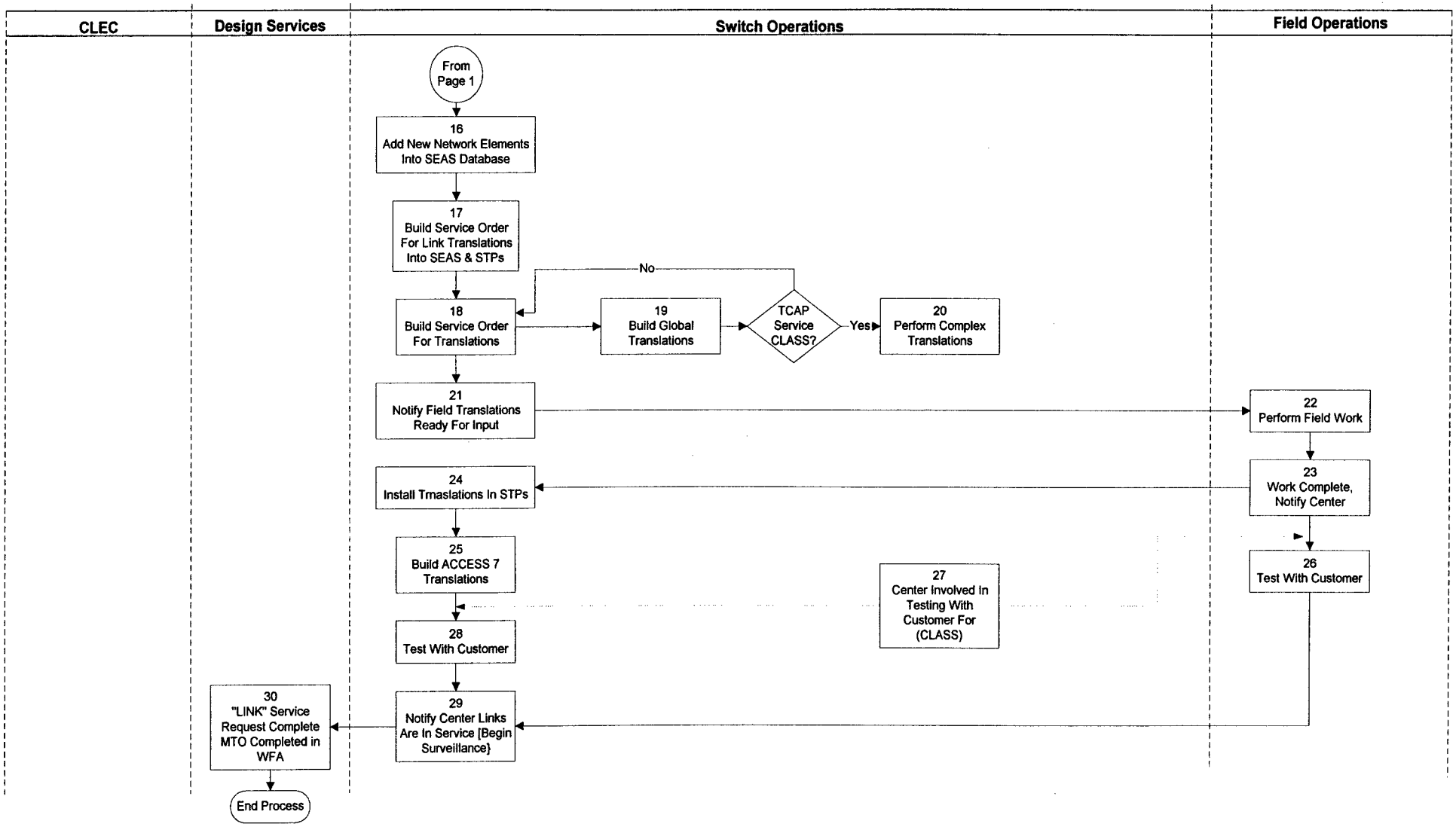
1997										
CTWDAZMAD	Cottonwood	USW	08/04/97	09/03/97	09/04/97	11/07/97	520	649	1	1
TEMPAZMADS	Phoenix	USW	09/30/97	10/10/97	10/13/97	12/04/97	602	638	3	1
TCSNAZSOCG	Tucson	USW	10/17/97	10/17/97	10/29/97	12/27/97	520	434	12	8
PHNXAZNODS	Phoenix	USW	10/17/97	10/29/97	11/10/97	12/27/97	602	745	12	8
TCSNAZMADS	Tucson	USW	11/05/97	11/06/97	11/17/97	01/17/98	520	879	11	7
SCDLAZSHDS	Phoenix	USW	11/06/97	11/06/97	11/18/97	01/17/98	602	767	12	8
AGFIAZSRDS0	Phoenix	USW	11/13/97	11/14/97	11/26/97	01/24/98	602	825	12	8
TCSNAZNOCG	Tucson	USW	11/20/97	11/19/97	12/02/97	02/01/98	520	877	13	8
PRVYAZPPDS	Phoenix	USW	12/08/97	12/08/97	12/17/97	02/12/98	602	342	9	7
1998										
SCDLAZTHDS	PHOENIX	USW	12/16/97	12/24/97	01/07/98	02/18/98	602	609	14	8
TEMPAZMADS	PHOENIX	USW	01/02/98	01/02/98	01/21/98	03/10/98	602	449	19	13
CHNDAZMADS	PHOENIX	USW	01/05/98	01/05/98	01/15/98	03/01/98	602	726	10	8
MESAAZGIDS0	PHOENIX	USW	01/05/98	01/05/98	01/15/98	03/01/98	602	539	10	8
SCDLAZMADS	PHOENIX	USW	01/05/98	01/19/98	01/27/98	03/10/98	602	429	8	6
PHNXAZNODS	PHOENIX	USW	01/23/98	01/23/98	02/02/98	03/01/98	602	798	10	6
TEMPAZMADS	PHOENIX	USW	01/26/98	01/26/98	02/04/98	03/10/98	602	884	9	7
PHNXAZMADS	PHOENIX	USW	01/22/98	01/29/98	02/05/98	04/04/98	602	712	7	5
PHNXAZEADS	PHOENIX	USW	02/02/98	02/06/98	02/13/98	04/05/98	602	685	7	5
PRSCAZMADS	PRESCOTT	USW	02/16/98	02/16/98	02/25/98	04/16/98	520	443	9	7
TCSNAZNODS	TUCSON	USW	02/20/98	02/20/98	03/03/98	04/20/98	520	229	11	7
PHNXAZBWDS	PHOENIX	USW	02/17/98	02/26/98	02/28/98	04/21/98	602	772	2	2
MESAAZMADS	PHOENIX	USW	02/27/98	02/27/98	03/05/98	05/01/98	602	733	6	4
NGLSAZMWD	NOGALES	USW	02/27/98	03/04/98	03/05/98	05/01/98	520	375	1	1
TCSNAZSODS	TUCSON	USW	02/14/98	03/05/98	03/06/98	05/29/98	520	807	1	1
PHNXAZNEDS	PHOENIX	USW	03/11/98	03/13/98	03/17/98	05/11/98	602	522	4	2
TCSNAZCRDS	CRAYCROF	USW	04/01/98	04/01/98	04/08/98	06/01/98	520	514	7	5
PHNXAZSECG	PHOENIX	USW	04/01/98	04/01/98	04/08/98	06/13/98	602	426	7	5
PHNXAZWEDS	PHOENIX	USW	04/01/98	04/01/98	04/08/98	06/01/98	602	442	7	5
CVCKAZMADS	PHOENIX	USW	04/13/98	04/13/98	04/23/98	06/24/98	602	575	10	8
PHNXAZPRDS	PHOENIX	USW	04/10/98	04/22/98	04/23/98	06/15/98	602	773	1	1
PHNXAZSECG	PHOENIX	USW	04/01/98	04/23/98	04/30/98	06/13/98	602	562	7	5
CHNDAZWED	PHOENIX	USW	04/23/98	04/24/98	04/27/98	07/11/98	602	783	3	1
PHNXAZSEDS	PHOENIX	USW	04/10/98	04/27/98	04/30/98	06/15/98	602	454	3	3
CHNDAZSODS	PHOENIX	USW	04/01/98	04/27/98	04/30/98	06/13/98	602	883	3	3
LTPKAZMARS	PHOENIX	USW	05/08/98	05/11/98	05/20/98	07/13/98	602	536	9	7
SCDLAZTHDS	PHOENIX	USW	05/13/98	05/26/98	05/26/98	07/24/98	602	367	0	0
TEMPAZMCDS	PHOENIX	USW	05/19/98	05/27/98	06/03/98	08/03/98	602	775	7	5
SPRSAZMACG	PHOENIX	USW	05/21/98	05/29/98	06/03/98	08/03/98	602	354	5	3
FTMDAZMADS	PHOENIX	USW	05/29/98	06/22/98	06/26/98	08/10/98	602	836	4	4
TEMPAZMADS	PHOENIX	USW	06/29/98	07/03/98	07/08/98	09/12/98	602	317	5	4
PHNXAZMADS	PHOENIX	USW	07/08/98	07/14/98	07/16/98	09/26/98	602	744	2	2
CHNDAZMADS	PHOENIX	USW	07/27/98	07/30/98	07/31/98	09/27/98	602	782	1	1
										4.95

Average Number of Days for Assignment

SIGNALING SYSTEM 7 PROVISIONING PROCESS FLOW



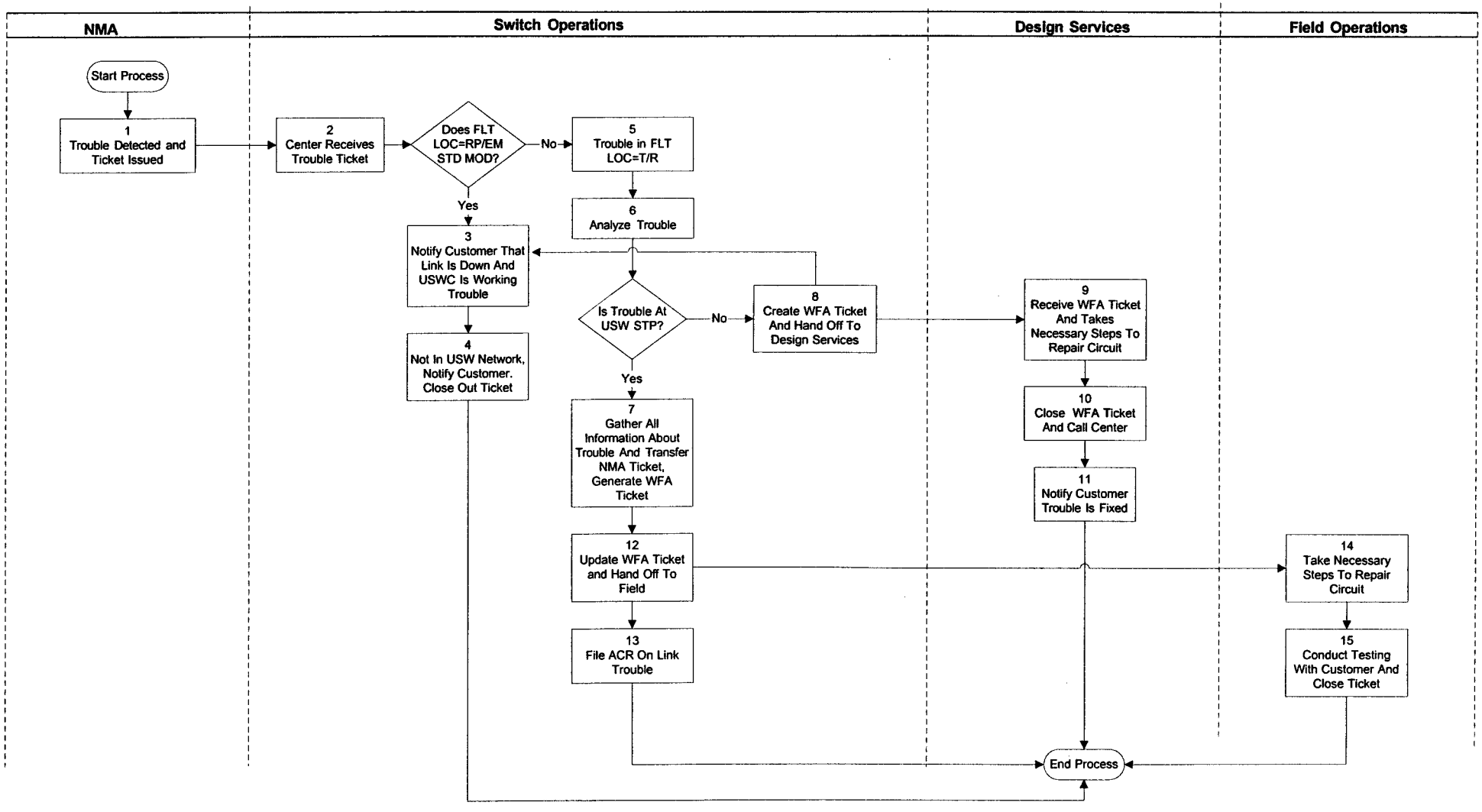
SS7 PROVISIONING PROCESS FLOW



Signaling System 7 Provisioning
Task List

Assoc. Task #	Process
1	CLEC issues ASR. Pre-certification for interoperability completed.
2 and 3	SS7 request is reviewed and determination made about new or addition to existing service. If link request only, Word Doc is issued.
4	If new SS7 service request, the specific type of service dictates next steps.
5, 6 & 7	If non-TCAP and ISUP only, translations for service are arranged for ISUP signaling format to existing network trunking.
8 & 9	If TCAP service, translator builds TCAP assignments in STPs.
10	Testing with STPs completed; Network Channel (NC) and Network Channel Interface verified.
11	Switch Operations completes order in system and notifies customer.
12, 13, 14	If service request is for database access (LIDB, ICNAM or 800 service), translations are built in STPs for global networking.
15	Test; refer to translator for corrective action, if necessary. When completed, arrange for coordinated testing with customer for acceptance and final turn-up of the service.
16, 17 18, 19 & 20	If accepted, make final translations in network and entry of global title information to administrative systems.
21, 22, & 23	Notify field that translations are ready for input. Perform any physical field work necessary to activate service.
24	Install translations into STPs.
25	Build Access 7 translations for recording of message detail.
26 & 27	Test with customer the access to databases and accuracy of messaging.
28 & 29	Notify Network Monitoring centers of link activation for surveillance purposes. Complete any additional acceptance testing with customer specific to the application(s) or service request.
30	Complete service request in provisioning and maintenance systems for administration and billing purposes.

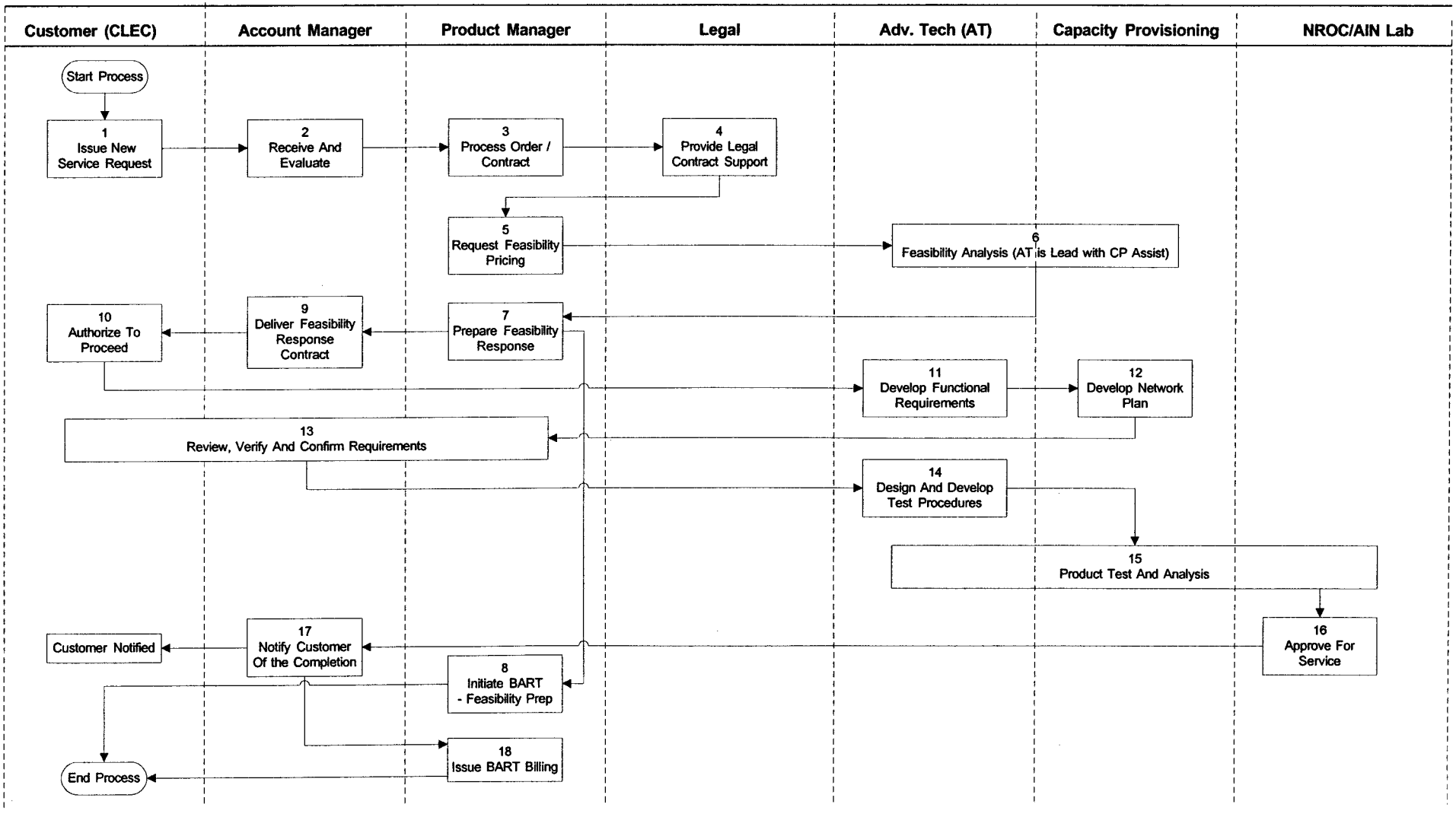
SS7 REPAIR PROCESS FLOW



Signaling System 7 Repair
Task List

Assoc. Task #	Process
1 & 2	Customer opens trouble ticket through system interface or contacts Account Management Center to report SS7 trouble. Testing by Customer may or may not have taken place.
3	If trouble is detected through network monitoring by U S WEST or other diagnostic tools, customer is notified that U S WEST is working on trouble.
4	Testing determines trouble is not in U S WEST portion of the circuit. Trouble ticket is closed after customer notification.
5 & 6	If trouble is determined to be in U S WEST network, trouble analysis continues.
7	Open ticket in Work Force Administration system.
8	WFA system assigns trouble case to Design Services Center for further testing.
9	If link is isolated, check translations and retranslated, if necessary. If link problem is resolved, close trouble ticket. Notify customer.
10, 11, 12, & 13	If design problem with circuit, issue redesign to meet performance standards. If design problem resolved, close the ticket and notify the customer. If not corrected, update WFA ticket and dispatch to Field.
14	Field dispatch to repair physical circuit. Status to customer and estimated time to repair is made. Corrective action taken.
15	When problem is corrected, customer is notified to coordinate testing and acceptance of circuit operations. Ticket is closed after concurrence by customer.

ACCESS TO AIN SERVICE CREATION ENVIRONMENT (AASCE) MACRO PROCESS FLOW

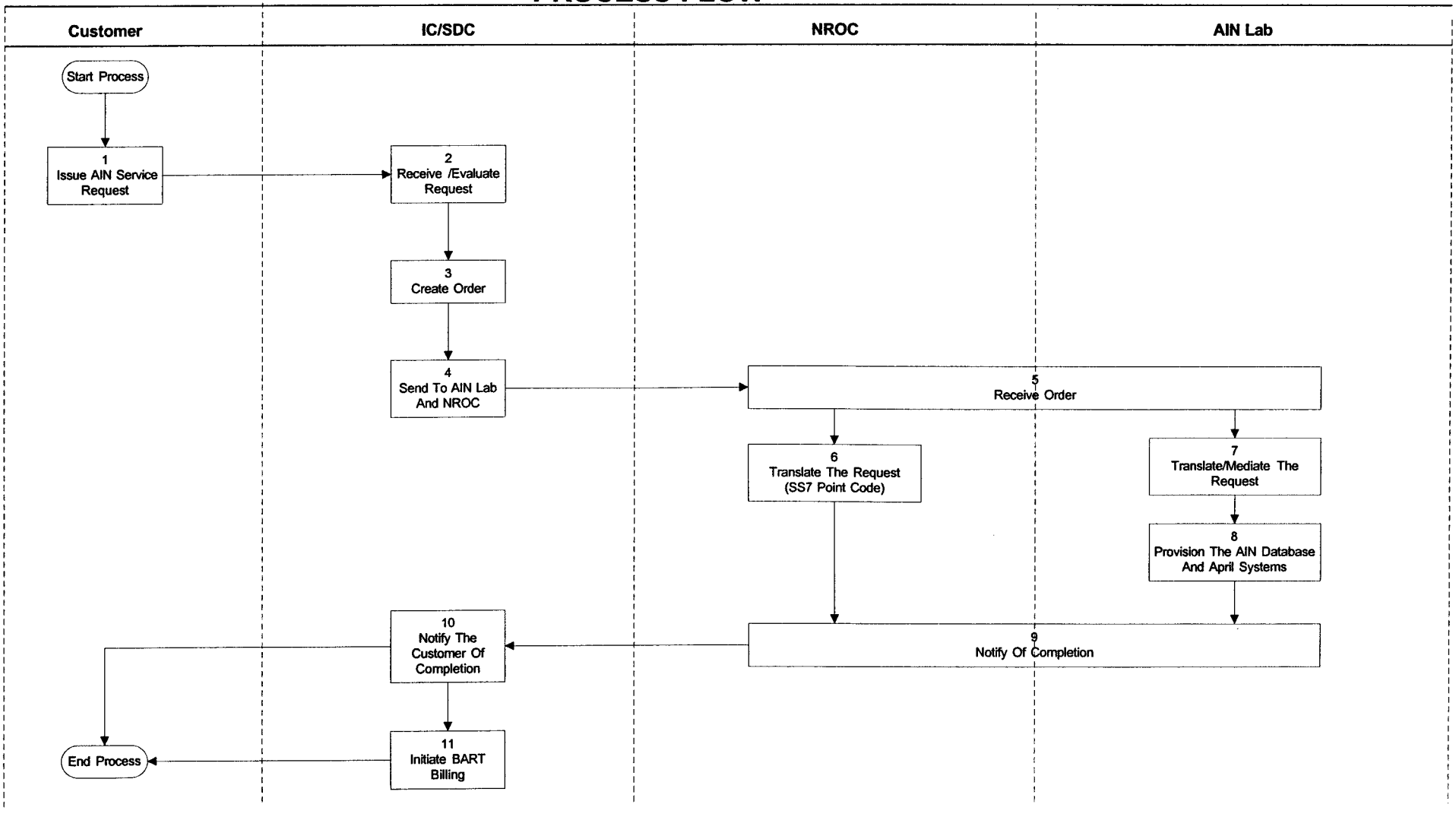


ACCESS TO AIN SERVICE CREATION ENVIORNMENT (AASCE) MACRO PROCESS FLOW

Task List

Assoc. Task #	Process
1 &2	Customer issues Service Request. Service request is reviewed and evaluated, the Product Manager starts preparation of the contract.
3, 4 & 5	Product Manager processes the order and contract. Requests feasibility evaluation and pricing.
6	Feasibility analysis is prepared by Advanced Technology and Capacity Provisioning Return feasibility analysis to Product Manager.
7 & 8	Product Manager prepares the feasibility response and contract for customer; initiate BART billing.
9 & 10	Account Manager delivers the feasibility response and contract to the customer. Customer authorizes to proceed.
11 & 12	Advanced Technology and Capacity Provisioning develop the functional requirements and develop the network plan.
13	The network plan and functional requirements are reviewed with the customer for concurrence.
14, 15, & 16	Test procedures are developed. Implement the network plan and service creation with the AIN Lab. Perform product tests and analysis with AIN Lab. Approve for service test.
17	Notify customer of the completion of product development and testing. Test for acceptance by customer.
18	After customer acceptance, complete service request. Issue BART billing.

ACCESS TO AIN OPERATIONS SUPPORT SYSTEMS/SERVICE MANAGEMENT SYSTEM (AAOS) MACRO PROCESS FLOW

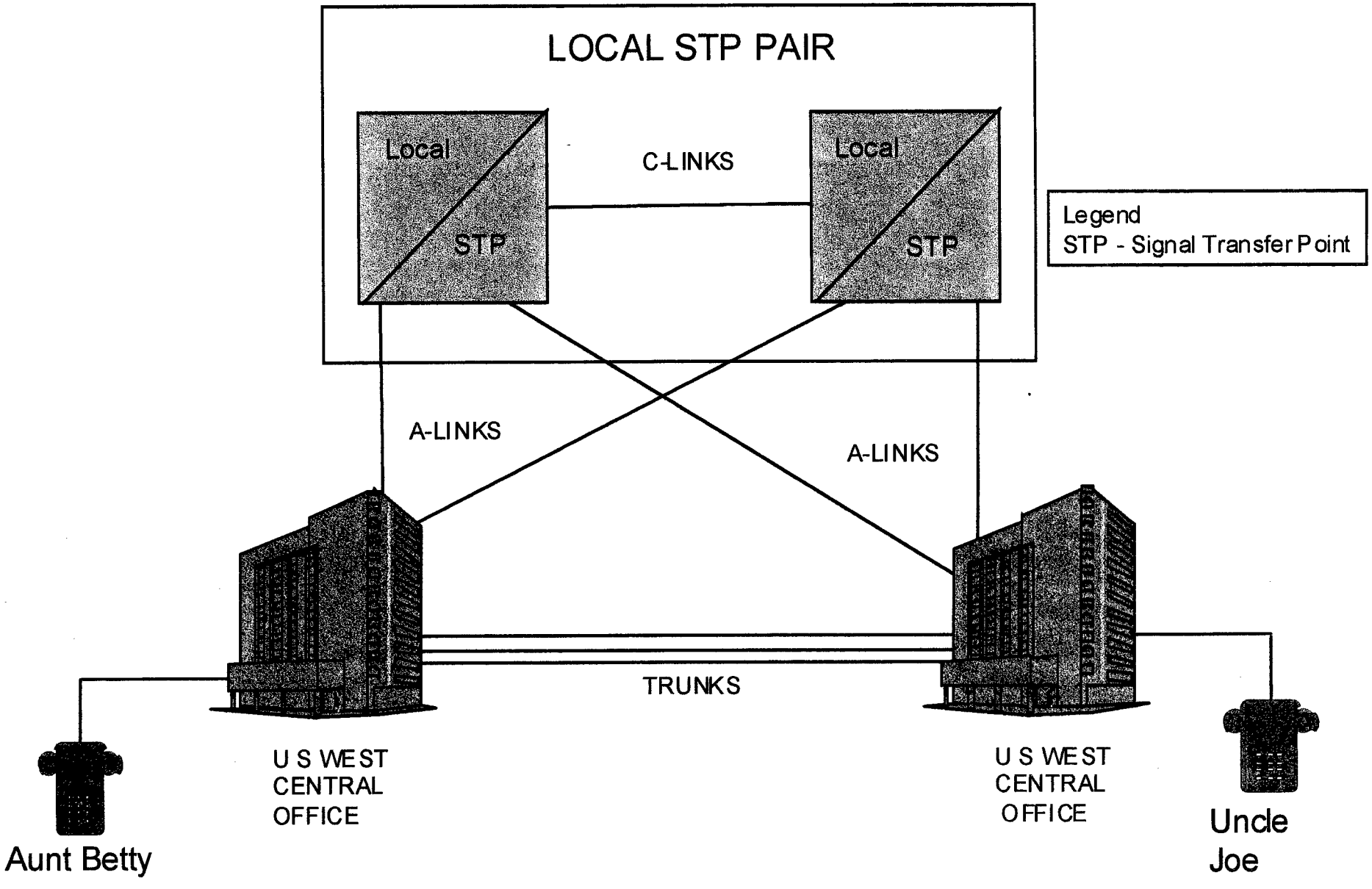


Access To AIN Operations Support Systems/Service Management System (AAOS) MACRO

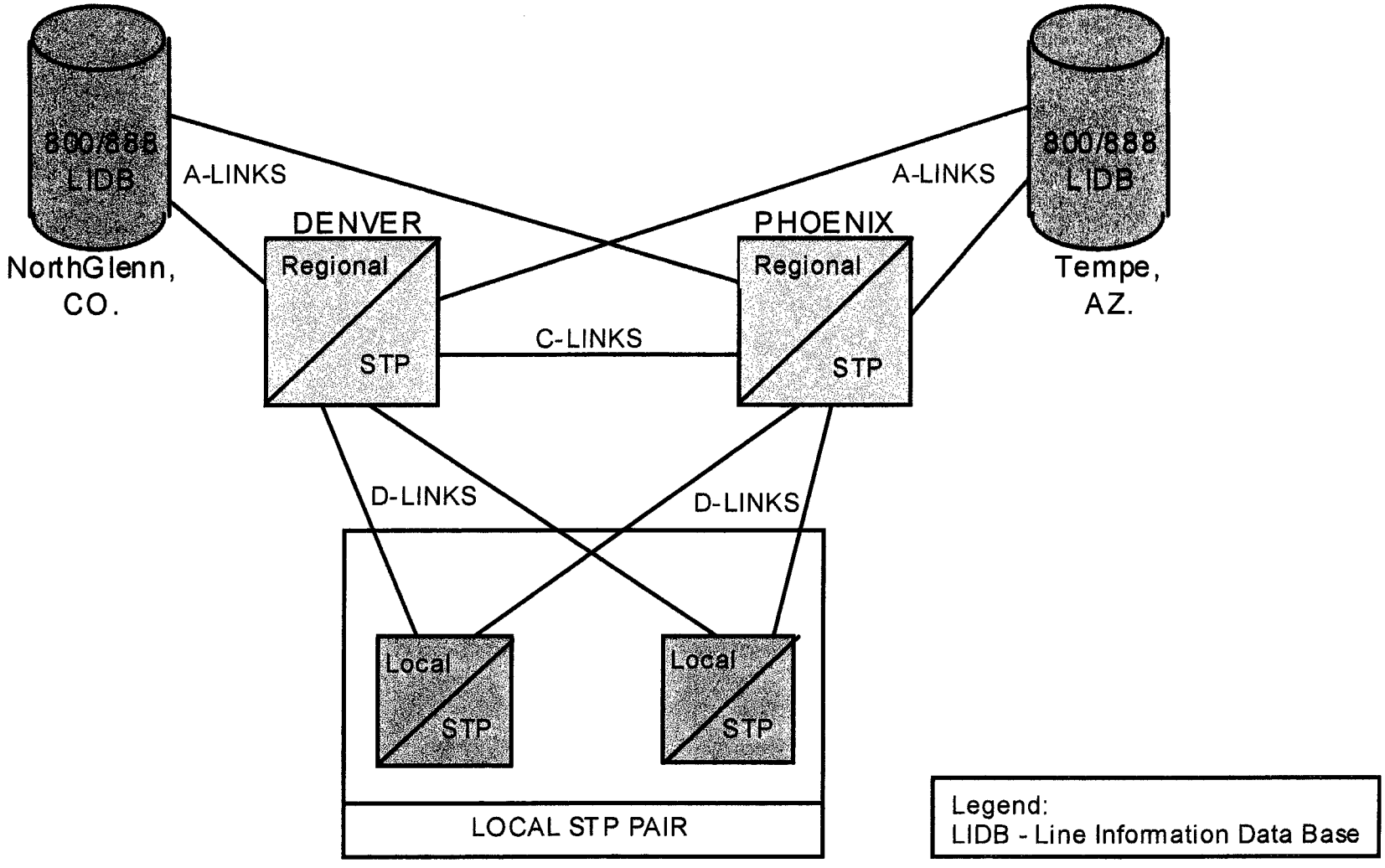
Task List

Assoc. Task #	Process
1	Customer issues AIN service request.
2, 3, & 4	AIN service request is evaluated and an order is prepared and sent to the AIN Lab and Network Operations.
5 & 6	Receive and review order. Translations are input into the network for the appropriate SS7 Point Code information.
7 & 8	AIN Lab technician reviews the request and provisions the AIN database and April systems. Notify the center that the order has been completed.
9 & 10	The customer is notified of the completion; testing is performed if necessary.
11	Service request is completed and BART billing is started.

U S WEST Basic SS7 Signaling Network

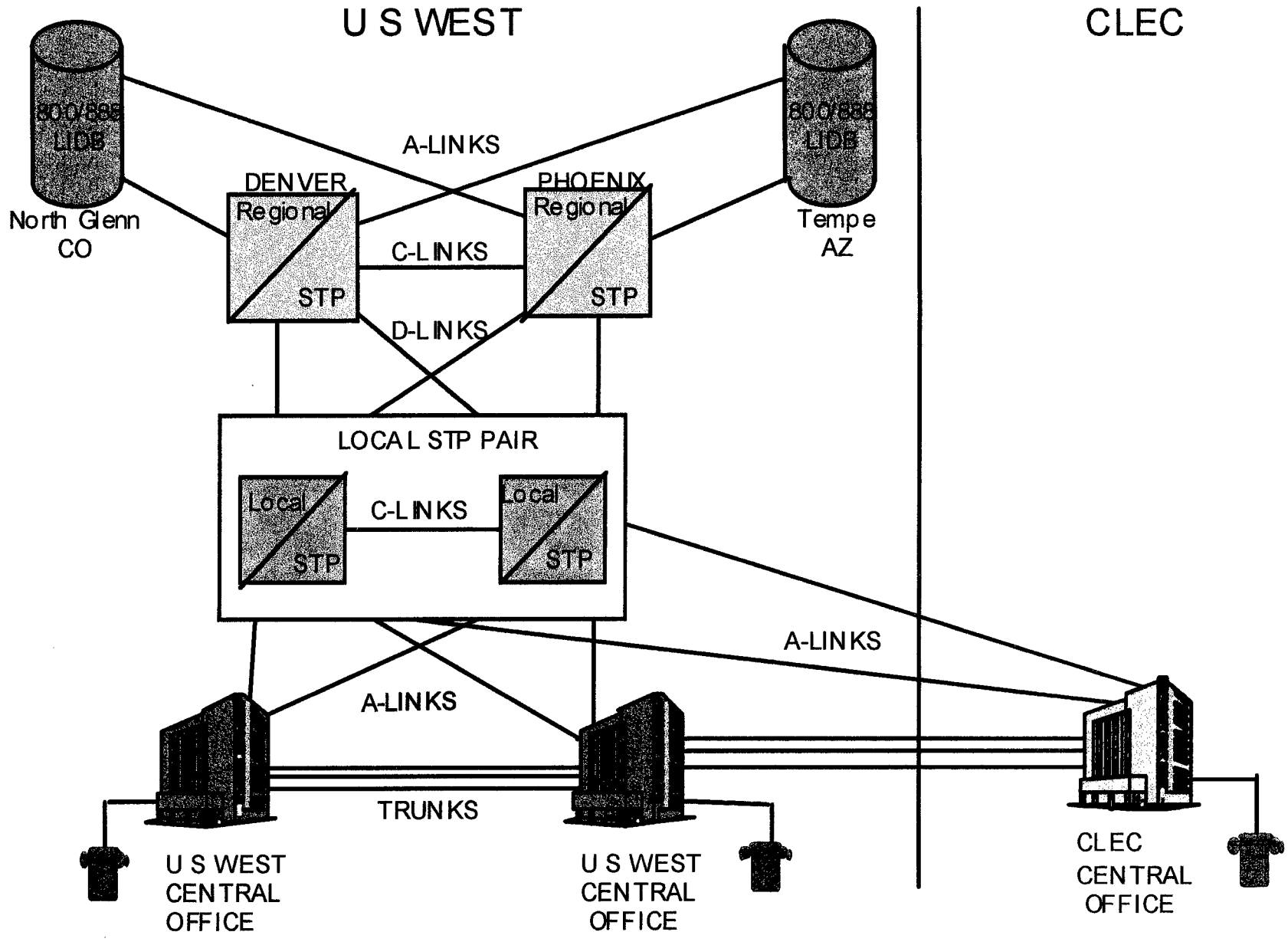


SS7 Signaling With Database Access

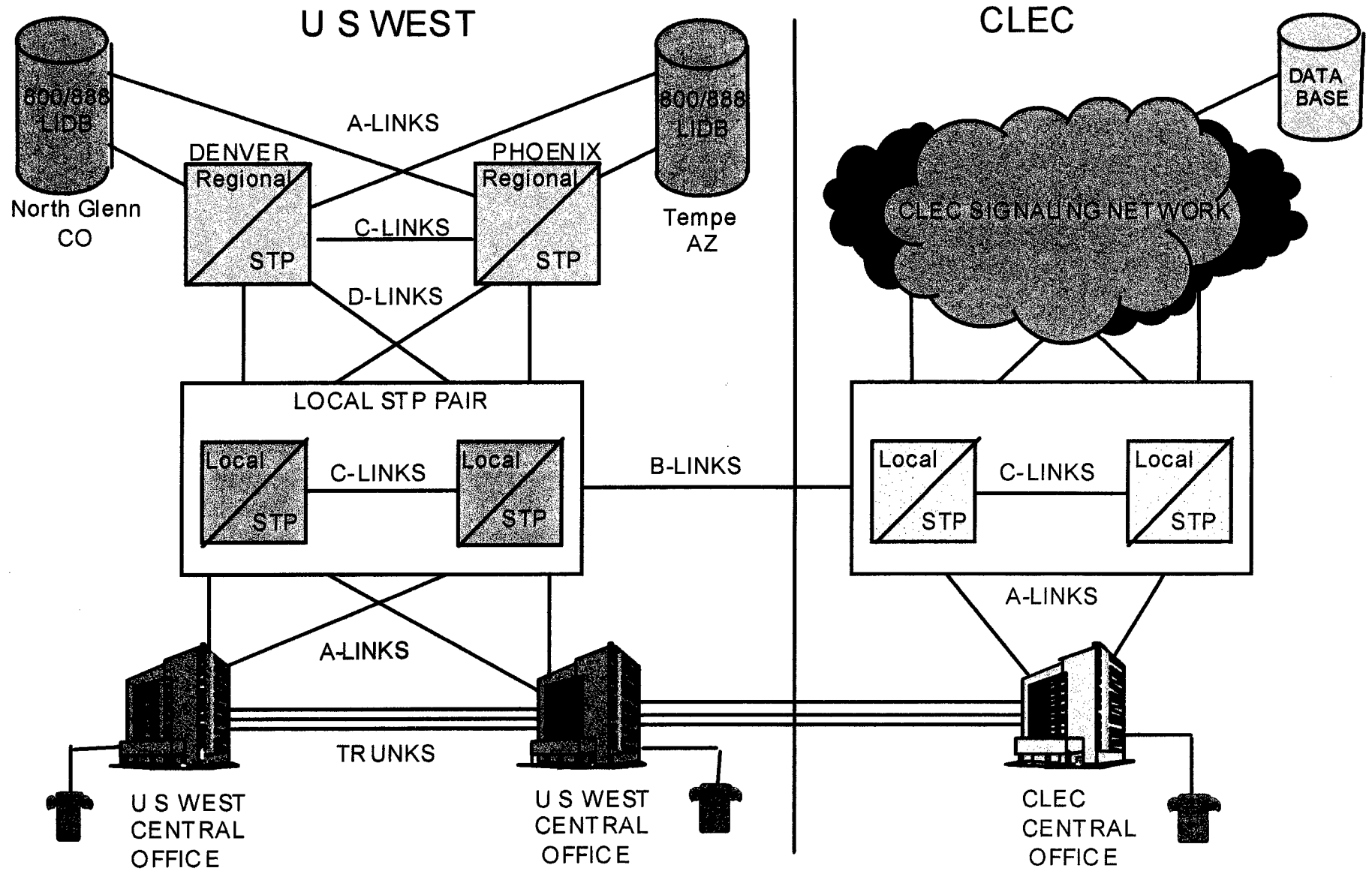


Legend:
LIDB - Line Information Data Base

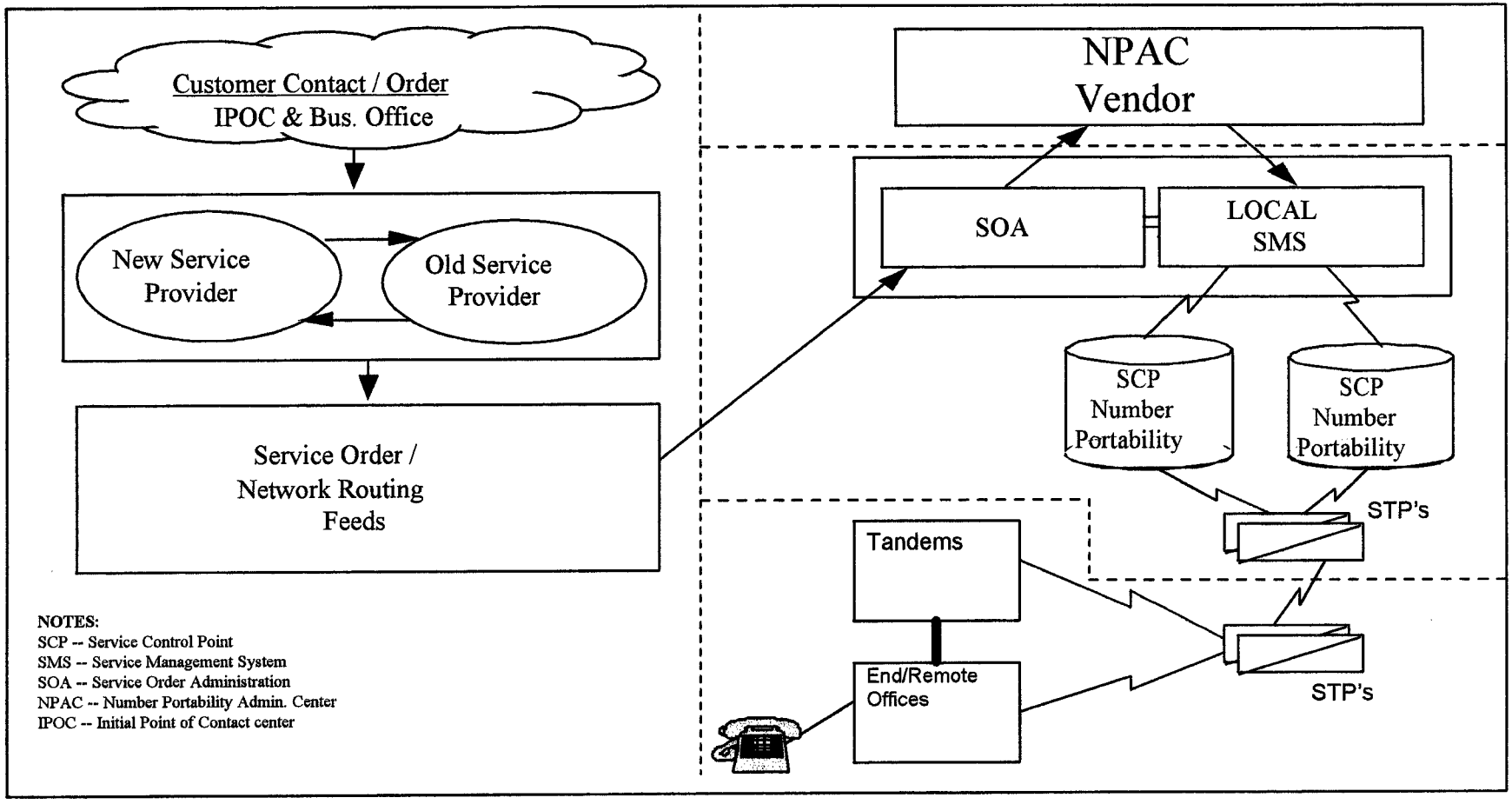
FACILITY BASED CLEC ACCESS TO U S WEST SIGNALING NETWORK



CLEC Signaling Network Interconnection

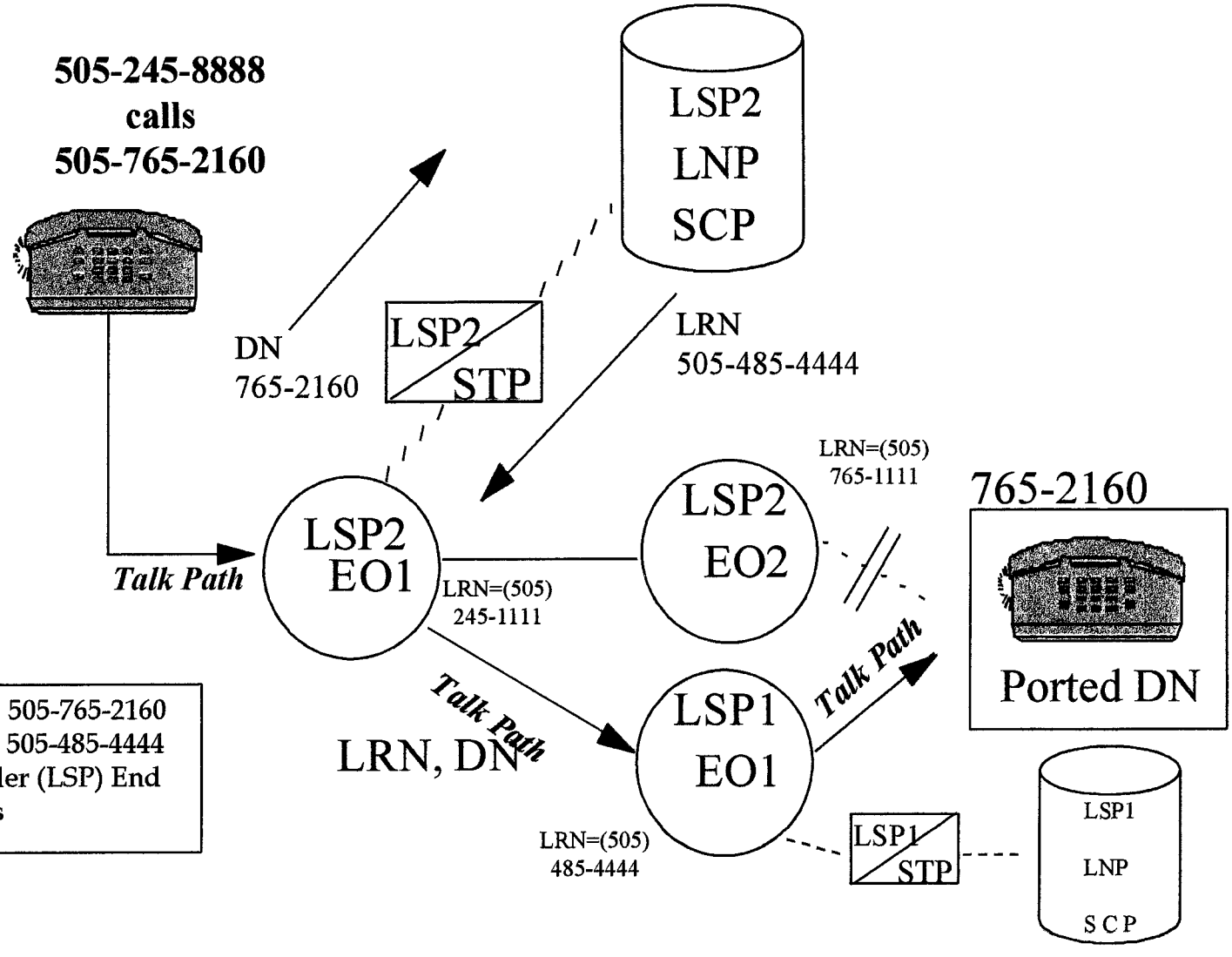


Local Number Portability Data Flow



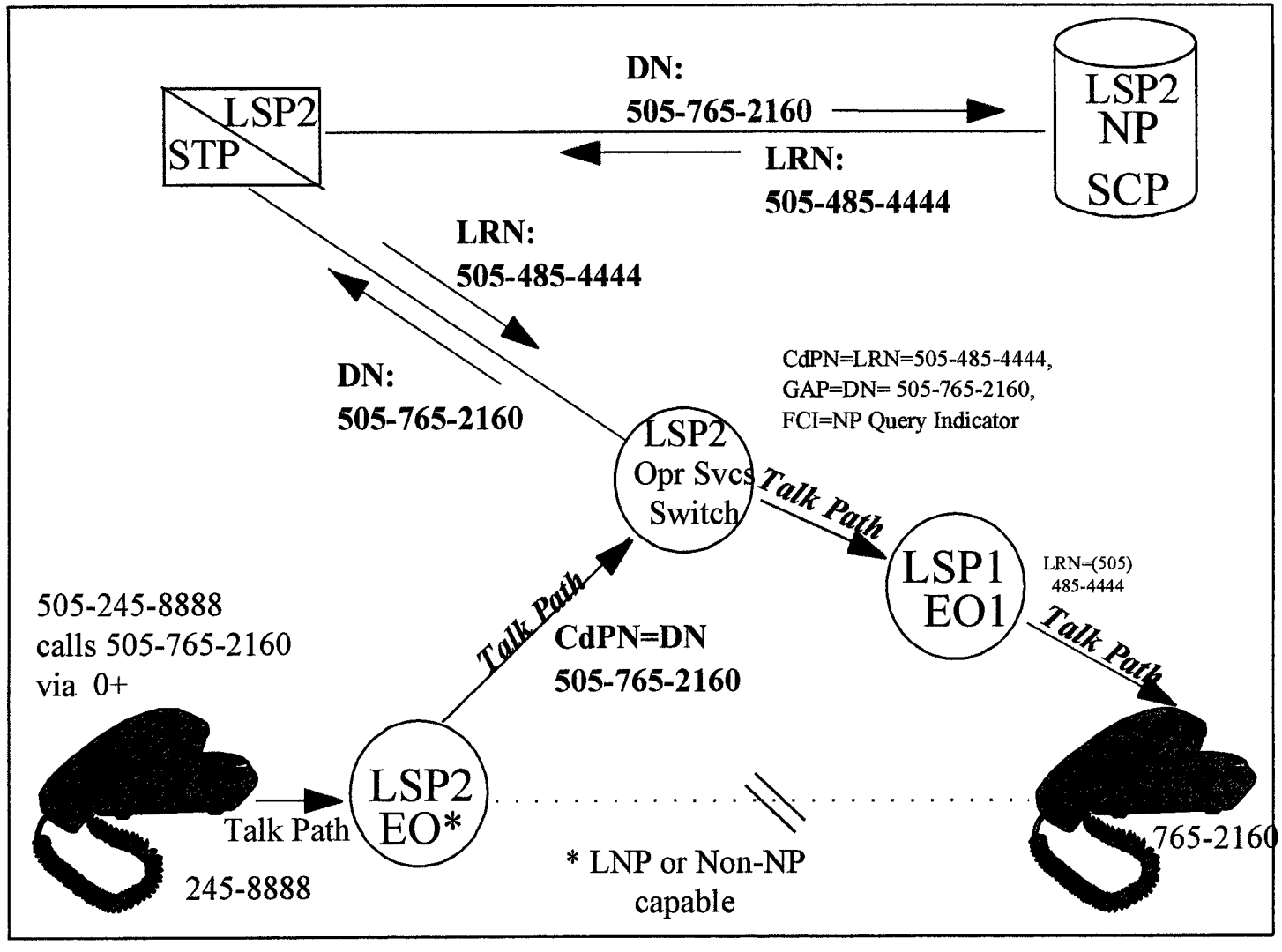
Local Number Portability Call Flow

Call made from 245-8888 generates a query to the LNP SCP. It sends the LRN for the LSP1 EO1(End Office) and completes the call to the ported customer.

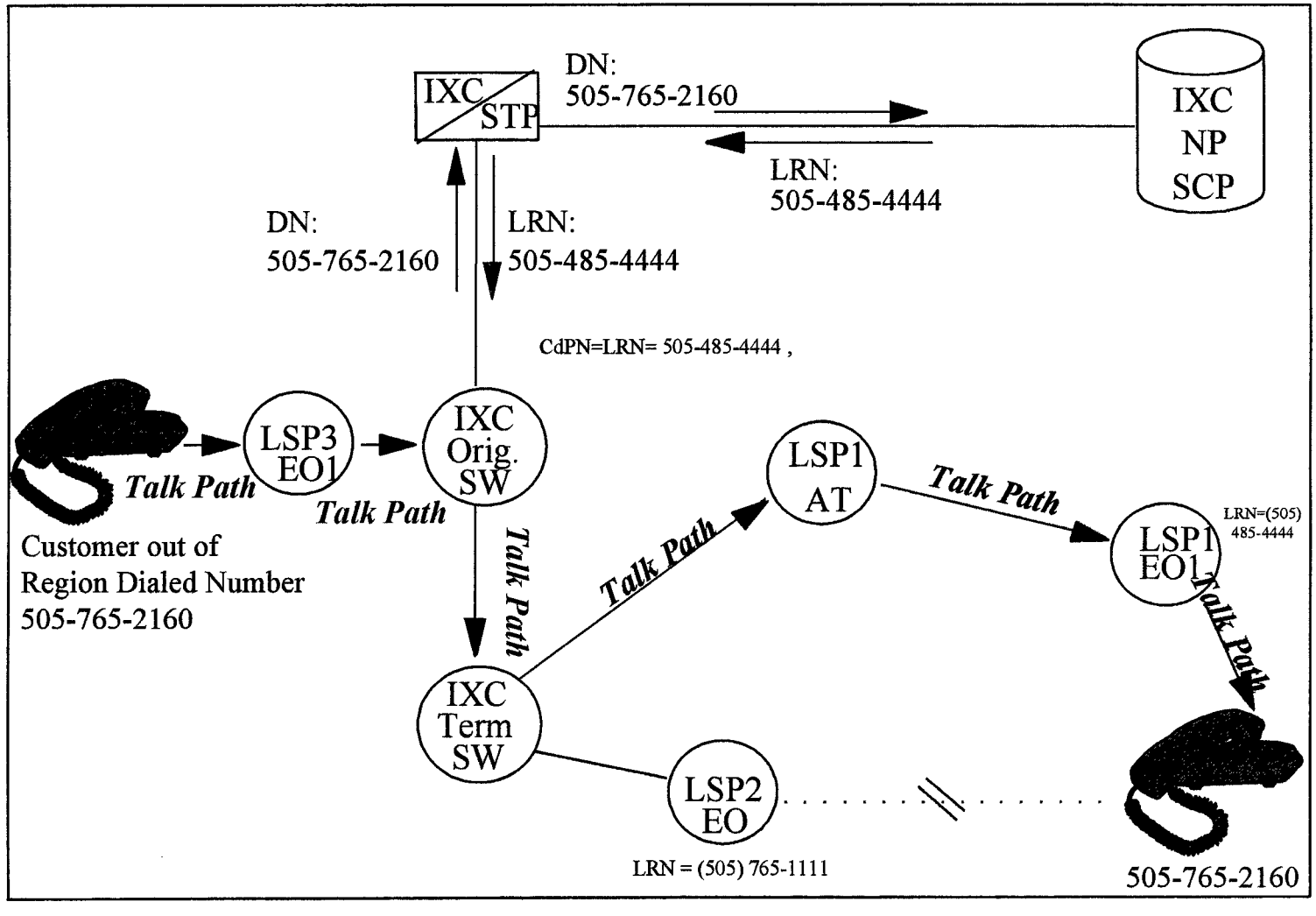


Directory Number	505-765-2160
LRN Number	505-485-4444
Local Service Provider (LSP) End Office Switches	

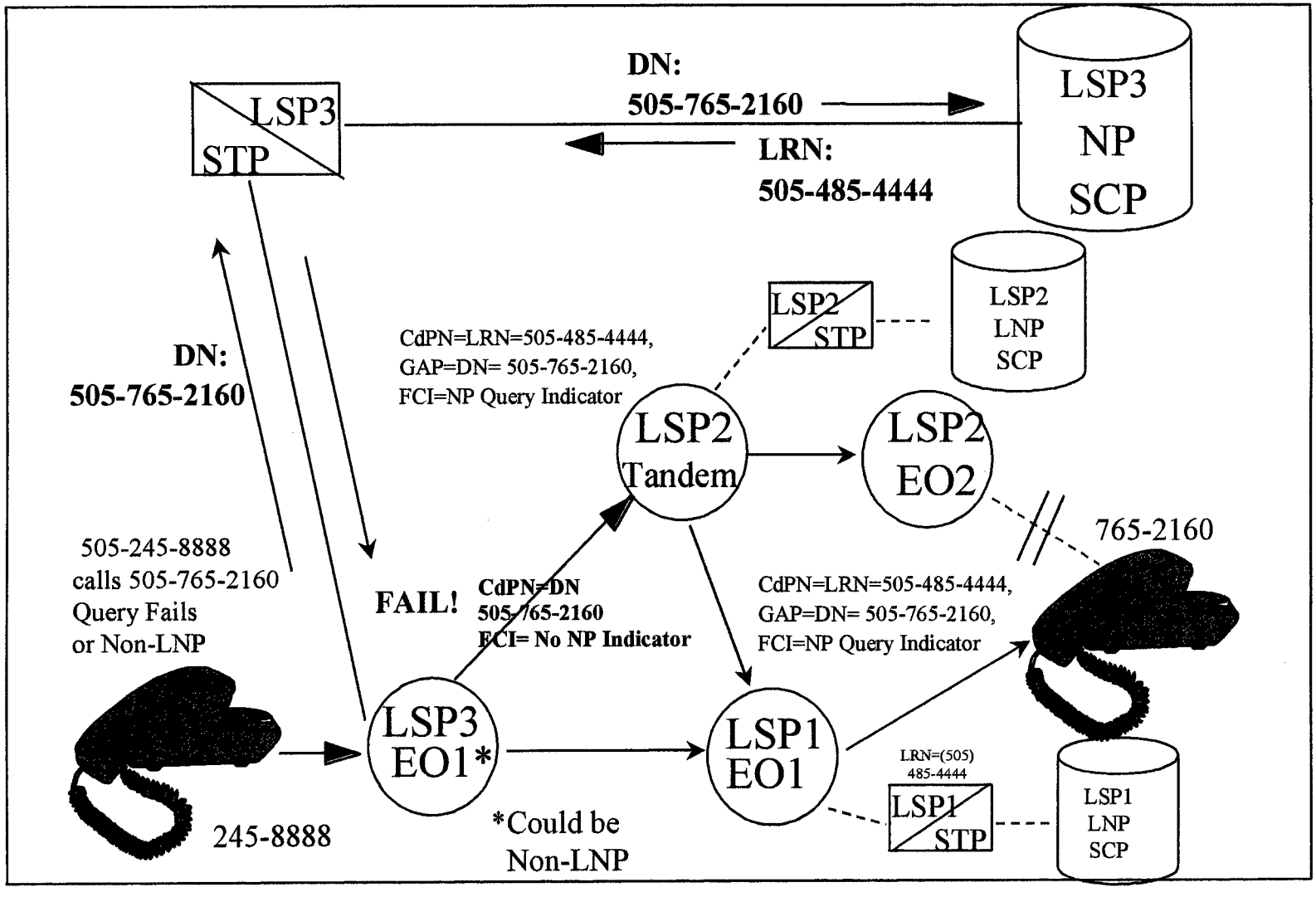
Local Number Portability
Operator Services Call



Local Number Portability
Interexchange Carrier Call

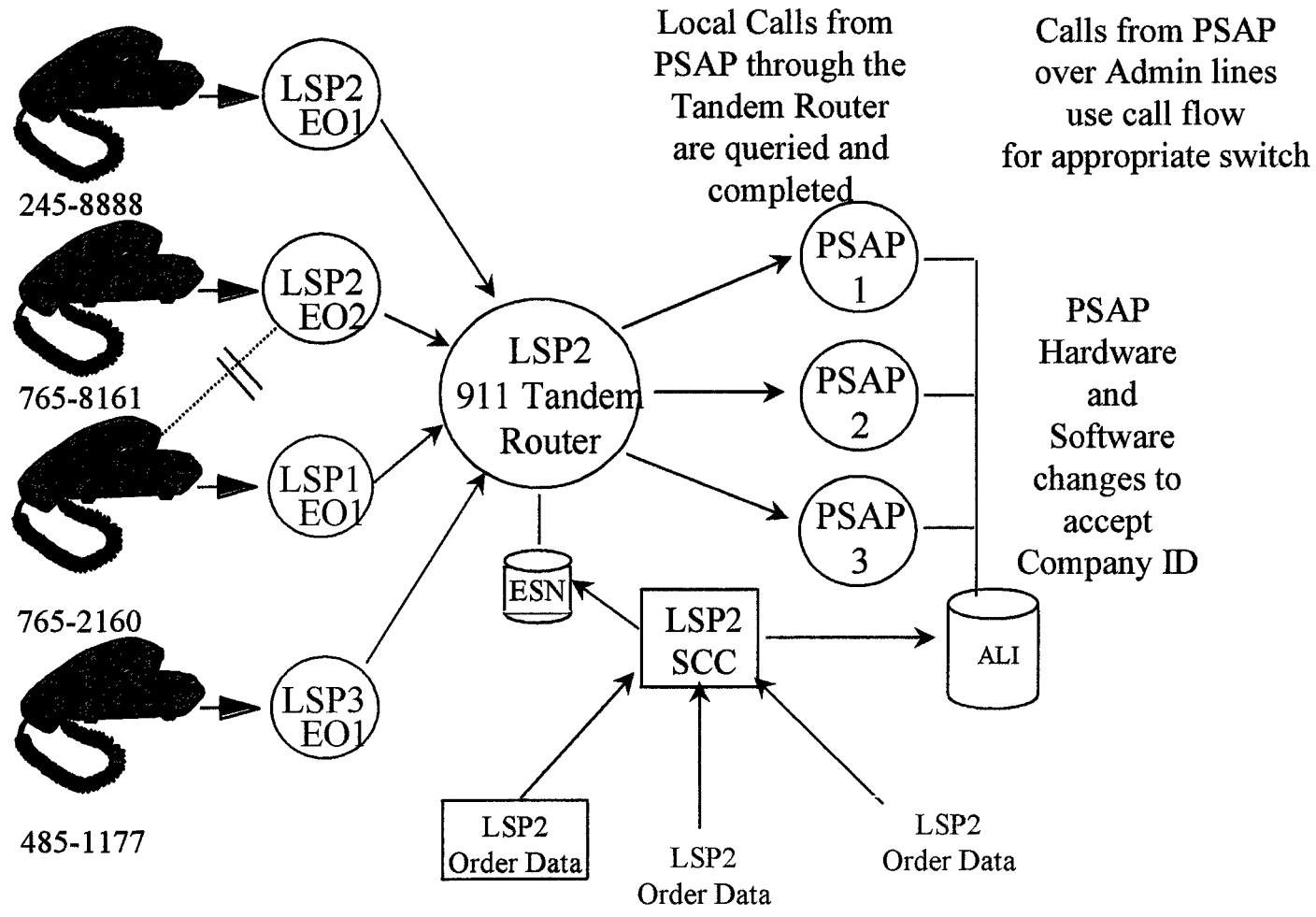


Local Number Portability
Default Query Or Other Non-LNP Call

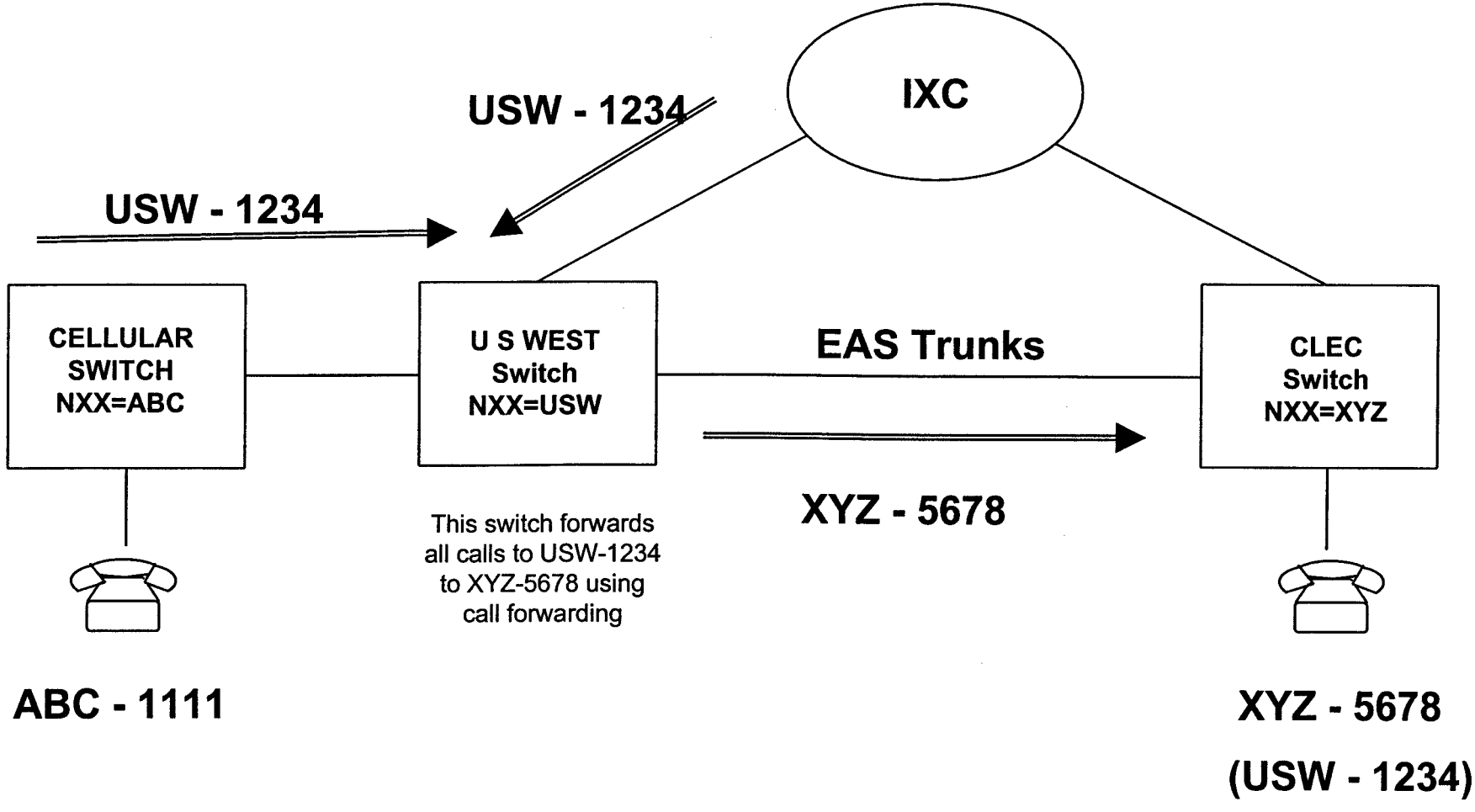


Local Number Portability
E911 View

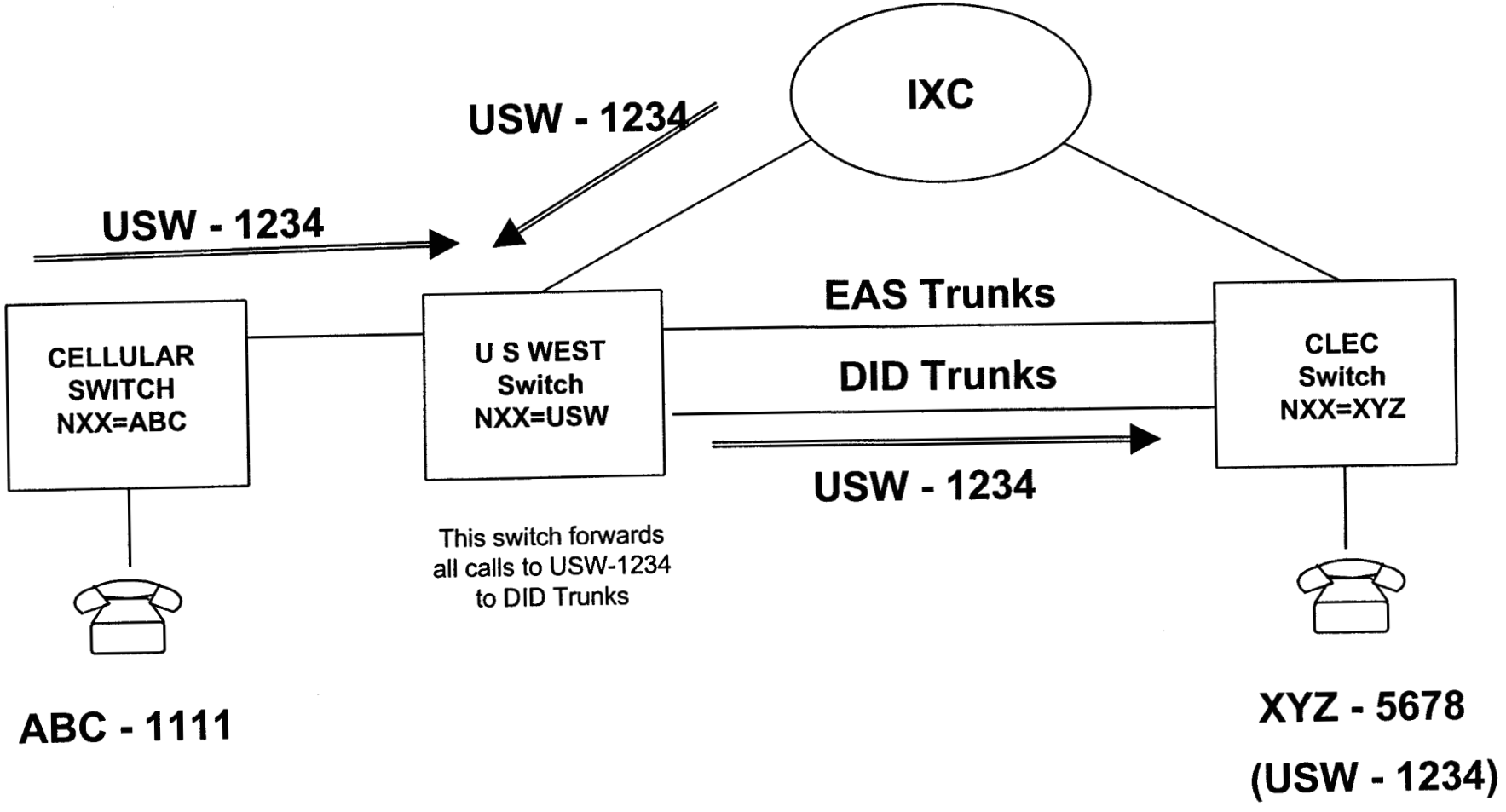
A new process was established to allow the donor to "unlock" and the Recipient to "modify" the Company ID



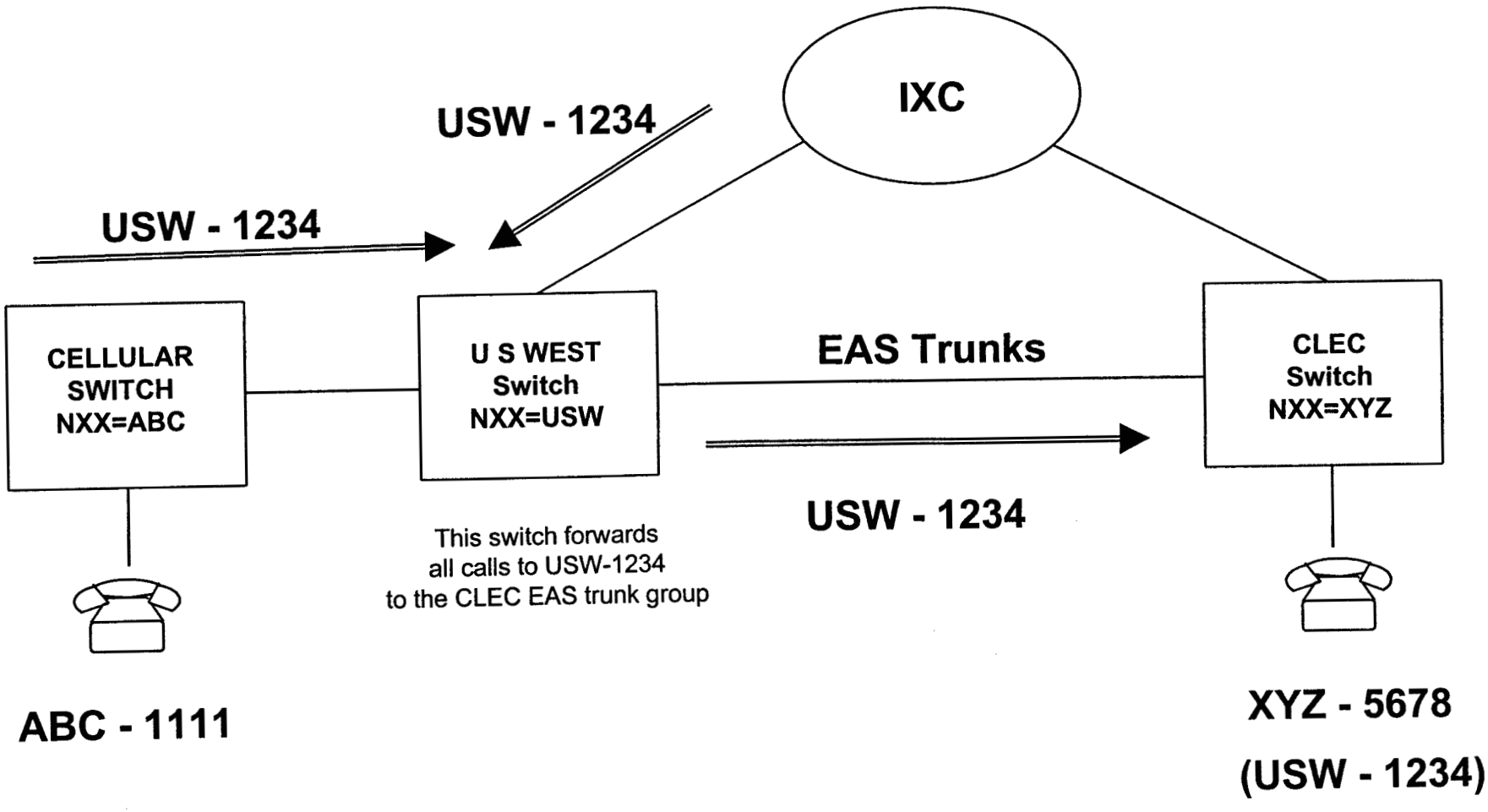
INTERIM LOCAL NUMBER PORTABILITY WITH CALL FORWARDING TECHNOLOGY



INTERIM LOCAL NUMBER PORTABILITY WITH DID TECHNOLOGY



INTERIM LOCAL NUMBER PORTABILITY WITH ROUTE INDEX TECHNOLOGY



Local Number Portability
Arizona Switch Depolyment List

Locality State	Switch	Serving Wire Center	Locality Name	Portable Indicator
AZ	AGFIAZSRDS0	Sunrise	AGUA FRIA	Y
AZ	AGFIAZSRDS0	Sunrise	DEERVALLEY	Y
AZ	AGFIAZSRDS0	Sunrise	AGUA FRIA	Y
AZ	AGFIAZSRDS0	Sunrise	DEERVALLEY	Y
AZ	AGFIAZSRDS0	Sunrise	DEERVALLEY	Y
AZ	ASFKAZMARS1	Ashfork	ASH FORK	N
AZ	AZCYAZ03RS1	Eloy (Arizona City)	ELOY	Y
AZ	BCKYAZMARS1	Buckeye	BUCKEYE	Y
AZ	BISBAZMARS1	Bisbee	BISBEE	N
AZ	BLCNAZMARS1	Black Canyon City	BLACKCNYON	N
AZ	BNSNAZMADS0	Benson	BENSON	N
AZ	BNSNAZSDDS0	Saint David	BENSON	N
AZ	BRDSAZMADS0	Beardsley	AGUA FRIA	Y
AZ	BRDSAZMADS0	Beardsley	GLENDALE	Y
AZ	CHNDAZMADS0	Chandler Main	CHANDLER	Y
AZ	CHNDAZSODS0	Chandler South	CHANDLER	Y
AZ	CHNDAZWEDS0	Chandler West	TEMPE	Y
AZ	CHNDAZWEDS0	Chandler West	CHANDLER	Y
AZ	CHVYAZMARS1	Chino Valley	CHINO VLY	N
AZ	CLDGAZMARS1	Coolidge	COOLIDGE	Y
AZ	CMVRAZMARS1	Camp Verde	CAMP VERDE	N
AZ	CMVRAZRRRS1	Camp Verde (Rimrock)	CAMP VERDE	N
AZ	CRCYAZMARS1	Circle City	CIRCLECITY	Y
AZ	CRNDAZMADS1	Coranado	CORONADO	Y
AZ	CRNDAZMADS1	Coranado	CORONADO	Y
AZ	CSGRAZMADS0	Casa Grande	CASAGRANDE	Y
AZ	CTWDAZMADS0	Cottonwood	COTTONWOOD	N
AZ	CTWDAZSORS1	Cottonwood (South)	COTTONWOOD	N
AZ	CVCKAZMADS0	Cave Creek	CVCRKCARFR	Y
AZ	DDVLAZNMRS1	Dudleyville	DUDLEYVL	Y
AZ	DGLSAZMARS1	Douglas	DOUGLAS	N
AZ	DRVYAZNODS0	Deer Valley	GLENDALE	Y
AZ	ELOYAZ01RS1	Eloy	ELOY	Y
AZ	FLGSAZEADS0	Flagstaff East	FLAGSTAFF	N
AZ	FLGSAZMADS0	Flagstaff Main	FLAGSTAFF	N
AZ	FLGSAZSORS1	Flagstaff South	FLAGSTAFF	N
AZ	FLRNAZMARS1	Florence	FLORENCE	Y
AZ	FTMDAZMADS0	Fort McDowell	FTMCDOWELL	Y
AZ	FTMDAZNORS1	Rio Verde	FTMCDOWELL	Y
AZ	GDYRAZCWDS0	Coldwater	LITCHFLDPK	Y

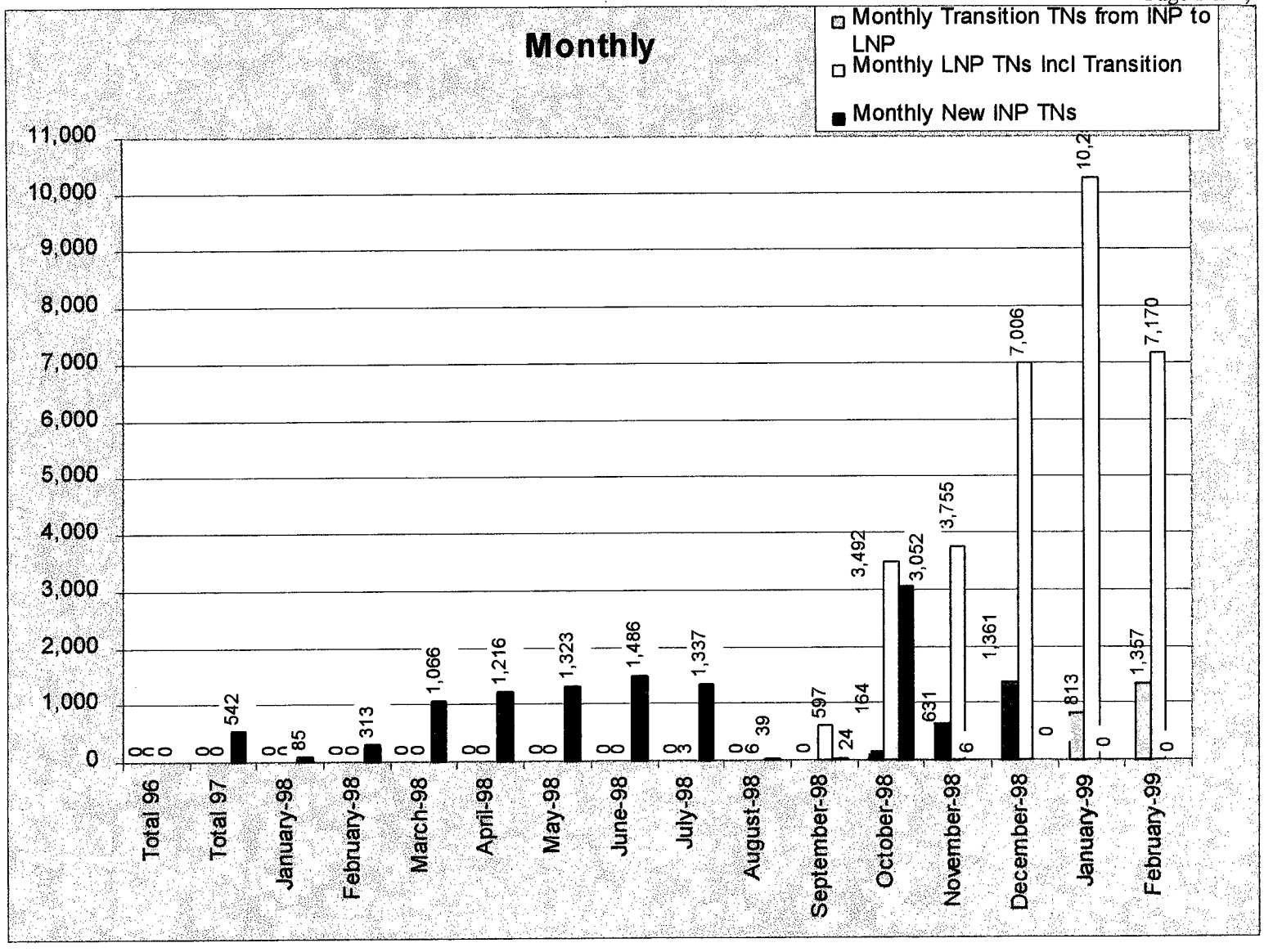
Locality State	Switch	Serving Wire Center	Locality Name	Portable Indicator
AZ	GLBNAZMARS1	Gila Bend	GILA BEND	Y
AZ	GLDLAZMACG0	Glendale	GLENDALE	Y
AZ	GLDLAZMARS1	Glendale	GLENDALE	Y
AZ	GLOBAZ06CM1		GLOBE	N
AZ	GLOBAZMARS1	Globe	GLOBE	N
AZ	GNVYAZMADS0	Green Valley	GREEN VLY	Y
AZ	GRCNAZMARS1	Grand Canyon	GRANDCNYON	N
AZ	HGLYAZMADS0	Higley	HIGLEY	Y
AZ	HGLYAZQCDS0	Queen Creek	HIGLEY	Y
AZ	HMBLAZMARS1	Humboldt	HUMBOLDT	N
AZ	HYDNAZMARS1	Hayden	HAYDEN	Y
AZ	JSCYAZMARS1	Joseph City	JOSEPHCITY	N
AZ	KRNYAZMARS1	Kearny	KEARNY	Y
AZ	LTPKAZMADS0		LITCHFLDPK	Y
AZ	LTPKAZMARS1	Litchfield Park	LITCHFLDPK	Y
AZ	MARNAZ02RS1	Marana (West)	MARANA	Y
AZ	MARNAZ03RS1	Marana (South)	MARANA	Y
AZ	MARNAZMARS1	Marana	MARANA	Y
AZ	MAYRAZMARS1	Humboldt (Mayer)	HUMBOLDT	N
AZ	MESAAZGIDS0	Gilbert	GILBERT	Y
AZ	MESAAZMADS0	Mesa	MESA	Y
AZ	MIAMAZMARS1	Miami	MIAMI	N
AZ	MMTHAZMARS1	Mammoth	MAMMOTH	Y
AZ	MRCPAZMARS1	Maricopa	MARICOPA	Y
AZ	MSPKAZMADS0	Munds Park	MUNDS PARK	N
AZ	NGLSAZ03RS2	Nogales Midway	NOGALES	N
AZ	NGLSAZ10CM1		NOGALES	N
AZ	NGLSAZMARS1	Nogales Main	NOGALES	N
AZ	NGLSAZMWDS0	Nogales Midway	NOGALES	N
AZ	NWRVAZMARS1	New River	NEW RIVER	Y
AZ	ORCLAZMARS1	Oracle	ORACLE	Y
AZ	PAGEAZMADS0	Page/Glen Canyon	PAGE	N
AZ	PHNXAZ81DS0	Foothills	PHOENIX	Y
AZ	PHNXAZ93RS1	Sunnyslope	NO PHOENIX	Y
AZ	PHNXAZBWDS0	Bethany West	GLENDALE	Y
AZ	PHNXAZBWDS0	Bethany West	LITCHFLDPK	Y
AZ	PHNXAZCADS0	Cactus	NO PHOENIX	Y
AZ	PHNXAZCADS0	Cactus	SCOTTSDALE	Y
AZ	PHNXAZCADS0	Cactus	PARADISVLY	Y
AZ	PHNXAZEADS0	Phoenix East	PHOENIX	Y
AZ	PHNXAZEARS1	Phoenix East	PHOENIX	Y
AZ	PHNXAZGRDS0	Greenway	PHOENIX	Y
AZ	PHNXAZGRDS0	Greenway	GLENDALE	Y
AZ	PHNXAZGRDS0	Greenway	NO PHOENIX	Y

Locality State	Switch	Serving Wire Center	Locality Name	Portable Indicator
AZ	PHNXAZLVDS0	Laveen	PHOENIX	Y
AZ	PHNXAZMA04T		PHOENIX	N
AZ	PHNXAZMA1CD		DIR ASST	N
AZ	PHNXAZMADS1	Phoenix Main	PHOENIX	Y
AZ	PHNXAZMADS4	Phoenix Main	PHOENIX	Y
AZ	PHNXAZMRCG0	Midriver	AGUA FRIA	Y
AZ	PHNXAZMRCG0	Midriver	GLENDALE	Y
AZ	PHNXAZMRRS1	Midriver	GLENDALE	Y
AZ	PHNXAZMYCG0	Maryvale	PHOENIX	Y
AZ	PHNXAZMYCG0	Maryvale	GLENDALE	Y
AZ	PHNXAZMYCG0	Maryvale	LITCHFLDPK	Y
AZ	PHNXAZMYDS0	Maryvale	PHOENIX	Y
AZ	PHNXAZNEDS0	Phoenix Northeast	PHOENIX	Y
AZ	PHNXAZNEDS0	Phoenix Northeast	SCOTTSDALE	Y
AZ	PHNXAZNODS1	Phoenix North	NO PHOENIX	Y
AZ	PHNXAZNODS3	Phoenix North	NO PHOENIX	Y
AZ	PHNXAZNODS3	Phoenix North	PHOENIX	N
AZ	PHNXAZNWCG0	Phoenix Northwest	PHOENIX	Y
AZ	PHNXAZNWCG0	Phoenix Northwest	GLENDALE	Y
AZ	PHNXAZNWCG0	Phoenix Northwest	NO PHOENIX	Y
AZ	PHNXAZNWDS0		PHOENIX	Y
AZ	PHNXAZNWDS0		GLENDALE	Y
AZ	PHNXAZNWDS0		NO PHOENIX	Y
AZ	PHNXAZNWRS1	Phoenix Northwest	PHOENIX	Y
AZ	PHNXAZPPDS0	Pecos	CHANDLER	Y
AZ	PHNXAZPRCG0	Peoria	GLENDALE	Y
AZ	PHNXAZSECG0	Phoenix Southeast	TEMPE	Y
AZ	PHNXAZSECG0	Phoenix Southeast	PHOENIX	Y
AZ	PHNXAZSOCG0	Phoenix South	PHOENIX	Y
AZ	PHNXAZSYDS0		NO PHOENIX	Y
AZ	PHNXAZSYDS0		PHOENIX	Y
AZ	PHNXAZSYRS1	Sunnyslope	NO PHOENIX	Y
AZ	PHNXAZWECG0	Phoenix West	PHOENIX	Y
AZ	PHNXAZWEDS0	Phoenix West	PHOENIX	Y
AZ	PHNXAZWEDS0	Phoenix West	PHOENIX	N
AZ	PHNXAZWERS1	Phoenix West	PHOENIX	Y
AZ	PHNYAZWJCM1		PHOENIX	N
AZ	PIMAAZMARS1	Pima	PIMA	N
AZ	PINEAZMARS1	Pine	PINE	N
AZ	PLMNAZMARS1	Palominas	BISBEE	N
AZ	PRSCAZEARS2	Prescott East	PRESCOTT	N
AZ	PRSCAZMADS0	Prescott (Main)	PRESCOTT	N
AZ	PRVYAZPPDS0	Pinnacle Peak	NO PHOENIX	Y
AZ	PRVYAZPPDS0	Pinnacle Peak	PHOENIX	Y

Locality State	Switch	Serving Wire Center	Locality Name	Portable Indicator
AZ	PRVYAZPPDS0	Pinnacle Peak	PARADISVLY	Y
AZ	PTGNAZELRS1	Elgin	ELGIN	N
AZ	PTGNAZMARS1	Patagonia	PATAGONIA	N
AZ	PYSNAZ05CM1		PAYSON	N
AZ	PYSNAZMADS0	Payson	PAYSON	N
AZ	SCDLAZMADS0	Scottsdale	SCOTTSDALE	Y
AZ	SCDLAZSHDS0	Shea	SCOTTSDALE	Y
AZ	SCDLAZTHDS0	Thunderbird	SCOTTSDALE	Y
AZ	SEDNAZMADS0	Sedona	SEDONA	N
AZ	SEDNAZSORS3	Sedona South	SEDONA	N
AZ	SFFRAZ03CM1		SAFFORD	N
AZ	SFFRAZ03CM2		SAFFORD	N
AZ	SFFRAZ03CM2		SAFFORD	N
AZ	SFFRAZMADS0	Safford	SAFFORD	N
AZ	SMTNAZMARS1	Somerton	SOMERTON	N
AZ	SNMNAZMADS0	San Manuel	SAN MANUEL	Y
AZ	SPRRAZMARS1	Superior	SUPERIOR	Y
AZ	SPRSAZEADS0	Superstition East	SPSTNAPHJC	Y
AZ	SPRSAZMACG0	Superstition Main	SPSTNAPHJC	Y
AZ	SPRSAZWEDS0	Superstition West	MESA	Y
AZ	SRVSAZ09CM1		SIERRAVIST	N
AZ	SRVSAZMADS0	Sierra Vista Main	SIERRAVIST	N
AZ	SRVSAZMADS0	Sierra Vista Main	FTHUACHUCA	N
AZ	SRVSAZNORS1	Sierra Vista North	SIERRAVIST	N
AZ	SRVSAZSORS1	Sierra Vista South	SIERRAVIST	N
AZ	STFDAZMARS1	Stanfield	STANFIELD	Y
AZ	TCSNAZCADS0	Catalina	TUCSON	Y
AZ	TCSNAZCODS0	Cortaro	TUCSON	Y
AZ	TCSNAZCRCG0	Craycroft	TUCSON	Y
AZ	TCSNAZCRDS0	Craycroft	TUCSON	N
AZ	TCSNAZEADS0	Tucson East	TUCSON	Y
AZ	TCSNAZEARS1	Tucson East	TUCSON	Y
AZ	TCSNAZFWDS0	Flowing Wells	TUCSON	Y
AZ	TCSNAZMA04T		TUCSON	N
AZ	TCSNAZMADS1	Tucson Main	TUCSON	Y
AZ	TCSNAZMLRS2	Mount Lemmon	TUCSON	Y
AZ	TCSNAZNOCG0	Tucson North	TUCSON	Y
AZ	TCSNAZNODS0	Tucson North	TUCSON	Y
AZ	TCSNAZRNCG0	Rincon	TUCSON	Y
AZ	TCSNAZRNRS1	Rincon	TUCSON	Y
AZ	TCSNAZSERS3	Tucson Southeast	TUCSON	Y
AZ	TCSNAZSOCG0	Tucson South	TUCSON	Y
AZ	TCSNAZSWDS0	Tucson Southwest	TUCSON	Y
AZ	TCSNAZSWDS0	Tucson Southwest	ROBLES	Y

Locality State	Switch	Serving Wire Center	Locality Name	Portable Indicator
AZ	TCSNAZTVDS0	Tanque Verde	TUCSON	Y
AZ	TCSNAZWERS1	Tucson West	TUCSON	Y
AZ	TEMPAZMADS0	Tempe	TEMPE	Y
AZ	TEMPAZMCCG0	McClintock	TEMPE	Y
AZ	TLSNAZMARS1	Tolleson	TOLLESON	Y
AZ	TMBSAZMARS1	Tombstone	TOMBSTONE	N
AZ	TNCKAZMARS1	Tonto Creek	PAYSON	N
AZ	TUBCAZMARS1	Tubac	TUBAC	N
AZ	VAILAZNORS1	Vail North	VAIL	Y
AZ	VAILAZSODS0	Vail South	VAIL	Y
AZ	WCBGAZMARS1	Wickenburg	WICKENBURG	Y
AZ	WHTKAZMARS2	White Tanks	LITCHFLDPK	Y
AZ	WHTLAZMADS0	Whitlow	WHITLOW	Y
AZ	WLCXAZMARS1	Willcox	WILLCOX	N
AZ	WLMSAZMARS1	Williams	WILLIAMS	N
AZ	WLTNAZMARS1	Wellton	WELLTON	N
AZ	WNBGAZ01RS1	Buckeye (Wintersburg)	BUCKEYE	Y
AZ	WNSLAZMADS1	Winslow	WINSLOW	N
AZ	WNSLAZQACM1		WINSLOW	N
AZ	YRNLAZMARS1	Yarnell	YARNELL	N
AZ	YUMAAZFTDS1	Yuma Fortuna	YUMA	N
AZ	YUMAAZMADS0	Yuma Main	YUMA	N
AZ	YUMAAZSEDS0	Yuma Southeast	YUMA	N

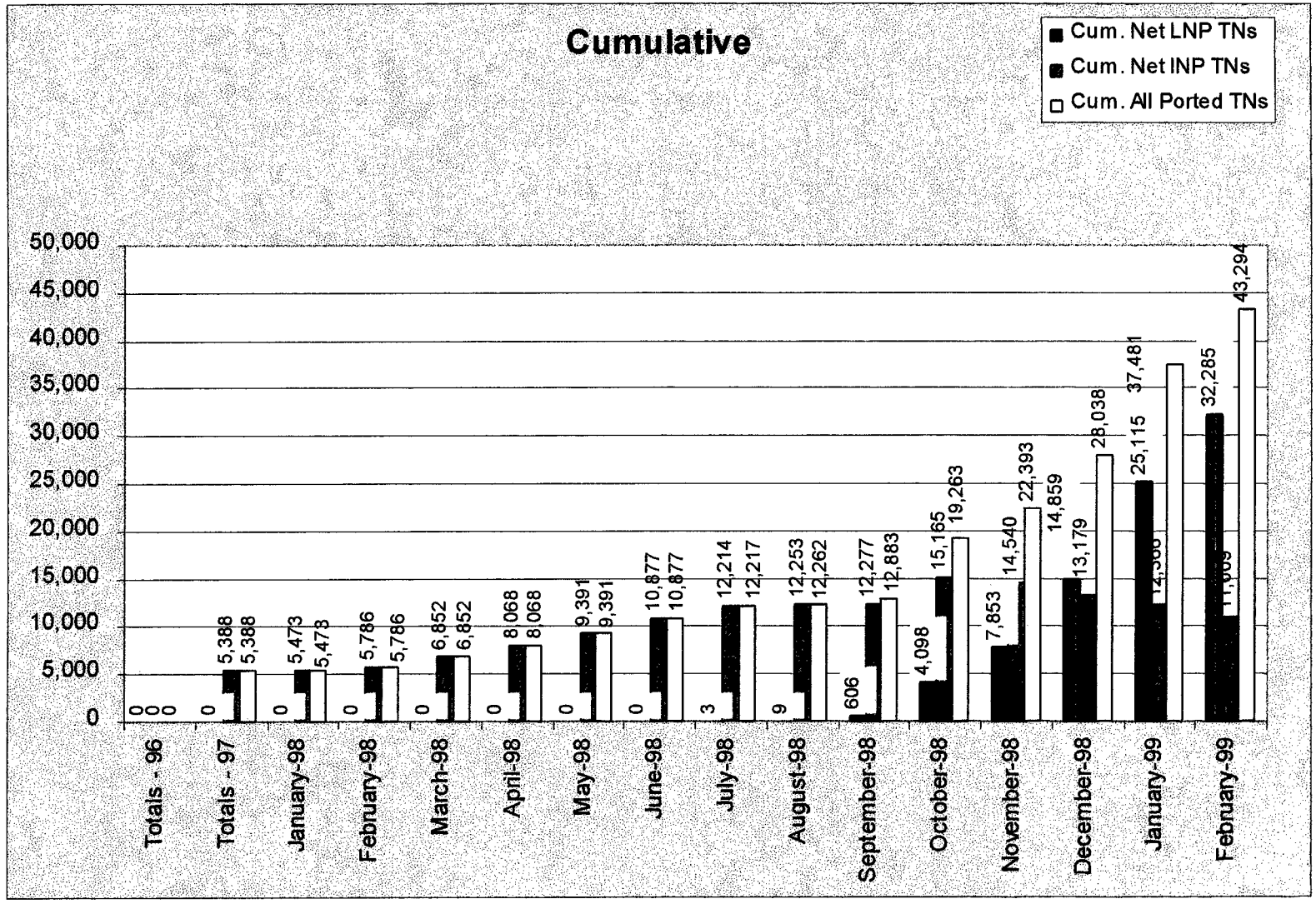
INP / LNP Numbers Ported - Arizona



INP / LNP Numbers Ported - Arizona

	Monthly Transition TNs from INP to LNP	Monthly LNP TNs Incl Transition	Monthly New INP TNs
Total 96	0	0	0
Total 97	0	0	542
January-98	0	0	85
February-98	0	0	313
March-98	0	0	1,066
April-98	0	0	1,216
May-98	0	0	1,323
June-98	0	0	1,486
July-98	0	3	1,337
August-98	0	6	39
September-98	0	597	24
October-98	164	3,492	3,052
November-98	631	3,755	6
December-98	1,361	7,006	0
January-99	813	10,256	0
February-99	1,357	7,170	0

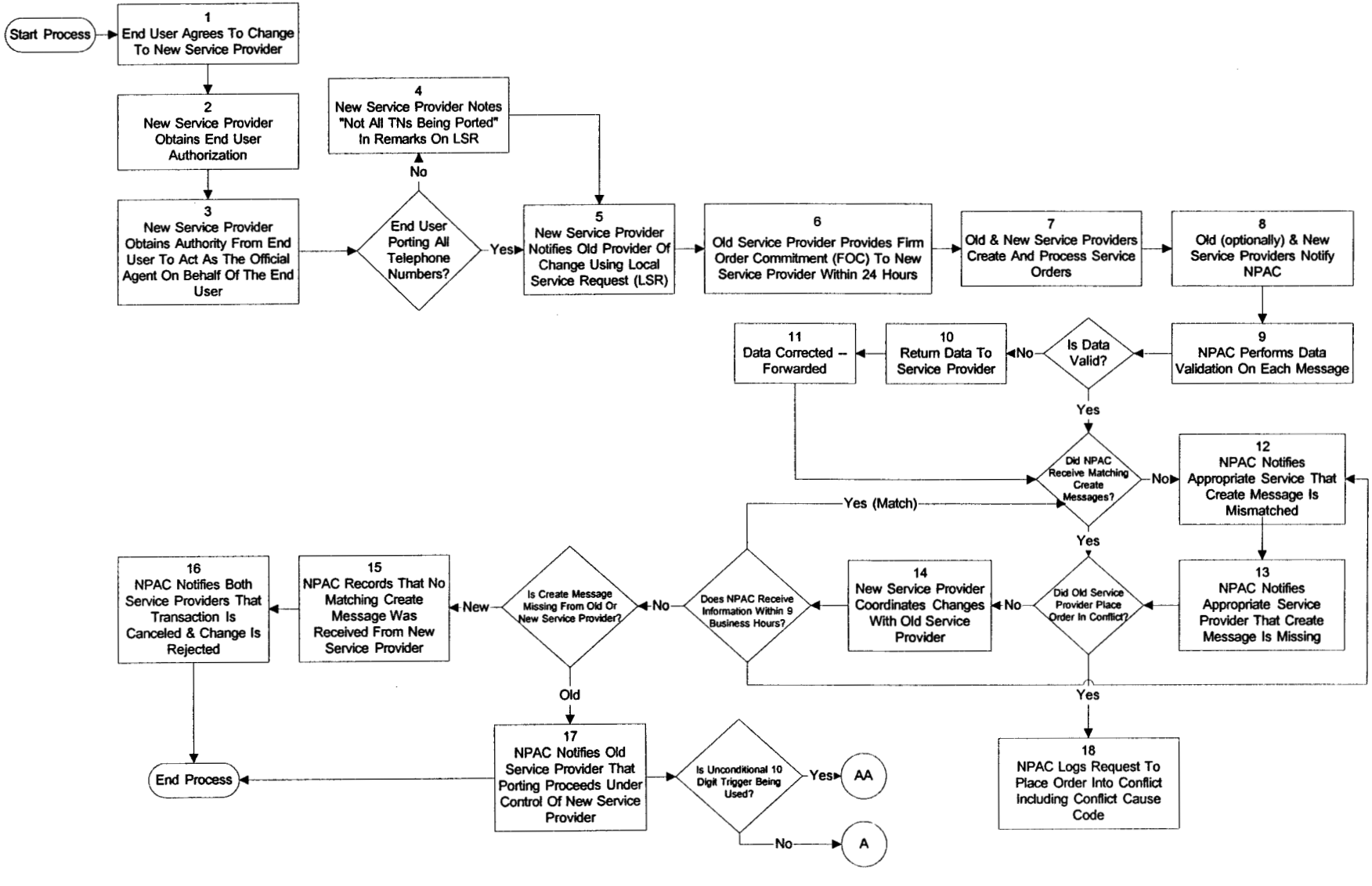
INP / LNP Numbers Ported - Arizona



INP / LNP Numbers Ported - Arizona

	Cum. Net LNP TNs	Cum. Net INP TNs	Cum. All Ported TNs
Totals - 96	0	0	0
Totals - 97	0	5,388	5,388
January-98	0	5,473	5,473
February-98	0	5,786	5,786
March-98	0	6,852	6,852
April-98	0	8,068	8,068
May-98	0	9,391	9,391
June-98	0	10,877	10,877
July-98	3	12,214	12,217
August-98	9	12,253	12,262
September-98	606	12,277	12,883
October-98	4,098	15,165	19,263
November-98	7,853	14,540	22,393
December-98	14,859	13,179	28,038
January-99	25,115	12,366	37,481
February-99	32,285	11,009	43,294

LOCAL NUMBER PORTABILITY PROVISIONING PROCESS FLOW

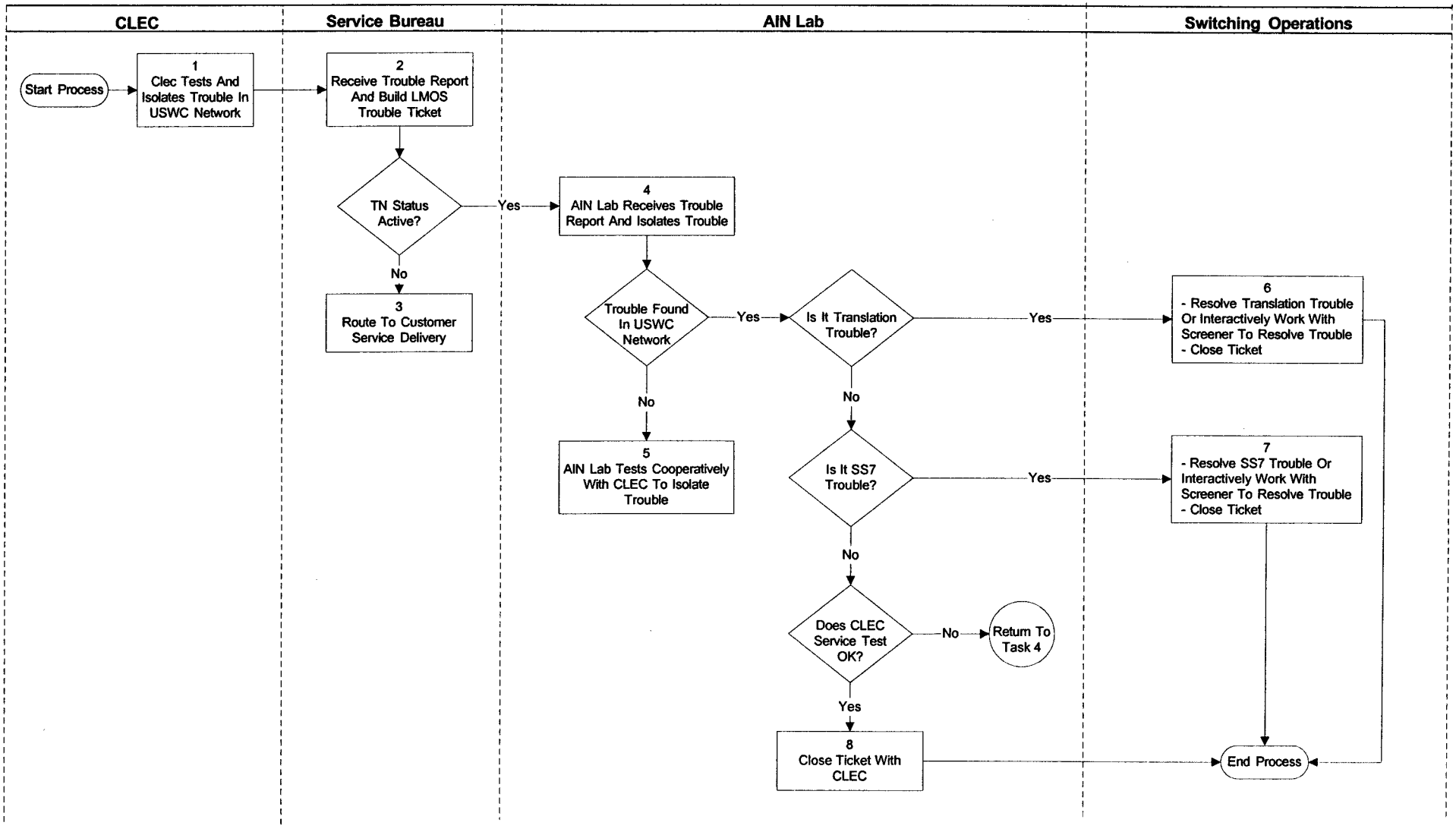


Local Number Portability Provisioning

Task List

Assoc. Task #	Process
1, 2, & 3	End user requests service from the new service provider and requests retention of current telephone number(s); authorizes new service provider to act as official agent. New service provider determines if the customer is porting all TNs. If yes, go to Step (6). If no, go to Step (5).
4	New service provider notes "not all TNs being ported" in remarks field on LSR.
5	New service provider notifies old service provider of change using Local Service Request (LSR).
6.	Old service provider provides Firm Order Confirmation (FOC) to the new service provider.
7 & 8	Old and new service providers create and process service orders through service order systems. Old and new service providers notify the NPAC and enter subscription data into the NPAC SMS.
9.	NPAC performs data validation on each individual message.
10 & 11	If the data is not valid, the NPAC returns notification to the service provider for correction. The service provider, upon notification from the NPAC SMS, corrects the data and sends back to the NPAC SMS.
12 & 13 & 18	NPAC notifies appropriate service provider that create message is missing or data does not match. Service provider places order in conflict. Service provider coordinates correction.
14	New service provider coordinates changes with old service provider. Go to Step (17).
15	Does NPAC receive information within nine (9) business hours? If create messages match go to Step (17). If time expires or create messages mismatched, go to Step (16).
16	The NPAC records that time expired or no matching create message was received from new service provider. NPAC notifies both service providers that transaction is canceled and change is rejected.
17	NPAC notifies old service provider that porting proceeds under control of new service provider.

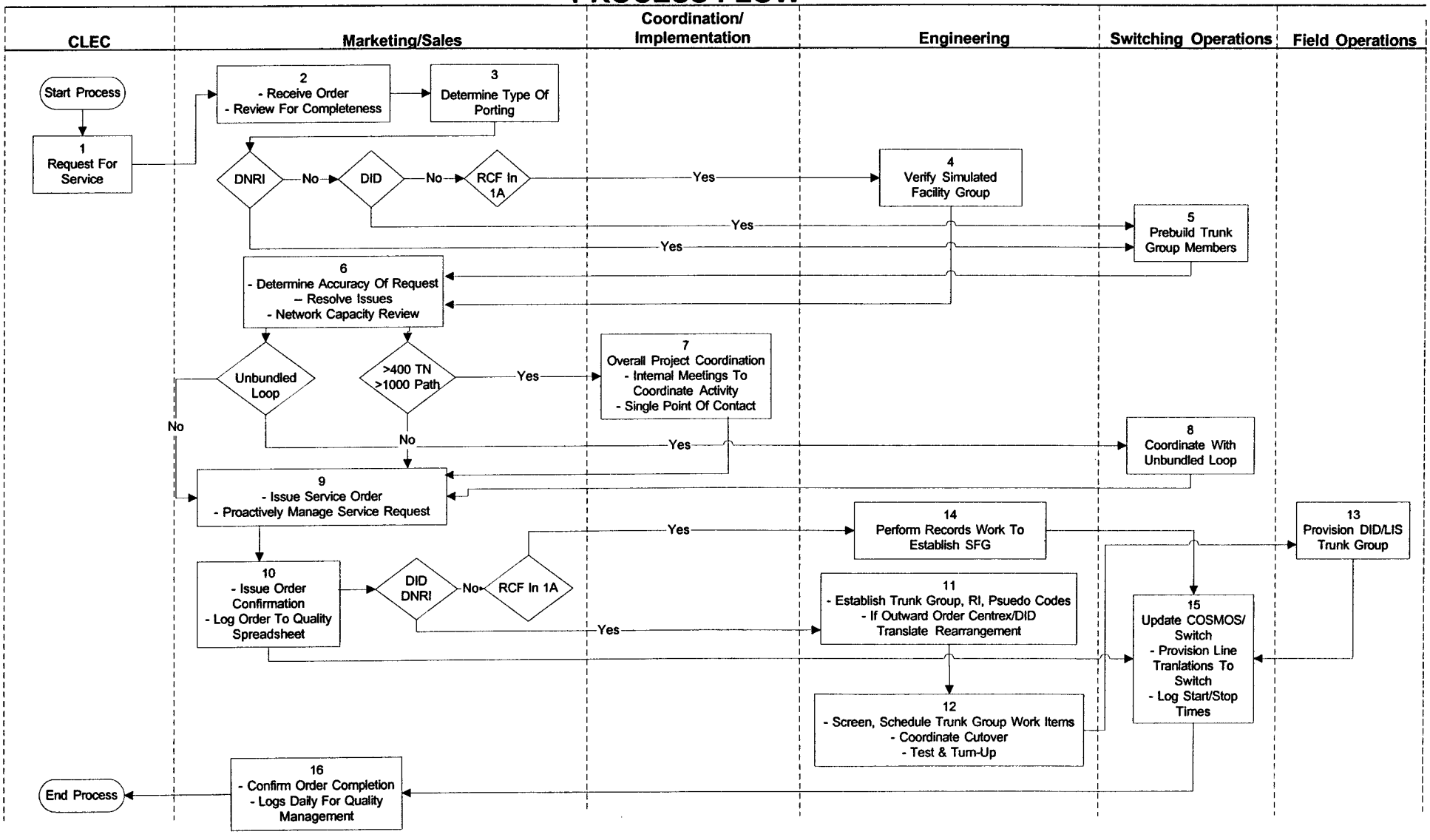
LOCAL NUMBER PORTABILITY MAINTENANCE PROCESS FLOW



Local Number Portability Maintenance
Task List

Assoc. Task #	Process
1	End User reports trouble to CLEC, CLEC tests and isolates trouble in USW network
2	Receive trouble report and build LMOS trouble ticket
2.1	Route to AIN Lab if TN status is active at NPAC
3	If TN does not have a status of active route call to ISC
4	Ain Lab receives trouble report, analyzes trouble, and isolates trouble found
4.1	AIN Lab analyzes trouble and isolates to USW network
5	No trouble found in U S WEST network. AIN Lab will cooperatively test with CLEC if trouble isolation is unknown
6	AIN Lab will route translation trouble to Complex Translations, RCMAC. Translations groups will resolve translation trouble or interactively work with screener to resolve trouble. Close trouble ticket once trouble is resolved.
7	AIN Lab will route SS7 trouble to SS7 group to resolve trouble or work interactively with screener to resolve trouble. Closes trouble ticket with once trouble is resolved.
8	Close trouble ticket with CLEC

INTERIM NUMBER PORTABILITY PROVISIONING PROCESS FLOW

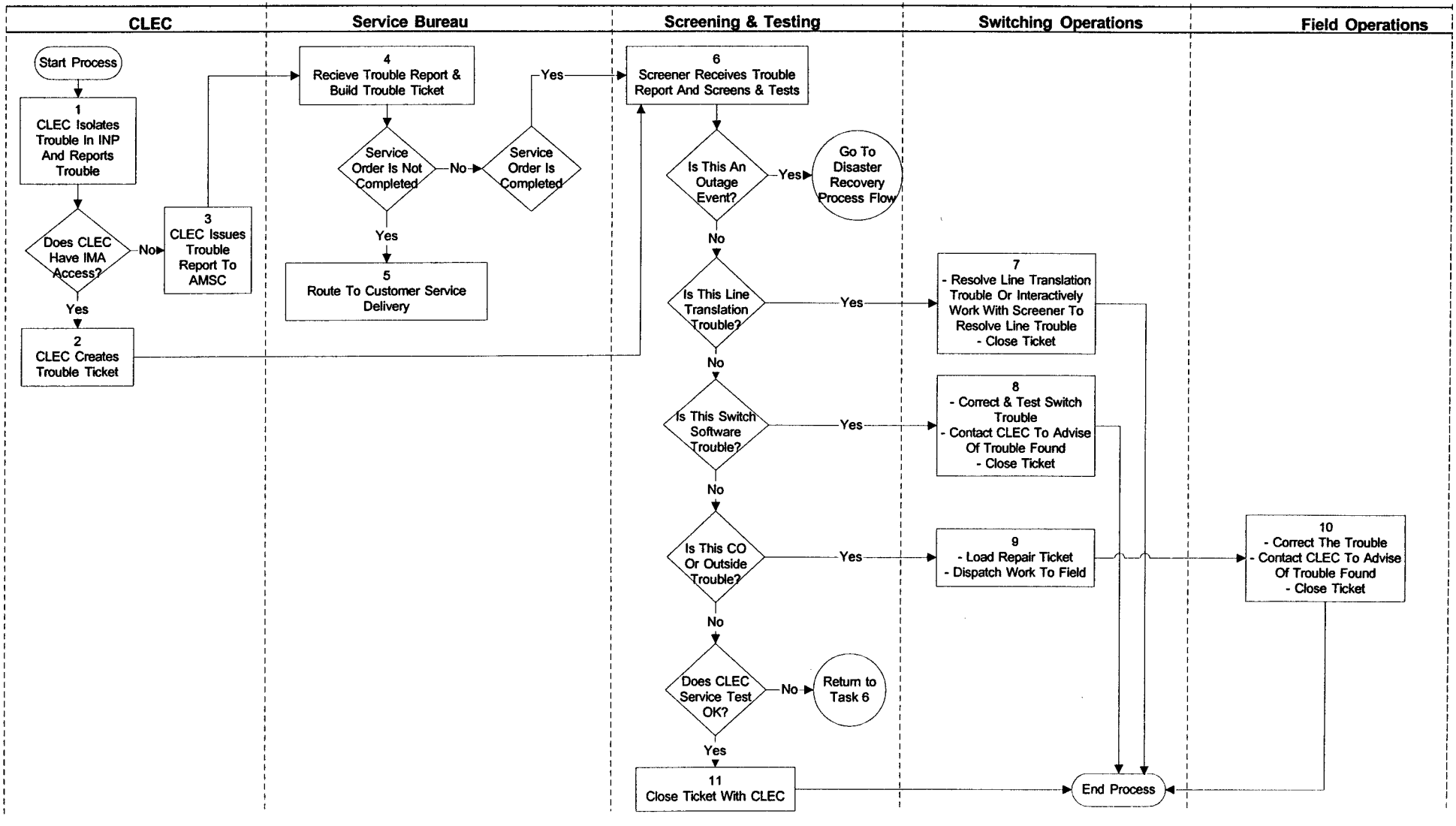


Interim Number Portability Provisioning

Task List

Assoc. Task #	Process
Interim Number Portability utilizing RCF, DID, DNRI solutions	
1	CLEC requests Interim Number Portability Service
2	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ICS). LSR and associated forms reviewed for completeness (LSR, Number Portability Form, Outward LSR, End User Information Form)
3	Determine interim portability solution to be used (Remote Call Forwarding, Directory Number Route Indexing, INP/DID arrangement
4	If request is for RCF in a 1A switch, verify availability of Simulated Facility Group and provide to ICS for service order
5	If request is for DNRI/DID service, prebuild trunk group members
6	Determines if the request forms are accurate and complete; resolves questions; initiates network capacity review
7	Overall project coordination for INP orders greater than 400 TNs and/or 1,000 paths. All DID/DNRI orders are project managed.
8	If INP service is associated with unbundled loop service, follow INP/Unbundled Loop process flow for coordination
9	Issue Service Order and proactively manage all INP orders
10	Service Order Administrator issues order confirmation
11	For DID/DNRI, establish trunk group, route index, pseudo codes. If outward order is Centrex/DID, retranslate common block
12	For DID/DNRI, screen, schedule trunk group work items. Coordinate cutover, testing and turn-up of trunk group at frame due time
13	If DID, provision DID and LIS trunk groups and augments via WFAC
14	If RCF in a 1A switch with no availability, perform records work to establish Simulated Facility Group
15	Update COSMOS/switch. Provision line translations to switch. Log start/stop time in Quality Database.
16	ICS confirms order completions and logs daily in the INP Quality Database for quality management

INTERIM NUMBER PORTABILITY MAINTENANCE PROCESS FLOW



Interim Number Portability Maintenance
Task List

Assoc. Task #	Process
1	CLEC isolates trouble and reports trouble
1.1	CLEC determines if trouble is reported either manually or through IMA access
2	If CLEC is reporting trouble via IMA access, CLEC issues trouble ticket
3	CLEC issues trouble report to AMSC by call 1-800-223-7881
4	Receive trouble report and build LMOS trouble ticket
4.1	Determine if the service order status for the trouble reported is identified in the service order processor as "not completed". If service order has not completed, route to Customer Service Delivery for handling with pending service order
4.2	Determine if service order status for the trouble reported is identified in the service order processor as "completed". If "yes", route to screener
5	Route to Customer Delivery Center to process trouble report with existing service request
6	Screener receives trouble report in LMOS and screens and tests
6.1	Screener follows decision flow for isolating trouble
7	Resolve line translation trouble or interactively work with screener to resolve line translations trouble. Close LMOS ticket. Contact CLEC
8	Correct and test switch trouble. Contact CLEC to advise of trouble resolution. Close ticket with screener or via WFA/DI. Call Screener to notify of trouble resolution.
9	LRAC dispatches work to LNO via WFA/DI/DO
10	LNO corrects the trouble and closes the trouble ticket in WFA and contacts the CLEC to advise of resolution. LNO contact MPAC of OE changes
11	Close ticket with CLEC

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238 AFFIDAVIT OF MARGARET S. BUMGARNER**
STATE OF WASHINGTON	)	
	:	**SS**
COUNTY OF KING	)	

Margaret S. Bumgarner, of lawful age being first duly sworn, deposes and states:

1. My name is Margaret S. Bumgarner. I am Manager – Federal Regulatory in the Public Policy organization of U S WEST Communications in Seattle, Washington.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Margaret S. Bumgarner
Margaret S. Bumgarner

SUBSCRIBED AND SWORN to before me this 10 day of March, 1999.

JOYCE A. MORRIS
COMMISSION EXPIRES
NOTARY
PUBLIC
APRIL 11, 2002
STATE OF WASHINGTON

Joyce A. Morris
Notary Public

My Commission Expires:
April 11, 2002

0000008534

THE ARIZONA CORPORATION COMMISSION

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TONY WEST
Commissioner
CARL J. KUNASEK
Commissioner

ORIGINAL

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	Docket No. T-00000B-97-0238 **U S WEST COMMUNICATIONS, INC.'S SUPPLEMENTAL NOTICE OF INTENT TO FILE WITH FCC AND APPLICATION FOR VERIFICATION OF § 271(c) COMPLIANCE**

U S WEST COMMUNICATIONS, INC.
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Arizona Corporation Commission
DOCKETED
MAR 25 1999
DOCKETED BY MN

PART II

AFFIDAVIT OF SIMPSON

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

LORI A. SIMPSON

U S WEST COMMUNICATIONS

MARCH 25, 1999

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1 **Identification of Affiant**

2 My name is Lori Simpson. My business address is 301 West 65th Street, Minneapolis,
3 Minnesota, 55423. I have been employed by U S WEST for 26 years. I am a director in
4 the Wholesale Markets division of U S WEST. In this position, I supervise a group of
5 managers responsible for providing technical and other information to support
6 U S WEST's 271 checklist filings. I have previously held positions in the residence,
7 small business, and large business retail divisions of U S WEST, and in the carrier and
8 operator services divisions. Prior to assuming my current position, I worked in the area
9 of legal and regulatory compliance.

10 My education includes a Bachelor of Arts degree from the University of Minnesota
11 (1978), and a Juris Doctor degree from William Mitchell College of Law in St. Paul,
12 Minnesota (1992). I was admitted to the Minnesota bar in 1992, and am currently
13 licensed to practice law in Minnesota.

14 **Purpose of Affidavit**

15 The purpose of my affidavit is to describe how U S WEST has satisfied the elements of
16 three checklist items contained in Section 271 of the Telecommunications Act of 1996
17 ("Act"): items 7(ii) and 7(iii), access to directory assistance and operator services; item
18 (8), white pages directory listings; and item (14), resale.

19 In describing how U S WEST has satisfied these three checklist items, I will note the
20 terms and conditions to which U S WEST is specifically and concretely bound by its
21 proposed Statement of Generally Available Terms (SGAT) and by its approved

1 interconnection and resale agreements. I will also explain that U S WEST currently
2 provides products and services to CLECS in these three checklist areas.

3 **Executive Summary**

4 My testimony establishes that U S WEST has satisfied the requirements of the
5 Telecommunications Act of 1996 (Telecom Act) for providing access to directory
6 assistance and operator services, white pages directory listings, and resale of retail
7 telecommunications services, that are prerequisites for U S WEST's entry into the
8 interLATA long distance market in Arizona.

9 U S WEST meets these requirements in Arizona through the proposed Statement of
10 Generally Available Terms and Conditions for Interconnection (SGAT) and 58
11 Commission-approved interconnection and resale agreements. As shown in this
12 testimony, U S WEST provides the services covered by the proposed SGAT and the
13 agreements under concrete and binding terms and conditions that comport with the
14 requirements of the Telecommunications Act of 1996 and FCC orders.

15 First, with regard to directory assistance and operator services, U S WEST provides
16 access to directory assistance and operator services under the terms of the SGAT and
17 the agreements. Specifically, CLECs may purchase directory assistance and operator
18 services from U S WEST, they may provide their own services, or they may purchase
19 the services from a third party. U S WEST currently provides directory assistance
20 and/or operator services to 30 resellers and four facility-based CLECs in Arizona. As
21 demonstrated in my testimony, these services are provided on a nondiscriminatory
22 basis as between U S WEST and CLECs, and as between CLECs.

1 Second, under the SGAT and the agreements, U S WEST provides white pages
2 directory listings for CLECs in Arizona. U S WEST's listing service includes: 1)
3 updating U S WEST's directory assistance database to include CLEC end user listings;
4 2) updating U S WEST's listings database to include CLEC end user listings records;
5 and 3) furnishing directory publishers with CLEC end user listings contained in the
6 U S WEST listings database for publication in local white pages directories. U S WEST
7 provides the same listings activities to its retail end users. U S WEST has successfully
8 processed more than 19,990 white pages directory listings for CLECs in Arizona. As
9 demonstrated in my testimony, U S WEST provides nondiscriminatory white pages
10 directory listings service to CLECs and provides listings for CLECs' end users with the
11 same accuracy and reliability as provided for U S WEST's retail end users.

12 Finally, under the SGAT and the agreements, U S WEST makes a broad range of retail
13 telecommunications services available for resale by CLECs in Arizona. As required
14 under the Act, these services include, but are not limited to, Basic Exchange Service,
15 Basic Exchange Switched Features, and IntraLATA toll. Further, the limited restrictions
16 on resale have been approved by the Commission and are consistent with the Act and
17 FCC orders.

18 The Commission established discounts for services available for resale in a cost docket
19 proceeding. These discounts are included in the SGAT and apply under the
20 agreements with CLECs. The discounts reflect the costs avoided by U S WEST for
21 offering these services on a wholesale rather than retail basis, as required under the
22 Act.

As this testimony demonstrates, U S WEST successfully provides more than 19,734 resold residential and business local exchange lines, and numerous other resold services, to 30 CLECs in Arizona. U S WEST provides these services under the concrete and binding terms and conditions of the proposed SGAT and the agreements, each of which comply with the Telecom Act.

In summary, U S WEST is committed to providing nondiscriminatory access to directory assistance services and operator services, white pages directory listings, and retail telecommunications services for resale. As this testimony describes in detail, U S WEST provides assistance and support to CLECs in their resale, listings, and other U S WEST interactions. U S WEST measures its performance in providing nondiscriminatory services to CLECs. As this testimony demonstrates, U S WEST satisfies the checklist and the Telecom Act in these three checklist areas.

Directory Assistance Service

Section 271(c)(2)(B)(vii) of the Act requires local exchange carriers, such as U S WEST, to provide CLECs:

> Nondiscriminatory access to . . . (II) directory assistance services to allow the other carrier's customers to obtain telephone numbers . . . .

U S WEST satisfies this checklist item via its proposed SGAT and 58 approved interconnection and resale agreements. Under the provisions in these documents, U S WEST specifically and concretely offers to provide CLEC's with nondiscriminatory access to U S WEST's directory assistance service. The following language from the SGAT demonstrates this point:

> 10.5.1.1 Directory assistance service is a telephone number, voice information service that U S WEST provides to its own end users and to other telecommunications carriers. U S WEST provides CLEC non-discriminatory access to U S WEST's directory assistance centers, services and directory assistance databases . . . .

The SGAT further obligates U S WEST to provide directory services to CLECs according to the same methods, practices and standards U S WEST uses to provide directory assistance service to its end users:

> 10.5.2.4 U S WEST will perform Directory Assistance Services for CLEC in accordance with operating methods, practices, and standards in effect for all U S WEST end users. U S WEST will provide the same priority of handling for CLEC's end user calls to U S WEST's Directory Assistance service as it provides for its own end user calls. Calls to U S WEST's directory assistance are handled on a first come, first served basis, without regard to whether calls are originated by CLEC or U S WEST end users.

Service Description – Directory Assistance Service

Callers to directory assistance service use a simple dialing arrangement to access directory assistance service, for example, "411" or "1-(area code)-555-1212." Callers to directory assistance can request the telephone number of any telephone subscriber contained in the directory assistance database, regardless of the telephone subscriber's local service provider.

Directory assistance service consists of several elements:

Directory Assistance Listings – include the name, address and telephone number of a telephone subscriber.

Directory Assistance Listings Updates – are required whenever a telephone subscriber changes a telephone number or address.

Directory Assistance Database – contains directory assistance listings. The directory assistance database is accessed by directory assistance operators during a directory assistance call.

Operators and Operator Positions – receive requests from callers and, after searching the directory assistance database, provide the caller with the requested listing.

Directory Assistance Trunking – provides the connection between an end user's end office switch and the directory assistance platform. Directory

1 assistance operator-type trunking connects both U S WEST and CLEC end
2 office switches to the U S WEST directory assistance platform.

3 CLECs have several options for obtaining their directory assistance service. CLECs
4 who use U S WEST end office switches to serve their end users, such as resellers and
5 purchasers of unbundled switching, may use the same directory assistance operator-
6 type trunking used by U S WEST to reach the directory assistance platform. Such
7 CLECs have access to the operators and operator positions used by U S WEST, and
8 receive service from the same directory assistance database used to provide service to
9 U S WEST's end users. A facility-based CLEC that serves its end users from its own
10 end office switch can obtain access to U S WEST's directory assistance service. Such
11 a CLEC must obtain dedicated operator-type trunks to connect its end office switch to
12 the U S WEST directory assistance platform.

13 CLECs that use U S WEST operators to provide directory assistance service can obtain
14 branded or unbranded service. Branded directory assistance includes a message such
15 as "Thank You for using (CLEC)" at the beginning and end of each directory assistance
16 call.

17 CLECs may choose to use their own directory assistance platform and operators. In
18 this case, CLECs that use U S WEST end office switches to serve their end users, such
19 as resellers and purchasers of unbundled switching, must establish dedicated operator-
20 type trunks from the U S WEST end office switch to the CLEC's directory assistance
21 platform. A CLEC that wants to offer its own directory assistance service has several
22 choices for establishing its directory assistance database. First, the CLEC can access

1 the U S WEST directory assistance database on a real-time, "per-dip" basis. Second,
2 the CLEC can establish its own directory assistance database, but populate that
3 database with listings provided by U S WEST. Finally, the CLEC can obtain its
4 directory assistance listings from a third party, just as U S WEST obtains listings for its
5 National Directory Assistance service from a third party listings provider.

6 U S WEST includes the CLEC's end users in the U S WEST directory assistance
7 database regardless of the option a CLEC chooses to serve its end users. This
8 ensures that callers to the U S WEST directory assistance service will be able to obtain
9 telephone numbers assigned to the CLEC's end users.

10 **Directory Assistance Service in Arizona**

11 U S WEST currently provides directory assistance service to CLECs in Arizona,
12 including facilities-based and reseller CLECs. U S WEST provides directory assistance
13 services for 19,734 end users of 30 reseller CLECs and for end users of four facilities-
14 based CLECs in Arizona.

15 CLECs' end users have access to the same listings to which U S WEST's end users
16 have access. U S WEST has processed more than 19,990 CLEC end user listings and
17 included them in U S WEST's directory assistance database in Arizona (except for
18 nonpublished listings, which are not available on directory assistance).

19 U S WEST will continue to meet the current demand for directory assistance service,
20 and is prepared to meet reasonable and foreseeable future demand for directory
21 assistance service.

The following description details how U S WEST provides nondiscriminatory access to directory assistance service and satisfies the requirements of the Telecom Act and the FCC's orders.

Branding

In conformance with the FCC's rules,[1] U S WEST allows CLECs to brand calls to U S WEST's directory assistance service, where technically feasible. By branding a call, a CLEC can identify the end user's local service provider. An example of branding is the message "thank you for using Easy Phone," which would be played for Easy Phone's end users' who call directory assistance, either at the front of the call, at the end of the call, or both. The proposed SGAT provides for this as follows:

> 10.5.1.1.1.3 Call Branding Service – Allows CLEC's end users to receive the service options listed in 10.5.1.1.1.1 and 10.5.1.1.1.2 branded with the brand of CLEC, where technically feasible. Call Branding announces CLEC's name to CLEC's end user at the start and completion of the call. Call Branding is an optional service available to CLEC. If CLEC selects the Call Branding option, U S WEST will provide Call Branding to CLEC, where technically feasible.
>
> a) Front End Brand - Announces CLEC's name to CLEC's end user at the start of the call. There is a nonrecurring charge to setup and record the Front End Brand message.
>
> b) Back End Brand - Announces CLEC's name to CLEC's end user at the completion of the call. There is a nonrecurring charge to setup and record the Back End Brand message.

U S WEST will provide branded directory assistance service to a CLEC that resells or uses unbundled switching, where technically feasible, through customized routing and dedicated trunks. Customized routing allows a CLEC's calls to be directed to the

[1] 47 C.F.R. 51.217(d).

1 CLEC's dedicated trunks. Those dedicated trunks allow the CLEC's directory
2 assistance traffic to be recognized by the directory assistance platform and branded
3 with the CLEC's unique brand.

4 A facility-based CLEC's traffic to U S WEST's directory assistance platform may also be
5 branded. In this instance, the operator-type trunks that deliver CLEC traffic from a
6 CLEC's end office switch identify the CLEC's traffic so that it may be uniquely branded.

7 No monthly, recurring charge for branding applies. The nonrecurring charge to
8 establish each branding message is $3,560.00. (See SGAT Exhibit A – Price List.)

9 **Dialing Parity**

10 U S WEST provides dialing parity for CLEC access to U S WEST's directory assistance
11 services. An end user of a CLEC that resells U S WEST's local exchange services or
12 uses unbundled switching accesses U S WEST's directory assistance services by
13 dialing the same number (e.g., "411") as a retail end user of U S WEST. An end user
14 of a facility-based CLEC dials a number selected by the CLEC to access U S WEST's
15 directory assistance service. The CLEC may choose the same number used by
16 U S WEST or a different number.

17 The proposed SGAT provides for this as follows:

18 10.5.2.7 CLEC's customers may dial 1+411 or 1+NPA+555-1212 to access
19 U S WEST.

20 10.5.2.8 A facility-based CLEC may choose to have its customers dial a
21 unique number or use the same dialing pattern as U S WEST end users to
22 access U S WEST Directory Assistance operators.

Thus, U S WEST provides CLECs with dialing parity for access to directory assistance services.

Directory Assistance Listings

The following provision of the SGAT obligates U S WEST to place CLECs' listings in U S WEST's directory assistance database.

> 10.4.2.4 CLEC grants U S WEST a non-exclusive license to incorporate CLEC's end user listings information into its directory assistance database. U S WEST will incorporate CLEC end user listings in the directory assistance database. U S WEST will incorporate CLEC's end user listings information in all existing and future directory assistance applications developed by U S WEST.

CLECs enjoy the same options for the appearance of their end users' listings as U S WEST's end users. These options include nonpublished, nonlisted, and premium listings.

Third Party Directory Assistance

CLECs can provide their own directory assistance service for their end users, or they can provide access to the directory assistance service of a third party provider.

A reseller CLEC can provide its own, or a third party's, directory assistance service by purchasing customized routing, and routing its end users' directory assistance traffic from U S WEST end offices to the CLEC's own directory assistance platform, or to the platform of a third party provider. This scenario also applies to CLECs that purchase unbundled switching from U S WEST.

A facility-based CLEC can provide its own directory assistance service by routing its directory assistance traffic directly from its end office switch to its directory assistance platform, or to the platform of a third party provider. A facility-based CLEC that uses its own switch to route its end users' directory assistance calls to a provider other than U S WEST does not require the involvement of U S WEST, unless the CLEC obtains trunks from U S WEST.

Access to U S WEST's Directory Assistance Listings or Database

In conformance with the FCC's rules, U S WEST allows CLECs to obtain U S WEST's directory assistance listings in an electronic format, on magnetic tape, or a CLEC's operators may access the U S WEST directory assistance database on a read-only, real-time basis.[2] These options are available to CLECs that employ directory assistance operators to provide directory assistance service to their end users. The SGAT provides for these options as follows:

> 10.5.1.1.2 Directory Assistance List Services – Directory Assistance List Services is the bulk transfer of U S WEST's Directory Assistance database under a non-exclusive, non-transferable, revocable license to use the information solely for the purpose of providing Directory Assistance Service subject to the terms and conditions of this SGAT. See Section 10.6 for terms and conditions relating to the Directory Assistance List Services.
>
> 10.5.1.1.2.1 If CLEC elects to build its own directory assistance service, it can obtain U S WEST directory listings through the purchase of the Directory Assistance List.

Alternatively, a CLEC's directory assistance operators may access U S WEST's directory assistance database on a real-time basis, making "dips" into the database for

[2] 47 C.F.R. 51.217(C)(3)(ii).

individual listings, just as U S WEST's operators do. U S WEST has not received a request for this service from any CLEC in Arizona as of the date of this filing. However, the SGAT provides as follows:

> 10.5.1.1.3 Directory Assistance Database Service – U S WEST shall provide CLEC non-discriminatory access to U S WEST's Directory Assistance Database or "Directory1" database, where technically feasible, on a "per dip" basis.

In conformance with the FCC's rules, the listings provided to CLECs include all the listings available to U S WEST.[3] U S WEST's Directory Assistance List and Directory Assistance Database services provide CLECs with all the listings contained in U S WEST's directory assistance database, including nonlisted and nonpublished listings, and the listings of all service providers – U S WEST, CLEC, and independent telephone company listings. While U S WEST obtained access to some independent telephone company listings pursuant to contract provisions that limit U S WEST's ability to provide such listings to third parties, U S WEST has informed the independent telephone companies from whom such listings were obtained that such contract provisions are no longer valid because they violate the Act.

Nondiscriminatory Access to U S WEST's Directory Assistance Service

As discussed earlier in this affidavit, the Act and the FCC's rules require U S WEST to provide nondiscriminatory access to directory assistance service. The affidavit of Mr. Mike Williams describes two performance indicators for directory assistance service. The first indicator, "Speed of Answer," measures the average time following the first ring

[3] 47 C.F.R. 51.217(c)(3)(i).

1 before the U S WEST directory assistance system answers a call. The second
2 indicator, "Calls Answered Within 10 Seconds," measures the percent of directory
3 assistance calls that the U S WEST directory assistance system answers within ten
4 seconds of the first ring. U S WEST provides the results for these indicators on an
5 aggregated basis that combines the results for U S WEST and each CLEC into a single
6 measure. The results for the months of November, 1998, through January, 1999, are
7 as follows:

	November	December	January
Speed of Answer (in seconds):	10.20	8.60	8.40
Calls Answered within 10 Seconds:	89.8%	91.4%	91.6%

11 In its second Louisiana 271 application, BellSouth proposed similar directory assistance
12 measures. In its response to that application, the FCC required BellSouth to either
13 disaggregate directory assistance performance data between BellSouth and CLECs, or
14 to explain why disaggregation is not feasible or is unnecessary to show
15 nondiscrimination.[4] In U S WEST's case, disaggregation is not necessary to show
16 nondiscrimination because the underlying directory assistance platform and procedures
17 ensure U S WEST and CLECs receive identical directory assistance service.

18 The majority of directory assistance traffic that U S WEST handles on behalf of CLECs
19 originates from resold services. This directory assistance traffic, as well as traffic from
20 unbundled switching, is delivered to the directory assistance platform via trunks that
21 CLEC end users' share with U S WEST's retail end users. CLEC and U S WEST retail

1 end users receive offers access to these shared trunks on a "first-come, first-served"
2 basis so CLECs enjoy the same access to these trunks as U S WEST.

3 Once directory assistance traffic arrives at the directory assistance platform, CLEC and
4 U S WEST directory assistance calls are handled on a first-come, first-served, basis –
5 regardless of whether the call arrives on a shared trunk from a U S WEST end office
6 switch or a dedicated trunk from a CLEC switch. This means that whether a call
7 originates with a U S WEST end user or a CLEC end user, the call is delivered to the
8 directory assistance operator based on the order in which the directory assistance
9 platform receives the call.

10 The directory assistance platform feeds each directory assistance call to a directory
11 assistance operator on the same first-come, first-served basis. Directory assistance
12 operators handle both CLEC and U S WEST directory assistance traffic. Calls feed
13 automatically and mechanically into "open" operator positions; the operators have no
14 capability to choose one call over another. Furthermore, the directory assistance
15 database does not identify the party providing local service to the listed party, so the
16 U S WEST operator is unable to discriminate in the provision of CLEC and U S WEST
17 listings information.

18 The design of U S WEST's directory assistance service platform assures the
19 nondiscriminatory treatment of CLECs. With a few exceptions, calls to each U S WEST
20 directory assistance platform are placed in a single queue based on the order in which

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[4] In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, Released October 13, 1998, para. 245.

1 the directory assistance platform received the call. Calls feed to an operator based on
2 the call's order in the queue. Once in the queue, calls may only be handled on a first-
3 in, first-answered, basis. There is no technical capability to prioritize the handling of
4 calls within the queue based on anything except the order in which the calls were
5 received.

6 U S WEST bases its policy to design a single queue for calls to each directory
7 assistance platform on economic and efficiency considerations. U S WEST makes an
8 exception to this single-queue design when required to meet end users' needs.
9 Exceptions include: separate queues for Spanish-speaking callers (so such calls may
10 be sent to Spanish-speaking operators); separate queues according to the service
11 being accessed (for example, so calls for national directory assistance and calls for
12 regional directory assistance go into different queues); and a separate queue for calls
13 from coin phones and hotels (for technical reasons involving billing). In no case does a
14 separate directory assistance queue exist based on the identity of the end user's local
15 service provider.

16 The design of the directory assistance network prevents any opportunity for
17 discrimination among or between CLECs' end users' calls and U S WEST's end users'
18 calls. In order to discriminate, U S WEST would have to place CLECs' calls into
19 separate queues, and give those queues a lower answering priority. Separate queues
20 would require separate trunks for each CLEC's calls, additional software for additional
21 queues, and could require additional operators because multiple queues create
22 significant call handling inefficiencies. Financially speaking, attempting to provide
23 directory assistance in a discriminatory manner would cost more than it would be worth.

As calls are placed in queue, operator positions are polled to determine operator availability to receive a call. Each call is then automatically and mechanically delivered to an available operator based on the call's place in the queue and the length of time that an operator has been without a call. The operator takes no action to receive a call; rather, if an operator is without a call, the next call in queue is automatically fed to the operator and he simply hears a tone that alerts him to the presence of a call.

The above procedures ensure that U S WEST and CLECs receive the same level of directory assistance service. The proposed SGAT obligates U S WEST to use the above first-come, first-served procedures in the provision of directory assistance service:

> 10.5.2.4 U S WEST will perform Directory Assistance Services for CLEC in accordance with operating methods, practices, and standards in effect for all U S WEST end users. U S WEST will provide the same priority of handling for CLEC's end user calls to U S WEST's Directory Assistance service as it provides for its own end user calls. Calls to U S WEST's directory assistance are handled on a first come, first served basis, without regard to whether calls are originated by CLEC or U S WEST end users.

Because U S WEST's directory assistance procedures and platform design afford U S WEST no opportunity to discriminate between callers, there is no need for separate measurements for CLEC and U S WEST access to directory assistance. In order to provide separate measurements, separate trunks and queues would be required, and additional software and personnel would be required. Adding the functionality to gather separate measurements for CLEC and U S WEST access to directory assistance service would, ironically, create the very conditions necessary to engage in the discriminatory handling of calls.

1 Mr. Mike Williams provides additional information about the measurement of the speed
2 of directory assistance access, and performance results for directory assistance service
3 provided to CLEC and U S WEST end users in Arizona.

4 **Ordering, Provisioning, and Maintenance**

5 As described above, reseller CLECs and those using unbundled switching do not need
6 any equipment or trunking to allow their end users to access U S WEST's directory
7 assistance service. Unless the CLEC chooses a directory assistance provider other
8 than U S WEST, its end users receive the same access to directory assistance as
9 U S WEST end users. Accordingly, the only ordering, provisioning, and repair that is
10 required is that which is provided for the local exchange service that is resold by the
11 CLEC to its end user. These activities are described in the resale section of this
12 testimony.

13 Mr. Mike Weidenbach describes the trunk ordering, provisioning, and maintenance
14 available for facility-based CLECs to access U S WEST's directory assistance platform
15 in his testimony.

16 **Billing**

17 U S WEST provides monthly bills to reseller CLECs and CLECs using unbundled
18 switching. Each CLEC's bill details the number of calls its end users make to
19 U S WEST's directory assistance service. The proposed SGAT obligates U S WEST to
20 issue bills in the following manner:

1 10.5.5.1 U S WEST will track and bill CLEC on a monthly basis for the
2 number of calls placed to U S WEST's Directory Assistance service by
3 CLEC's end users.

4 **Summary**

5 In summary, U S WEST's proposed SGAT and existing agreements with CLECs
6 establish specific and concrete terms which ensure it provides nondiscriminatory
7 access to directory assistance service as required under the Telecom Act. This
8 testimony demonstrates that U S WEST does, in fact, provide nondiscriminatory access
9 to directory assistance service to CLECs in Arizona. U S WEST satisfies this checklist
10 item.

Operator Services

Section 271(c)(2)(B)(vii) of the Telecom Act requires that local exchange carriers, such as U S WEST, provide to CLECs:

> Nondiscriminatory access to . . . (III) operator services to allow the other carrier's customers to obtain telephone numbers . . . .

U S WEST satisfies this checklist item via its proposed SGAT and its 58 approved interconnection and resale agreements. Under the provisions in these documents, U S WEST is specifically and concretely bound to provide CLECs with nondiscriminatory access to U S WEST's operator services. The following language from the SGAT recognizes this obligation.

> 10.7.1.1 Toll and assistance operator services are a family of offerings that assist end users in completing local and long distance calls. U S WEST provides nondiscriminatory access to U S WEST operator service centers, services and personnel.

Service Description - Operator Services

Callers access operator services by dialing "0" or "0" plus a phone number. Callers to operator services can request operator assistance to complete local and intraLATA long distance calls, including person-to-person calls, collect calls, third party billing calls, and calls to verify or interrupt busy lines.

Operator services consists of several primary functions:

Local Assistance. Assists end users requesting help or information on placing or completing local calls; connects end users to home NPA directory assistance,

1 and provides other information and guidance, as may be consistent with
2 U S WEST's customary practices for providing end user assistance.

3 **IntraLATA Toll Assistance.** Assists end users requesting help or information
4 on placing or completing intraLATA toll calls. U S WEST will direct a CLEC's
5 end user to contact its provider to complete intraLATA toll calls.

6 **Emergency Assistance.** Assists end users who are attempting to place local or
7 intraLATA toll calls to emergency agencies, including but not limited to, police,
8 sheriff, highway patrol and fire.

9 **Busy Line Verification.** Permits an end user to request assistance from the
10 operator bureau to determine if the called line is in use. The operator will not
11 complete the call for the end user initiating the BLV inquiry.

12 **Busy Line Interrupt.** Permits an end user to request assistance from the
13 operator to interrupt a telephone call in progress. The operator will interrupt the
14 busy line and inform the called party that a call is waiting.

15 **Quote Service**. Provides time and charges to hotel/motel and other CLEC end
16 users for guest/account identification.

17 CLECs enjoy several options for providing operator services. CLECs that serve their
18 end users from U S WEST end office switches, such as resellers and purchasers of
19 unbundled switching, may use the same trunking used by U S WEST to reach the
20 operator services switch. Such CLECs access the same operators and operator
21 positions used by U S WEST. A facility-based CLEC that serves its end users from its

1 own end office switch can obtain access to U S WEST's operator services. Such a
2 CLEC must obtain dedicated operator-type trunks to connect its end office switch to the
3 U S WEST operator services platform.

4 CLECs that use U S WEST operators to provide operator services can obtain branded
5 or unbranded service. Branded operator services include a message such as "Thank
6 You for using (CLEC)" at the beginning or end of each operator services call.

7 CLECs may choose to provide their own operator services and operators. In this
8 instance, CLECs that use U S WEST end office switches to serve their end users, such
9 as resellers and purchasers of unbundled switching, must establish dedicated operator-
10 type trunks from the U S WEST end office switch to the CLEC's operator services
11 platform.

12 **Operator Services in Arizona**

13 U S WEST currently provides operator services to CLECs in Arizona. U S WEST
14 provides operator services for 19,734 end users of 30 reseller CLECs, and for end
15 users of one facility-based provider.

16 U S WEST will continue to meet the current demand for operator services, and is
17 prepared to meet reasonable and foreseeable future demand for operator services.

18 The following description details how U S WEST provides nondiscriminatory access to
19 operator services and meets the requirements of the Act and the FCC's orders.

Branding

In conformance with the FCC's rules,[5] U S WEST allows CLECs to brand calls to U S WEST's operator services, where technically feasible. By branding a call, an end user can identify the local service provider. An example of branding is the message "Thank you for using Easy Phone," which would be played for Easy Phone's end users who call operator services, either at the front of the call, at the end of the call, or both. The proposed SGAT provides for this as follows:

> 10.7.2.10 Call Branding is an optional service available to CLEC. Call Branding announces CLEC's name to CLEC's end user at the start of the call and at the completion of the call. If CLEC selects the Call Branding option, U S WEST will provide Call Branding to CLEC where technically feasible.
>
> a) Front End Brand – Announces CLEC's name to CLEC's end user at the start of the call. There is a nonrecurring charge to setup and record the Front End Brand message.
>
> b) Back End Brand – Announces CLEC's name to CLEC's end user at the completion of the call. There is a nonrecurring charge to setup and record the Back End Brand message.

U S WEST will provide branded operator services to a CLEC that resells or uses unbundled switching, where technically feasible, through customized routing and dedicated trunks. Customized routing allows a CLEC's calls to be directed to the CLEC's dedicated trunks. Those dedicated trunks allow the CLEC's operator services traffic to be recognized by the operator services platform and branded with the CLEC's unique brand.

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[5] 47 C.F.R. 51.217(d).

A facility-based CLEC's traffic to U S WEST's operator services may also be branded. In this instance, the operator services trunks that deliver CLEC traffic from a CLEC's end office switch to U S WEST's operator services platform identify the CLEC's traffic so that it may be uniquely branded.

No monthly recurring charge for branding applies. The nonrecurring charge to establish each branding message is $3,560.00. (See SGAT Exhibit A – Price List.)

Dialing Parity

U S WEST provides dialing parity for CLEC access to U S WEST's operator services. An end user of a CLEC that resells U S WEST's local exchange services or a CLEC that uses unbundled switching accesses U S WEST's operator services by dialing the same number, i.e., "0" or "0" plus a phone number, as a retail end user of U S WEST.

An end user of a facility-based CLEC dials a number selected by the CLEC to access U S WEST's operator services. The CLEC may choose the same number used by U S WEST or a different number.

The proposed SGAT provides for this as follows:

> 10.7.2.12 CLECs customers may dial "0" or "0+" to access U S WEST operator services. A facility-based CLEC may choose to have its customers access U S WEST operators by dialing a unique number or by using the same dialing pattern as U S WEST end users.

1 Thus, U S WEST satisfies the Act's requirement for dialing parity with regard to
2 accessing operator services.

3 **Third Party Operator Services**

4 CLECs may provide their end users with their own operator services or a third party
5 provider's services.

6 A reseller CLEC can provide its own or a third party's operator services by purchasing
7 customized routing, and routing its end users' operator traffic from U S WEST end
8 offices to the CLEC's operator services platform or a third party provider's operator
9 services platform. This scenario also applies to CLECs that purchase unbundled
10 switching from U S WEST.

11 A facility-based CLEC can provide its own operator services by routing its operator
12 services traffic directly from its end office switch, over its trunks, to its own operator
13 services platform or to the platform of a third party provider. A facility-based CLEC that
14 uses its own switch to route its end users' operator services calls does not require the
15 involvement of U S WEST unless the CLEC orders the trunks from U S WEST.

16 **Nondiscriminatory Access to U S WEST's Operator Services**

17 As discussed earlier in this affidavit, the Act and the FCC's rules require U S WEST to
18 provide nondiscriminatory access to operator services. The affidavit of Mr. Mike
19 Williams describes two performance indicators for operator services. The first indicator,
20 "Speed of Answer – Operator Services," measures the average time following the first
21 ring before an operator answers a call. The second indicator, "Calls Answered Within

Ten Seconds," measures the percentage of operator assisted calls that operators answer within ten seconds of the first ring. U S WEST provides results for these indicators on an aggregated basis that combines the results for U S WEST and CLECs. The results for the months of November, 1998, through January, 1999, are as follows:

	November	December	January
Speed of Answer (in seconds):	10.90	11.60	10.40
Calls Answered within 10 Seconds:	89.1%	88.4%	89.6%

In its second Louisiana 271 application, BellSouth proposed similar operator services measures. In its response to that application, the FCC required BellSouth to either disaggregate operator services performance data between BellSouth and CLECs, or to explain why disaggregation is not feasible or is unnecessary to show nondiscrimination.[6] In U S WEST's case, disaggregation is not necessary to show nondiscrimination because the underlying operator services platform and procedures ensure U S WEST and CLECs receive identical operator services.

The majority of operator services traffic that U S WEST handles on behalf of CLECs originates from resold services. Trunks that CLEC end users share with U S WEST retail end users deliver operator services traffic to the operator services platform. CLEC and U S WEST retail end users receive access to these shared trunks on a "first-come, first-served" basis so CLECs enjoy the same access to these trunks as U S WEST.

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[6] In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, Released October 13, 1998, para. 245.

1 Once operator traffic arrives at the operator services platform, CLEC calls and
2 U S WEST calls are handled on a first-come, first-served, basis – regardless of whether
3 the call arrives on a shared trunk from a U S WEST end office switch or a dedicated
4 trunk from a CLEC switch. This means that whether a call originates with a U S WEST
5 end user or a CLEC end user, the call is delivered to the operator based on the order in
6 which the operator services platform receives the call.

7 The operator services platform feeds each call to an operator on the same first-come,
8 first-served basis. The same pool of operators handles both CLEC and U S WEST
9 operator services traffic. Calls feed mechanically and automatically into each available
10 operator position based on the order in which the calls arrived. Operators have
11 absolutely no capability to select one call over another.

12 The design of U S WEST's operator services platform assures the nondiscriminatory
13 treatment of CLECs. With few exceptions, calls to each U S WEST operator services
14 platform are placed in a single queue based on the order in which the operator services
15 platform received the call.

16 U S WEST bases its policy to design a single queue for calls to each operator services
17 platform on economic and efficiency considerations. U S WEST makes an exception to
18 this single-queue design when required to meet end users' needs. Exceptions include:
19 separate queues for Spanish-speaking callers (so such calls may be sent to Spanish-
20 speaking operators); and a separate queue for calls from hotels and coin phones (for
21 technical reasons involving billing). In no case does a separate operator services
22 queue exist based on the identity of the end users' local services provider.

The design of the operator services network prevents any opportunity for discrimination among or between CLECs' end users' calls and U S WEST's end users' calls. In order to discriminate, U S WEST would have to place CLECs' calls into separate queues, and give those queues a lower answering priority. Separate queues would require: separate trunks for each CLEC's calls, additional software for additional queues, and additional operators.

Once a call is placed in the queue, it may only be handled on a first-in, first-answered, basis; no technical capability exists for prioritizing call handling within the queue on any basis other than the order in which calls were received.

As calls are placed in queue, all operator positions are polled to determine operator availability to receive a call. Each call is then automatically and mechanically delivered to an available operator based on the call's place in the queue and the length of time that an operator has been without a call. The operator takes no action to receive a call; rather, if an operator is without a call, the next call in queue is automatically fed to the operator and she simply hears a tone that alerts her to the presence of a call.

The above procedures ensure that U S WEST and CLECs receive the same level of operator services. The proposed SGAT obligates U S WEST to use the above first-come, first-served procedures in the provision of operator services:

> 10.7.2.7 U S WEST will perform Operator Services in accordance with operating methods, practices, and standards in effect for all its end users. U S WEST will respond to CLEC's end user calls to U S WEST's operator services according to the same priority scheme as it responds to U S WEST's end user calls. Calls to U S WEST's operator services are handled on a first come, first served basis, without regard to whether calls are originated by CLEC or U S WEST end users.

1 Because U S WEST's operator services platform design and procedures afford
2 U S WEST no opportunity to discriminate between callers, there is no need for separate
3 measurements for CLEC and U S WEST access to operator services. In order to
4 provide separate measurements, separate trunks and queues would be required and
5 additional software and personnel would be required. Adding the functionality to gather
6 separate measurements for CLEC and U S WEST access to operator services would,
7 ironically, create the very conditions necessary to engage in the discriminatory handling
8 of calls.

9 Mr. Mike Williams provides additional information about the measurement of the speed
10 of operator services access and performance results for operator services provided to
11 CLEC and U S WEST end users in Arizona.

12 **Ordering, Provisioning, and Maintenance**

13 As described above, reseller CLECs do not need any equipment or trunking to allow
14 their end users to access U S WEST's operator services. Unless the reseller CLEC
15 chooses an operator services provider other than U S WEST, its end users receive the
16 same access to operator services as U S WEST's end users. Accordingly, the only
17 ordering, provisioning, and repair required is that which is provided for the local
18 exchange service that is resold by the CLEC to its end user. These activities are
19 described in the resale section of this testimony.

20 Mr. Mike Weidenbach describes the trunk ordering, provisioning, and maintenance
21 available for facility-based CLECs to access U S WEST's operator services platform in
22 his testimony.

Billing

U S WEST provides monthly bills to CLECs. The proposed SGAT, for example, obligates U S WEST to issue bills in the following manner:

> 10.7.5.1 U S WEST will track usage and bill CLEC for the calls placed by CLEC's end users and facilities.
>
> 10.7.5.2. U S WEST will compute CLEC's invoice based on both Option A (Price Per Message) and Option B (Price Per Work Second and Computer Handled Calls). U S WEST will charge CLEC whichever option results in lower charges.

Summary

In summary, U S WEST's proposed SGAT and its existing agreements with CLECs establish specific and concrete terms which ensure it provides nondiscriminatory access to operator services as required under the Telecom Act. This testimony demonstrates that U S WEST does, in fact, provide nondiscriminatory access to operator services to CLECs. U S WEST satisfies this checklist item.

White Pages Directory Listings

Sections 271(c)(2)(B)(viii) and 251(b)(3) of the Telecom Act together require U S WEST to provide CLECs with nondiscriminatory access to white page directory listings. U S WEST provides nondiscriminatory access to white page listings through the terms and conditions of the proposed SGAT and its 58 approved interconnection and resale agreements. The proposed SGAT states:

> 10.4.2.8 U S WEST provides non-discriminatory appearance and integration of white pages listings for all CLEC's and U S WEST's end users. All requests for white pages directory listings, whether CLEC or U S WEST end users, follow the same processes for entry into the listings database.

Service Description – White Page Listings

U S WEST offers several types of listings, including primary, premium, and privacy listings. A primary listing includes a telephone subscriber's name, address, and telephone number. The white pages of the local telephone directory contain primary listings. U S WEST provides primary listings at no charge to CLECs. For example, the SGAT states:

> 10.4.2.1 CLEC will provide in standard, mechanized format, and U S WEST will accept at no charge, one primary listing for each main telephone number belonging to CLEC's end users. Primary listings are defined in U S WEST general exchange tariffs.

Premium listings include, but are not limited to, additional listings for other household or business members, cross reference listings, and listings from other cities.

Privacy listings include nonlisted and nonpublished listings. Nonlisted listings are available on U S WEST directory assistance records, but are not published in local directories. Nonpublished listings are omitted from U S WEST directory assistance

1 records and are not provided to publishers of local directories. U S WEST treats CLEC
2 end user listings with the same level of confidentiality as U S WEST end user listings.

3 U S WEST offers premium and privacy listings to CLECs at the retail rate, less the
4 applicable wholesale discount. For example, the proposed SGAT states:

5 10.4.2.2 CLEC will be charged for premium and privacy listings *(e.g.,*
6 additional, foreign, cross reference) at U S WEST's General Exchange
7 listing Tariff rates, less the wholesale discount, as described in Exhibit A.

8 U S WEST integrates CLEC end user listings with U S WEST, other CLEC, and
9 independent telephone company listings in U S WEST's listing database. With the
10 CLEC's permission, U S WEST will provide these integrated listings to U S WEST DEX,
11 U S WEST's directory publisher, and other directory publishers for the purpose of
12 publishing local directories.

13 **White Pages Directory Listings in Arizona**

14 U S WEST has entered more than 19,990 listings for more than 30 facility-based and
15 reseller CLECs into U S WEST's listings database. U S WEST submits daily files
16 containing nonprivate CLEC, independent company, and U S WEST listings to its
17 directory publishers for inclusion in white pages directories.

18 **Nondiscriminatory Appearance and Integration of White Pages Listings**

19 In order to satisfy this checklist item, the FCC requires a BOC to provide CLECs with
20 white pages listings that are nondiscriminatory in appearance and integration.[7]

[7] Second Louisiana Order, para. 256.

U S WEST provides CLECs with listings to comply with this requirement. For example, U S WEST's proposed SGAT states:

> 10.4.2.8 U S WEST provides non-discriminatory appearance and integration of white pages listings for all CLEC's and U S WEST's end users. All requests for white pages directory listings, whether CLEC or U S WEST end users, follow the same processes for entry into the listings database.

The FCC further requires U S WEST to provide CLEC listings in the same font and size as U S WEST listings, without any separate classification for CLEC listings.[8] U S WEST satisfies this requirement in its proposed SGAT:

> 10.4.2.10 CLEC white pages listings will be in the same font and size as listings for U S WEST customers, and will not be separately classified.

U S WEST Provides Accurate, Reliable, and Nondiscriminatory Provisioning of White Pages Directory Listings

The FCC requires U S WEST to provide CLECs with white page listings that are as accurate and reliable as the white pages listings U S WEST provides to its own end users.[9] The FCC also requires U S WEST to have procedures in place that minimize the potential for errors in the listings provided to CLECs.[10]

U S WEST provides CLECs' white pages listings with the same accuracy and reliability with which it provides its own end users' listings. U S WEST accomplishes this requirement by using the same procedures for U S WEST and CLEC listings. U S WEST's proposed SGAT declares:

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8 Second Louisiana Order, footnote 803.

9 Second Louisiana Order, para. 257.

10 Id.

> 10.4.2.5 CLEC end user listings will be treated the same as U S WEST's end user listings . . . .

The proposed SGAT also provides:

> 10.4.2.11 U S WEST processes for publication of white pages directory listings will make no distinction between CLEC and U S WEST subscribers. CLEC listings will be provided with the same accuracy and reliability as U S WEST's end user listings. U S WEST will ensure CLEC listings provided to U S WEST are included in the white pages directory published on U S WEST's behalf using the same methods and procedures, and under the same terms and conditions, as U S WEST uses for its own end user listings.

U S WEST's processes and procedures for white pages directory listings ensure that listings provided for CLECs are as accurate and reliable as listings provided for U S WEST's retail end users. Attached as Exhibit LAS-1 is "Flow Chart for White Pages Directory Listings." This flow chart shows how CLECs and U S WEST end user listings are processed.

To ensure CLECs can submit accurate and complete listings orders to U S WEST, U S WEST provides extensive, detailed in-person listings training for CLECs. Between June 1998, and December 1998, directory listings training sessions were held in Phoenix, Portland, Seattle, and Denver. A session was held in Minneapolis in February, 1999. Representatives from the following CLECs, among others, have attended these sessions: AT&T, Nextlink, ECI Communications, Phone Solutions, Inc., MCI, GTE, GST, ELI, Compass, Touch America, Eclipse, McLeod, FirsTel, InfoTel, Arizona Dialtone, Inc., Dakota Telecom Group, and Winstar.

Detailed training materials are provided to CLECs at no charge. These materials, titled "U S WEST Facility-Based Co-Provider Directory Listings User Document," and

1 "U S WEST Reseller Co-Provider Directory Listings User Document," are several
2 hundred pages in length, and provide listing details, including: identity of the
3 U S WEST department responsible for listings, types of listings, process for electronic
4 and manual entry of listings, instructions for drafting listings, listings process flow,
5 process for problem resolution, and schedules for verification proofs.

6 To ensure nondiscriminatory treatment of CLEC listings, the same systems and
7 personnel process U S WEST and CLEC listings. These systems and personnel apply
8 manual and mechanical edits to CLEC and U S WEST end user listings before and
9 after they are entered into U S WEST's listings database. CLEC and U S WEST end
10 user listings are commingled in the U S WEST listings database.

11 U S WEST submits a single daily listings file containing commingled listings to its official
12 directory publisher, U S WEST DEX (DEX), for inclusion in white pages directories.
13 DEX publishes CLEC and U S WEST end user listings under the terms and conditions
14 of the agreement between U S WEST and DEX.

15 In addition to the processes and procedures described above, CLECs are given
16 opportunities to review their listings for accuracy, as they appear in U S WEST's listings
17 database. To allow CLECs to conduct the review, U S WEST provides monthly
18 "verification proofs" to CLECs. These proofs give the CLEC an opportunity to review
19 and correct their listings, if necessary. U S WEST provided verification proofs to
20 approximately 25 reseller CLECs and 10 facility-based CLECs in Arizona during
21 January, 1999. The proposed SGAT provides:

> 10.4.2.19 U S WEST will provide monthly listing verification proofs that provide the data to be displayed in the published white pages directory.
>
> 10.4.2.20 U S WEST will provide CLEC a reasonable opportunity to verify the accuracy of the listings to be included in the white pages directory.
>
> 10.4.2.21 CLEC may review and if necessary edit the white page listings prior to the close date for publication in the directory.

CLECs may request "on-demand" listings reports, or they may check individual listings at any time. U S WEST responded to two CLEC on-demand listings requests in Arizona in December, 1998, and January, 1999.

U S WEST provides CLECs with white pages directory closing schedules. Neither U S WEST nor CLECs can make changes to listings for incorporation in the next directory after these dates. U S WEST provides the closing date information to CLECs by mail or facsimile. The proposed SGAT provides:

> 10.4.2.3 Directory publishing schedules and deadlines will be provided to CLEC.

U S WEST provides for delivery of directories to CLEC end users on the same terms and conditions as directories are delivered to U S WEST end users.

> 10.4.2.12 U S WEST shall ensure its third party publisher distributes appropriate alphabetical and classified directories (white and yellow pages) and recycling services to CLEC customers at parity with U S WEST end users, including providing directories a) upon establishment of new service; b) during annual mass distribution; and c) upon customer request.

The testimony of Mr. Dean Buhler provides additional information concerning U S WEST's systems and business processes for white pages directory listings, including processes for preordering, ordering, provisioning, maintenance, and billing.

Publication of White Pages Directories

U S WEST licenses listings to CLECs that wish to publish their own white pages directories. Such listings are available in electronic format, on magnetic tape, or by other medium as may be agreed to between the parties. The proposed SGAT states:

> 10.4.2.23 Pursuant to Sec. 222 (a), (b), (c), (d), and (e) of the Telecommunications Act, U S WEST will provide subscriber lists information gathered in U S WEST's capacity as a provider of local exchange service on a timely and unbundled basis, under nondiscriminatory and reasonable rates, terms and conditions to CLEC upon request for the purpose of publishing directories in any format.

Summary

In summary, U S WEST's SGAT and existing interconnection agreements with CLECs establish specific and concrete terms that bind U S WEST to provide white pages directory listings in the manner required by the Act and the FCC's orders. U S WEST does, in fact, provide accurate and reliable listings to CLECs in Arizona. Accordingly, U S WEST satisfies this checklist item.

Resale

Sections 251(c)(4) and Section 252(d)(3) of the Telecom Act obligate U S WEST to provide retail telecommunications services available to its end users for resale by CLECs in a nondiscriminatory manner and at wholesale discounts. U S WEST provides telecommunications services for resale through the nondiscriminatory terms and conditions of its proposed SGAT and 58 approved interconnection and resale agreements. The following provision from the proposed SGAT demonstrates this obligation:

> 6.1.1 U S WEST Basic Exchange Telecommunications Service, Basic Exchange Features, and IntraLATA Toll originating from U S WEST exchanges will be available for resale from U S WEST pursuant to the Act and will include terms and conditions (except prices) in U S WEST Tariffs, where applicable.

Further, as ordered by the Commission in its cost docket, and consistent with the Act, U S WEST provides services for resale to CLECs at a 12% discount for residence lines and at an 18% discount for all other services available for resale, and product-specific nonrecurring charges. The SGAT provides for this in Exhibit A – Price List, and as follows:

> 6.3.1 The Telecommunications Services identified in Exhibit A are available for resale at the wholesale discount percentage shown in Exhibit A. This SGAT at Exhibit A incorporates the Wholesale Discount Rate for Arizona as ordered by the Commission in Docket Number U-3021-96-448 et al. If the Commission takes any action to adjust the rates contained herein, U S WEST will make a compliance filing to incorporate the adjusted rates into this SGAT. Upon the compliance filing by U S WEST, the parties will abide by the adjusted rates on a going-forward basis. The Telecommunications Services available for resale but excluded from the wholesale pricing arrangement in this SGAT are available at the retail Tariff rates.

The discounts approved by the Commission in the Cost Docket also apply to resale of products and services under the approved Arizona resale agreements.

The Telecom Act and FCC orders allow for certain limited restrictions on resale terms and conditions. The proposed SGAT and Commission-approved interconnection and resale agreements establish limited restrictions on resale by CLECs. Specifically, the proposed SGAT provides:

> 6.2.2 Basic Exchange Telecommunications Service, Basic Exchange Features, and IntraLATA Toll may be resold only for their intended or disclosed use and only to the same class of end user to which U S WEST sells such services (*e.g.,* residence service may not be resold to business end users). Service provided directly to CLEC for its own use and not resold to end users, such as administrative services, must be identified by CLEC, and CLEC must pay the full retail rates and prices for such services.
>
> 6.2.2.1 Promotional offerings of ninety (90) days or less are not available for resale.
>
> 6.2.2.2 Residential services, services that are grandfathered, and Lifeline/Link-up services are available only to the same class of customer eligible to purchase these services from U S WEST.
>
> 6.2.2.3 Non-telecommunications services, such as inside wiring, calling cards and CPE, are not available for resale.
>
> 6.2.2.4 Enhanced services, such as voice messaging, are not available for resale.

The Commission approved essentially the same restrictions on resale in its arbitration order related to AT&T's interconnection and resale agreement. The order provides the following direction regarding services to be made available for resale:

> The Commission is authorized to act pursuant to federally delegated jurisdiction regarding non-tariffed and deregulated services. The Act mandates the unbundling and resale of "all" telecommunications services, under the supervision of the states.

> As stated in the [FCC First Report and] Order, Para. 962, Lifelink and Link-up services should be offered for resale, but to the class of customers which would be eligible for such services from U S WEST . . . .
>
> Voice mail is not a telecommunications service, and also is presently available on the open market. Voice mail is not the type of service which the Act was designed to make available to LECs. It is not necessary for U S WEST to offer voice mail to CLECs at a resale discount . . . .[11]

Further, the Commission made the following decision regarding resale of promotional offerings:

> Promotional offerings of ninety days or less are not subject to a resale discount, pursuant to [FCC First Report and] Order, Para. 950 . . . .
>
> The Commission declines to extend the time frame of promotional offerings not subject to a resale discount beyond ninety days.[12]

The Commission also addressed cross-class restrictions as follows:

> The Commission interprets the Act's restriction of resale to the same category of customers eligible for the service from the ILEC to include residential service to businesses, business service to residential customers, services such as Lifelink to ineligible subscribers, and the limitation on reselling Centrex services to those customers eligible for the service pursuant to U S WEST's tariff.[13]

Finally, with regard to approved resale restrictions, BellSouth offered, in its second Louisiana 271 application, to make Contract Service Arrangements (CSAs) available at wholesale discounts to aggregated groups of CLEC end users that are similarly situated to the end users for whom the CSA was originally designed. In the FCC's response to BellSouth's second Louisiana application, the FCC found that BellSouth's terms and conditions for resale of CSAs may be a "reasonable and nondiscriminatory resale

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[11] Arizona Corporation Commission, Docket No. U-2428-96-417 et al., In the Matter of the Petition of AT&T Communications of the Mountain States, Inc. for Arbitration of Interconnection Terms, and Conditions with U S WEST Communications, Inc., Pursuant to 47 U.S.C. Sec. 252(b) of the Telecommunications Act of 1996, at pp 14-15.

[12] Id. at p. 16.

[13] Id.

1 restriction because it is sufficiently narrowly tailored."[14] In U S WEST's case,
2 U S WEST offers the resale of CSAs on essentially the same terms and conditions as
3 BellSouth. U S WEST's proposed SGAT provides:

> 4 6.2.2.5 U S WEST will offer Contract Service Arrangements (CSA) at the
> 5 wholesale discount rates specified in Exhibit A for resale. U S WEST will
> 6 offer CSAs for resale in aggregations of customers where CLEC end users
> 7 are similarly situated to the original CSA end user. Nothing in this
> 8 agreement shall affect any obligation of any end user with a CSA with
> 9 U S WEST to terminate the CSA pursuant to the terms of the CSA, including
> 10 payment of any cancellation fees, before transferring service to CLEC.

11 This provision is consistent with the Commission's order in the AT&T arbitration case.
12 The Commission ordered the following:

> 13 Section 251(c)(4) of the Act provides that ILECs must offer for resale at
> 14 wholesale rates "any telecommunication service" that the ILEC provides at
> 15 retail to non-carrier subscribers. This requirement would include discounted
> 16 services, which would still have some avoided costs when provided for
> 17 resale.[15]

18 **Service Description - Resale**

19 "Resale" describes the sale by a CLEC of U S WEST's finished retail
20 telecommunications services to an end user. U S WEST actually delivers the service to
21 the CLEC's end user, but U S WEST's "customer of record" is the CLEC, and all

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[14] In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, Released October 13, 1998, para. 316.

[15] Arizona Corporation Commission, Docket No. U-2428-96-417 et al., In the Matter of the Petition of AT&T Communications of the Mountain States, Inc. for Arbitration of Interconnection Terms, and Conditions with U S WEST Communications, Inc., Pursuant to 47 U.S.C. Sec. 252(b) of the Telecommunications Act of 1996, at p 19.

1 interactions regarding the service take place between U S WEST and the CLEC. The
2 CLEC's end user interacts only with the CLEC, and not with U S WEST.

3 U S WEST provides products/services training classes and ordering classes. CLECs
4 may submit orders for resold services to U S WEST electronically through U S WEST's
5 operational support systems interfaces, EDI or IMA, or by facsimile. CLECs receive the
6 same intervals for installation, provisioning, maintenance, and repair of resold services
7 that U S WEST retail end users receive. CLECs' orders are processed and entered
8 into U S WEST's services order processor (SOP) by U S WEST centers. After they are
9 entered into U S WEST's SOP, they are processed by the same systems and the same
10 personnel that process U S WEST's retail orders for the same services. CLECs receive
11 monthly bills from U S WEST for all resold services.

12 When a CLEC resells a residence or business local exchange service, certain ancillary
13 services are also provided with that service, unless the CLEC makes other
14 arrangements. These ancillary services include directory assistance and operator
15 services. Additionally, U S WEST continues to provide access to 911 service for resold
16 business and residence local exchange lines. To ensure 911 service for a CLEC's
17 resale end users, U S WEST uploads end user information to the Automatic Location
18 Identification (ALI) database from its service order processing systems each evening.
19 This database is used to provide a 911 dispatcher with address information associated
20 with a 911 caller's telephone number. The same end user information is extracted for
21 CLEC and U S WEST end users, using the same time interval for extraction of
22 information, using the same processes, methods and procedures. Ms. Margaret

1 Bumgarner provides additional information regarding 911 service in her testimony in
2 this matter.

3 **Resale in Arizona**

4 CLECs have resold, and U S WEST currently provides, 19,734 local exchange lines
5 and numerous other services to 30 CLECs in Arizona. This includes 10,642 residential
6 lines and 9,092 business lines. U S WEST currently provides other services to CLECs
7 for resale in Arizona including, but not limited to, ISDN service, Public Access Lines,
8 PBX trunks, and DS1 service. CLECs are providing these services in the following
9 Arizona cities, among others: Phoenix, Mesa, Green Valley, Tucson, and Yuma.
10 U S WEST provides these services under terms and conditions that comport with the
11 requirements of the Act and the FCC's orders, and U S WEST is concretely and
12 specifically bound to continue to provide services under such terms and conditions, as
13 described above.

14 U S WEST will continue to satisfy the current demand for services for resale, and is
15 prepared to meet reasonable and foreseeable future demand for services for resale.

16 The following description details how U S WEST provides telecommunications services
17 for resale as required by the Act and the FCC's orders.

18 **Nondiscriminatory Access to Resale**

19 U S WEST's processes and procedures for providing services to CLECs neither
20 discriminate between CLECs nor between CLECs and U S WEST's retail operation.
21 CLECs receive the same provisioning intervals for the same services as U S WEST end

1 users. The same technicians who handle U S WEST retail service orders handle CLEC
2 resale orders for the same services. These technicians use the same systems,
3 processes, and procedures for CLEC and U S WEST orders. CLECs receive the same
4 repair commitments as U S WEST's end users receive for the same services. The
5 same personnel, systems, and processes are used to repair services, whether resold
6 by CLECs or purchased by U S WEST's retail end users.

7 U S WEST has implemented extensive resale performance indicators to ensure that it
8 provides services for resale in the nondiscriminatory manner described above. Mr.
9 Mike Williams describes the resale indicators in his testimony and provides associated
10 Arizona results.

11 **U S WEST Support of CLECs**

12 U S WEST provides services for resale in compliance with the provisions of the Act and
13 the FCC's orders. The following details indicate how U S WEST interacts with CLECs
14 to provide services for resale.

15 U S WEST provides extensive support, training, and information to assist CLECs in
16 doing business with U S WEST and successfully reselling U S WEST's
17 telecommunications services. U S WEST provides training in the following areas:
18 products and services, white pages directory listings and directory assistance listings
19 (as described above in the Listings section of this affidavit), and electronic interfaces.
20 Mr. Dean Buhler provides additional information regarding electronic interface training.
21 The proposed SGAT discusses training:

> 6.2.1 U S WEST shall offer CLEC training on procedures that CLEC must use to request services from U S WEST, including product information, listing, and access to U S WEST systems.

Specifically, U S WEST provides the following resale training classes for reseller CLECs, including Basic Exchange Services Training, Complex Business Services Training, POTS LSR Order Process Training, and Interconnect Mediated Access Training.

U S WEST conducted classes in Seattle, Phoenix, Denver, and Phoenix during 1998 and 1999. To date, U S WEST has trained multiple representatives from more than 20 CLECs, including several CLECs doing business in Arizona. U S WEST posts class schedules on its internet web site at http://www.uswest.com/ com/customers/carrier/interconnect/html/businesstraining.html.

U S WEST provides the following training documents to CLEC representatives attending the classes listed above:

Basic Business and Residence Services

Centrex Services and Single Line Services-ISDN

Private Line, Analog and Digital Point to Point Services, Switchnet 56, DS1, DS3, and Contingency Services

PBX Services, Analog Services, Digital Switched Services, Primary Rate Services"

1 These materials provide detailed Information concerning the topics listed, including
2 product descriptions and ordering information.

3 U S WEST also publishes its "Interconnection and Resale Resource Guide" (IRRG) on
4 the internet at http://www.uswest.com/com/customers/carrier/interconnect/ index.html.
5 U S WEST regularly updates the IRRG. The IRRG contains product and service
6 descriptions, objective intervals for provisioning services, preordering and ordering
7 information, maintenance, repair, and billing information, U S WEST contact telephone
8 numbers, and schedules for training classes, as well as other information.

9 Additionally, U S WEST publishes its Interconnect Mediated Access (IMA) guide and
10 provides CLECs with access to it. U S WEST regularly updates the IMA. The IMA
11 guide contains an IMA user guide, IMA training schedules, answers to frequently asked
12 questions, and IMA future release information.

13 U S WEST also publishes an EDI guide and provides CLECs with access to it. An EDI
14 coordinator is also available by phone to provide assistance and information about EDI.

15 U S WEST has help desks for CLECs. The EDI help desk is referenced above. An
16 IMA help desk is available and provides answers to questions and assistance for
17 CLECs using IMA. The ISC is also available to help CLECs process orders.

18 Additionally, U S WEST provides support for CLECs by assigning an individual account
19 manager from U S WEST's Wholesale Markets organization to each CLEC once the
20 CLEC signs an interconnection or resale agreement with U S WEST. This account

1 manager is the single point of contact to answer questions and facilitate a CLEC's
2 interactions with U S WEST.

3 **Preordering, Ordering, and Provisioning Services**

4 Exhibit LAS-2 is a high-level flow chart that identifies the similarities between
5 preordering, ordering, and provisioning process for resold services provided to a CLEC
6 end user and the same services when they are provided to a U S WEST retail end user.
7 Service representatives in U S WEST's retail operation complete the same activities
8 completed by CLECs, including the following.

9 An end user calls a CLEC representative to order service; an end user calls
10 U S WEST's business office to order service.

11 The CLEC representative may complete preordering and ordering activities by
12 interfacing with U S WEST electronically.

13 The CLEC completes the activities comparable to U S WEST retail ordering and
14 provisioning activities by accessing the same information from the same systems
15 as U S WEST's retail representative.

16 CLECs and U S WEST retail service representatives receive a due date upon
17 completing ordering activities. CLECs and U S WEST's retail operation receive
18 the same due date intervals for the same services for orders placed at the same
19 time.

1 CLEC and U S WEST retail orders are entered into the service order processor
2 (SOP) and they flow through U S WEST's legacy systems in exactly the same
3 manner. Factors such as how service requests are provisioned, how technicians
4 are assigned, and so on, depend solely on variables that are not related to the
5 identity of the local service provider, such as order type, type of service ordered,
6 facility availability, personnel availability, weather conditions, and other variables.

7 Mr. Dean Buhler provides detailed testimony about U S WEST's legacy systems, and
8 provisioning via those systems, in his testimony.

9 A CLEC may perform preordering, ordering, and provisioning activities for resale of
10 U S WEST's services electronically or manually, i.e., via telephone and facsimile.
11 CLECs that perform these activities electronically have two choices; they can use the
12 Electronic Data Interchange (EDI) interface; or, they can use the Interconnect Mediated
13 Access (IMA) interface. Mr. Dean Buhler will provide detailed information about the
14 technical aspects of EDI and IMA in his testimony addressing this matter.

15 In Arizona, reseller CLECs use IMA to complete preordering, ordering, and/or
16 provisioning activities for their resale service requests, and some CLECs choose to use
17 manual processes to complete these activities. To perform preordering activities in
18 IMA, the CLEC accesses applicable preordering screens. To perform ordering
19 activities, the CLEC completes industry standard LSR forms in IMA, and sends them
20 electronically to U S WEST's Interconnect Service Center (ISC). Completed LSR forms
21 include entries for the services the CLEC will resell to its end user. LSR forms can

1 include end user white pages directory listings information, when required, which is also
2 entered into U S WEST's directory assistance database.

3 The ISC representative screens the LSR forms for accuracy and completeness. If the
4 ISC representative finds errors that prevent LSR processing, the representative
5 contacts the CLEC to resolve the error. Errors that cannot be resolved within two hours
6 result in the LSR being rejected.

7 The LSR forms for resale service requests that "flow through" are electronically
8 converted into U S WEST service orders and transmitted to U S WEST's service order
9 processor (SOP). The LSR forms for other resale service requests are forwarded
10 electronically to an ISC order specialist for entry into the SOP.

11 If a CLEC chooses to fax its service requests for resale to U S WEST, the CLEC
12 requests a copy of the CSR by sending a faxed request to U S WEST at a toll-free
13 number. U S WEST faxes or e-mails the CSR to the CLEC according to its request.
14 The CLEC completes preordering activities by contacting the ISC.

15 The CLEC completes resale ordering activities by completing LSR forms for resale of
16 services and faxing them to U S WEST's ISC. The ISC receives faxed LSR forms as
17 an electronic image, screens such forms for completeness and accuracy, and
18 electronically passes the forms to an ISC order specialist for entry into the SOP.

19 When a CLEC's resale order enters U S WEST's SOP, the ISC order specialist sends
20 the CLEC a Firm Order Confirmation (FOC). The FOC confirms the due date the CLEC

received when it completed preordering activities. U S WEST's retail operation does not receive an FOC.

When CLEC and U S WEST orders are completed, all appropriate U S WEST systems are updated. As noted on Exhibit LAS-2, CLECs receive daily reports showing all orders completed the prior day for resale, including new, additional, or disconnected services. In addition, CLECs can access the status of specific service requests in IMA. No notice of order completion is provided to U S WEST's retail operation or its end users.

Maintenance and Repair

Exhibit LAS-3 depicts the maintenance and repair process for the same services for CLECs and for U S WEST's retail operation. CLECs are responsible for reporting to U S WEST trouble experienced by their end users relating to resold services obtained by CLECs from U S WEST. CLECs may complete repair requests electronically or manually. CLECs that file repair reports electronically can use the Electronic Bonding – Trouble Administration (EB-TA) interface or the Interconnect Mediated Access (IMA) interface.

CLECs can also submit trouble reports by calling U S WEST. This is the process used by U S WEST's retail end users. For non-designed services (e.g., residential lines), CLEC and U S WEST retail end users call U S WEST's Repair Call Handling Center. CLECs report designed services trouble (e.g., DS1) to U S WEST's Account Maintenance Support Center, and U S WEST's end users report designed services trouble to the Centralized Repair Service Answering Bureau.

1 An employee called a "screener" receives telephone trouble reports, creates an
2 electronic trouble ticket, and submits it into U S WEST's systems. If a CLEC submits
3 trouble reports electronically, an electronic trouble ticket is automatically created and
4 released into U S WEST's systems. CLEC trouble reports are handled in the same way
5 that U S WEST's retail end users' reports are handled. The same systems, the same
6 personnel, and the same processes and procedures are used to clear such trouble.
7 CLECs' trouble reports receive the same priority as U S WEST end user trouble
8 reports. Trouble reports are handled on a "first-in, first-out," basis.

9 **Billing**

10 CLECs may receive bills from U S WEST electronically or in paper copy. The Business
11 Procedure section of the IRRG contains CLEC bill format options under "Media Type –
12 Output and Reports." CLECs can receive electronic bills for resold services using a
13 national standard electronic interface, the Network Data Mover (NDM). Mr. Dean
14 Buhler provides detailed information about the technical aspects of electronic billing in
15 his testimony.

16 CLECs that want paper bills receive statewide, monthly statements that itemize charges
17 for each end user to whom they have resold services.

18 **Summary**

19 In summary, U S WEST's proposed SGAT and its existing Arizona interconnection
20 agreements contain specific and concrete terms that bind U S WEST to provide
21 telecommunications services for resale in the manner required by the Telecom Act.

U S WEST does, in fact, provide services for resale to numerous CLECs in Arizona under these terms and conditions. Accordingly, U S WEST satisfies this checklist item.

Conclusion

My testimony establishes that U S WEST has satisfied the requirements of the Telecommunications Act of 1996 for providing access to directory assistance and operator services, white pages directory listings, and resale of retail telecommunications services, that are prerequisites for U S WEST's entry into the interLATA long distance market in Arizona.

Because U S WEST has satisfied the requirements of the Act, the Commission should find that U S WEST has satisfied the Act's checklist requirements for nondiscriminatory access to directory assistance and operator services, white page directory listings, and providing retail telecommunications services for resale.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

LORI A. SIMPSON

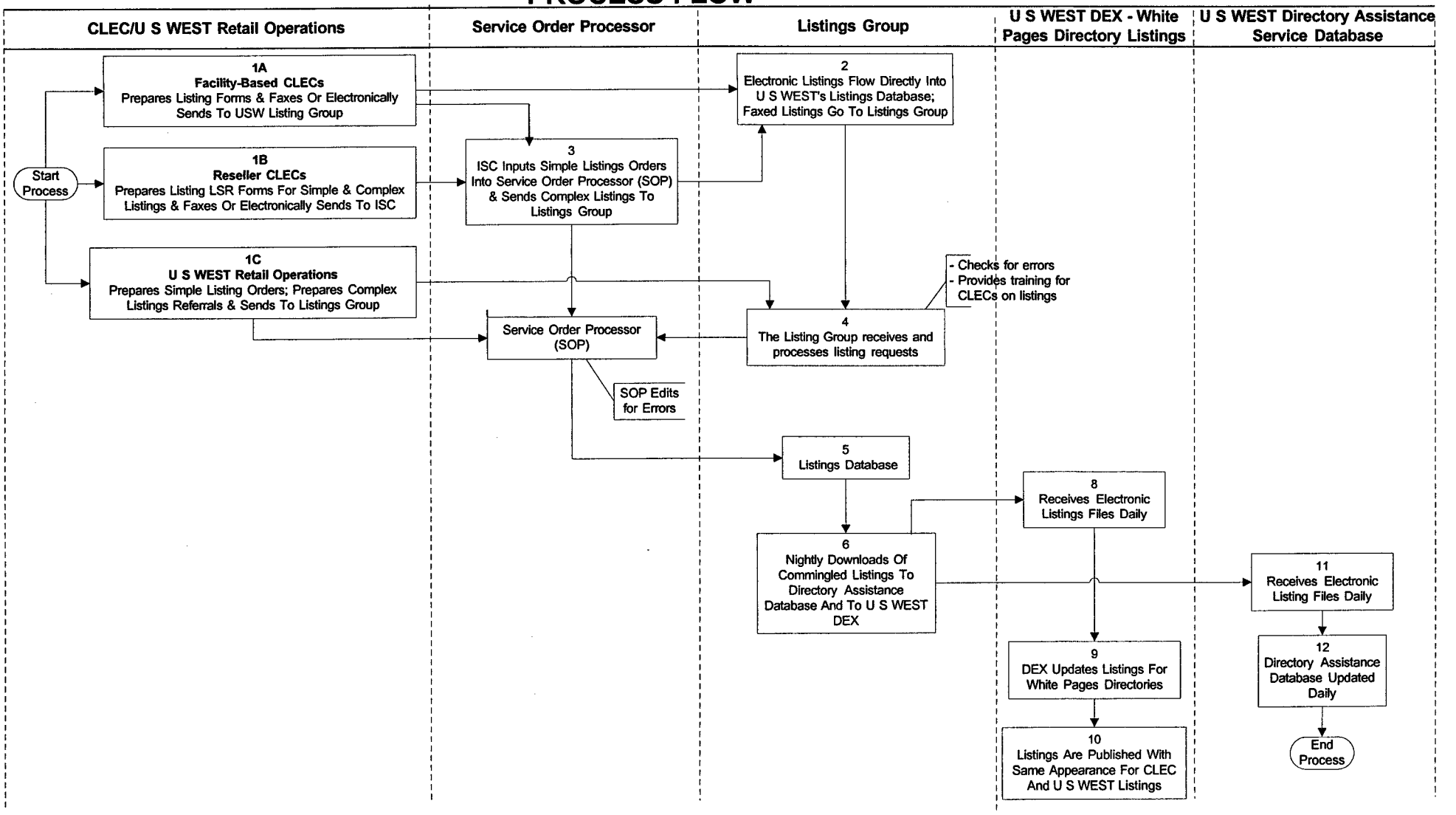
U S WEST COMMUNICATIONS

MARCH 25, 1999

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
Listings Process Flowchart	LAS-1
Retail/Resale Process Flowchart	LAS-2
Repair and Maintenance Process Flowchart	LAS-3

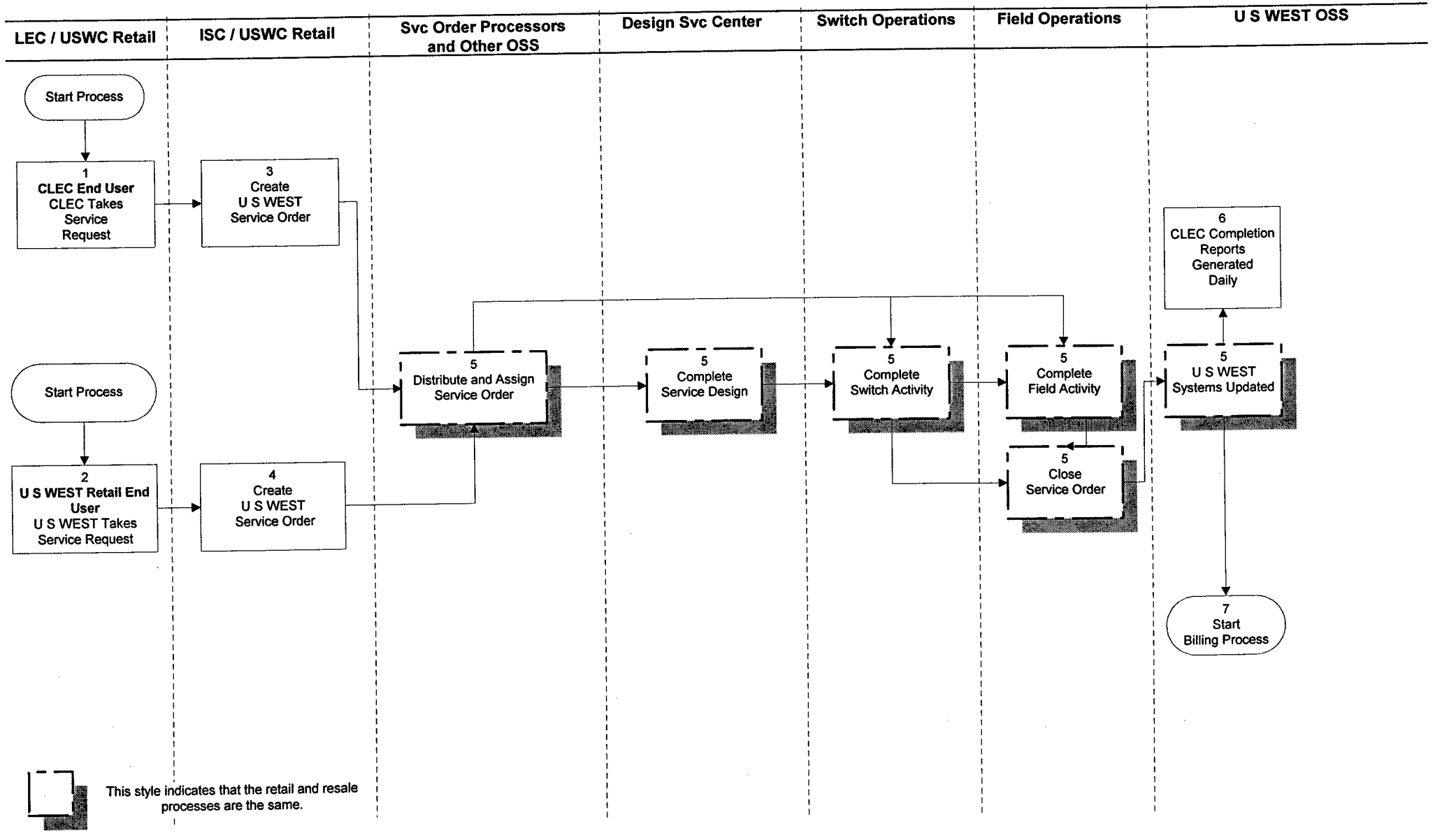
WHITE PAGES DIRECTORY LISTINGS - CHECKLIST ITEM 8
CLEC AND U S WEST RETAIL END USER LISTINGS
PROCESS FLOW



Resale – Checklist Item 14
Preorder, Order, Provisioning and Downstream Processes
Task List

Assoc. Task #	Process
1A Facility-Based CLECs Prepares Listing Forms & Faxes or Electronically Sends to USW Listing Group, or ISC for listings associated with unbundled switching orders	1. CLEC prepares one or more of the following OBF Directory Listing Forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 2. When the listing *is not* associated with a UNE request, or when the listing *is* associated with an UNE other than switching, the CLEC submits its request via fax or the EDI batch process. 3. When the listing is associated with UNE-switching, the CLEC may submit its request via fax, EDI, or IMA.
1B Reseller CLECs Prepares Listing LSR Forms for Simple & Complex Listings & Faxes or Electronically Sends to ISC	1. CLEC prepares one or more of the following OBF directory listing forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 2. The CLEC may submit its request via fax, EDI, or IMA.
1C U S WEST Retail Operations Prepares Simple Listing Orders; Prepares Complex Listings Referrals & Sends to Listings Group	1. U S WEST retail end user calls the U S WEST Service Representative. 2. Service representative prepares simple listings orders and releases to the service order processor (SOP). 3. Service representative sends complex listings orders to the Listings group for processing and release to SOP.
2 Inputs listings into listings database: or, Electronic listings go directly into U S WEST's listings database	1. Listings group representative prepares and releases faxed listings into listings database. 2. Batch EDI listings feeds directly to listings database.
3 ISC inputs simple listings orders into Service Order Processor (SOP)	1. ISC representative prepares and releases listing orders into SOP.
4 Listings Group receives listing orders from CLEC	1. Listings group representative receives faxed complex & simple listings orders from facility-based CLECs & processes facility-based listings orders & releases to listings database. 2. Receives complex listing requests from ISC & U S WEST retail operations & processes complex listings orders & releases to SOP.
5 Listings flow into listings database	Mechanical edits are applied to all listings - CLEC listings and U S WEST listings are Commingled in database CLECs are provided monthly "proof" reports of all their listings
6 Nightly downloads of commingled listings to Directory Assistance database and to U S WEST DEX	1. Data file automatically downloaded nightly updates directory assistance database from listings database. 2. Data file automatically downloaded nightly and sent to U S WEST DEX for updating white page directory listings.
Service Order Processor	Processor that takes all listings orders, applies edits, and releases them to all appropriate downstream databases and legacy systems.
8 U S WEST DEX receives updated electronic listings files nightly of commingled CLEC, U S WEST retail, and independent company listings	Receives listings from listings database. U S WEST DEX receives data file from listings database nightly with updates to white page directory listings for purposes of publication in white pages directories.
9 DEX updates listings for white pages directories	U S WEST DEX white page directory listing database updated.
10 White pages directroy listings are published with same appearance for CLEC, independent company, and U S WEST retail end user listings	
11 Directory assistance listing database receives updated electronic listing files nightly	Receives listings from listings database. Electronic data file is automatically received from listings database nightly with all updated listings for appropriate modification of listings in directory assistance database.
12 Directory Assistance database updated nightly	Directory assistance database updated from data file from listings database.

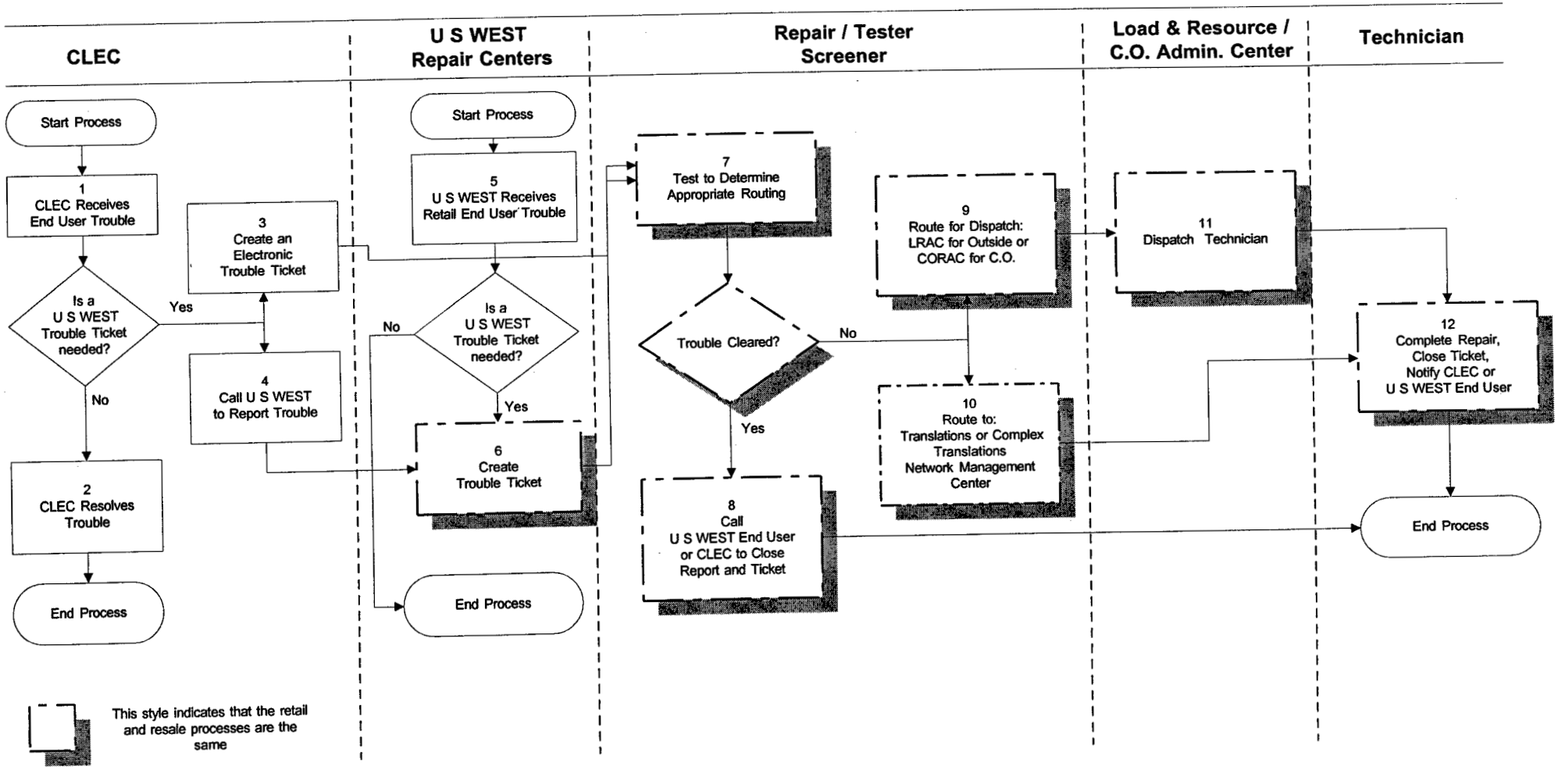
Resale - Chec st Item14
Pre-order, Order, Provisioning Processes



Resale – Checklist Item 14
Preorder, Order, Provisioning and Downstream Processes
Task List

Assoc. Task #	Process
1	CLEC takes order from end user and completes preorder and order activities and submits Local Service Request (LSR) forms to U S WEST using EDI, IMA or Faxing.
2	U S WEST retail operation takes order from end user and completes preorder-type and order activities.
3	USWC's Interconnect Service Center (ISC) receives the LSRs and for those orders that flow through to the Service Order Processor (SOP), the LSR is reviewed for completeness and then the ISC clicks on the "flow through" button and the LSRs are sent electronically to the SOP. If the LSR was faxed it is automatically converted into an LSR electronic image. The electronic image is reviewed for completeness and is electronically sent to an Order Specialist who enters the order into the SOP. U S WEST sends all CLECs a Firm Order Confirmation notice.
4	U S WEST retail operations submits order entry information to the order entry system for release into the SOP. Order entry information is either automatically sent to the SOPS or it is forwarded to an order typist for entry.
5	Service orders are created and released into the SOP. All U S WEST and CLEC orders are commingled at thi point, and are handled by the same systems, processes, and personnel. The service orders are distributed to the appropriate downstream departments for completion of required provisioning activities, including but not limited to the following: ▪ Assigning a new telephone number to a cable and pair. • Designing the circuit. ▪ Entering the switch translation for the telephone number and requested central office features. ▪ Completing any fieldwork, such as wiring the circuit at the end user location. After all provisioning activities are completed the service orders are completed off. This happens electronically if no field work was required. The completed service order is passed to appropriate internal databases and systems for updating of listings, 911, directory assistance records, customer service records, etc.
6	CLEC order completion reports are generated and sent to the CLEC daily. These reports are generated based on the service orders completed off on the previous day. The reports are available on paper or electronically, as each CLEC has requested.
7	Completed order information flows to U S WEST billing systems and order activity is reflected in monthly bills for CLECs' and U S WEST's retail end users.

Resale - Checklist Item 14
Maintenance And Repair Process



Resale – Checklist Item 14
Maintenance and Repair Process
Task List

Assoc. Task #	Process
1	The CLEC takes a trouble report from its end user and determines if the problem is with the end user's CPE, with CLEC equipment, or in U S WEST- provided service.
2	If the CLEC determines that the problem is not a U S WEST problem then the CLEC resolves the trouble with the end user.
3	If the CLEC determines that the problem is in U S WEST's service then a trouble report is sent to U S WEST. CLEC can send an electronic report in IMA or in EB-TA. The same procedures are used to process a CLEC trouble report as are used for U S WEST retail trouble reports for the same services.
4	The CLEC can call trouble reports in to U S WEST's RCHC at 888 405-0083 for simple POTS services or the Account Management Service Center (AMSC) at 800 223-7881 for complex or designed services. The same procedures are used to process a CLEC trouble report as are used for U S WEST retail trouble reports for the same services.
5	U S WEST's residential retail end users report trouble by calling the Repair Call Handling Center (RCHC) at 800-573-1311 and business end users call 800-954-1211. Business end-users will be routed to the correct repair center based on the type of service POTS or designed services. The center determines if the problem is with the end user's CPE or in U S WEST's service.
6	The repair center opens a trouble ticket. The same process is used for U S WEST end user trouble reports and CLEC reports.
7	When a CLEC or U S WEST trouble report is issued the line is automatically tested. Based on the results of the tests, the trouble ticket will be routed and assigned to the appropriate U S WEST departments. The same technicians using the same procedures and the same repair intervals will process all trouble tickets for the same type of service.
8	If no trouble is found in the line test, or the trouble is cleared, the U S WEST employee will contact the CLEC or the U S WEST end user and close the trouble ticket.
9	If the trouble requires U S WEST to dispatch an outside technician, then the ticket is routed to the Load and Resource Administrative Center (LRAC) for outside technicians. If the trouble involves the central office, then it is routed to the Central Office Resource Administration Center (CORAC) for central office technicians.
10	If the trouble involves the central office translations, then it is routed to the appropriate group correct the translations. The same U S WEST employees, regardless of the origin of the trouble, handle all like troubles.
11	The trouble tickets are dispatched to a U S WEST technician. All trouble tickets are loaded based on the standard repair interval for that service on a first in, first out, basis. No distinction is made between U S WEST retail trouble tickets and CLEC trouble tickets.
12	Trouble is repaired and the ticket is closed. The CLEC is notified that the ticket has been closed according to method requested by the CLEC, (e.g., by phone call). An electronic report created by the CLEC in IMA or EB-TA will be updated to show a status of "Closed". The U S WEST end user does not always receive notification that the trouble has been resolved.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF** **LORI A. SIMPSON**
STATE OF MINNESOTA	)	
	:	**SS**
COUNTY OF HENNEPIN	)	

Lori A. Simpson, of lawful age being first duly sworn, deposes and states:

1. My name is Lori A. Simpson. I am Director, Wholesale Markets, of U S WEST Communications in Minneapolis, Minnesota.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Lori A. Simpson

SUBSCRIBED AND SWORN to before me this 12th day of March, 1999.

Christine A Cocchiarella
Notary Public

My Commission Expires:

Jan 31, 2000

CHRISTINE A. COCCHIARELLA
NOTARY PUBLIC-MINNESOTA
My Commission Expires Jan. 31, 2000

AFFIDAVIT OF BRUNSTING

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	**DOCKET NO. T-00000B-97-238**

AFFIDAVIT OF

JUDITH L. BRUNSTING

MARCH 25, 1999

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IDENTIFICATION OF AFFIANT

My name is Judith L. Brunsting. I am Director, Regulatory, at U S WEST Long Distance, Inc. ("U S WEST Long Distance"). I am responsible for the regulatory and public policy issues for U S WEST Long Distance. I am a graduate of Nettleton Business College with a degree in Accounting. I have more than 30 years experience in the telecommunications industry with an emphasis in engineering, marketing, regulatory, and planning. I have held positions in Network, Public Policy, and the Carrier organizations within U S WEST Communications. In 1995, I became the Director, Regulatory, for Time Warner Communications. I assumed my position as Director, Regulatory, for U S WEST Long Distance in 1997.

PURPOSE OF AFFIDAVIT

The purpose of my affidavit is to provide the Commission with information relating to progress U S WEST Long Distance has made with regard to Section 272 of the Act and to show that U S WEST Long Distance is prepared to satisfy Section 272 requirements once U S WEST Communications obtains Section 271 authority.

Although the decisions regarding Section 272 satisfaction is left solely to the FCC, I understand that U S WEST Communications wants to ensure a complete

1 record in this proceeding. Therefore, I will demonstrate that U S WEST Long
2 Distance will follow Sections 272(a) "Separate Affiliate Required for Competitive
3 Activities", 272(b) "Structural and Transactional Requirements", and 272(g) "Joint
4 Marketing" of the Communications Act of 1996 ("Act"), and related rules as
5 promulgated by the Federal Communications Commission ("FCC"), upon
6 U S WEST Communications' receipt of in-region, interLATA authority in the state
7 of Arizona.
8
9 My affidavit also discusses the understanding that U S WEST Long Distance has
10 concerning the nondiscriminatory safeguards described in Section 272(c) of the
11 Act. Although not specifically directed at the long distance affiliate, U S WEST
12 Long Distance understands that, with the exception of express exemption set
13 forth in of Section 272(g), U S WEST Communications may not provide greater
14 access to U S WEST Long Distance than any other interexchange carrier in the
15 provision of services or standards. Further, U S WEST Long Distance
16 understands that all transactions between U S WEST Long Distance and
17 U S WEST Communications must be accounted for and in accordance with
18 standard accounting principles. My affidavit demonstrates the business
19 processes U S WEST Long Distance has in place to provide information and
20 show the support for the services it receives.
21

My affidavit also explains the steps U S WEST Long Distance has taken to ensure it satisfies these aspects of Section 272, including U S WEST Long Distance's employee training and awareness efforts.

EXECUTIVE SUMMARY

My affidavit provides the Commission with information relating to progress U S WEST Long Distance has made with regard to Section 272 of the Act. This affidavit provides an overview of U S WEST Long Distance's processes and procedures which establish that U S WEST Long Distance is prepared to offer service in compliance with Section 272. My affidavit is submitted to ensure as complete a record as possible. The affidavit of Ms. Teresa Million, an employee of U S WEST Communications, provides additional evidence of how these requirements are being implemented within that organization.

I will demonstrate that U S WEST Long Distance will satisfy all of the relevant requirements of Section 272, and the related rules promulgated by the FCC, following U S WEST Communications' receipt of in-region, interLATA authority in Arizona. U S WEST Long Distance is a separate affiliate that will offer originating interLATA services in Arizona upon approval.

1 There are three provisions of Section 272 that directly affect U S WEST Long
2 Distance as a Section 272 affiliate, subsections (a), (b), and (g). U S WEST
3 Long Distance is prepared to satisfy each of these provisions.
4
5 Section 272(a) of the Act requires that U S WEST provide long distance services
6 through a separate long distance affiliate. Long distance services will be offered,
7 upon approval, by a separate long distance affiliate, U S WEST Long Distance.
8
9 Section 272(b) requires that the long distance affiliate maintain separate books,
10 records and accounts, have its own directors, officers, and employees, obtain
11 credit that will not provide recourse to the assets of U S WEST Communications,
12 and conduct all transactions with U S WEST Communications on an arm's length
13 basis, with all such transactions reduced to writing and available to the public for
14 inspection. U S WEST Long Distance is satisfying and will continue to satisfy
15 these requirements of the Act.
16
17 Section 272(g) sets forth guidelines on how U S WEST Long Distance and
18 U S WEST Communications can jointly market interLATA long distance services.
19 U S WEST Long Distance is aware of and will adhere to these requirements of
20 the Act.
21

I will also discuss the substantial employee training and awareness efforts that U S WEST Long Distance has implemented to ensure the requirements of Section 272 of the Act are implemented and followed.

U S WEST LONG DISTANCE IS PREPARED TO ADHERE TO SECTION 272

Before discussing the facts supporting that U S WEST Long Distance is prepared to satisfy Section 272, it is important to distinguish the difference between Section 272 and Section 271 satisfaction. Section 271 sets forth the standards that must be satisfied before U S WEST Communications can get into the in-region interLATA market. Section 272 states how U S WEST Communications must offer such interLATA services once it receives Section 271 authority. Thus, there is no specific requirement that U S WEST Long Distance meet Section 272 obligations now. U S WEST Long Distance must present evidence that it is prepared to operate under the terms of Section 272 once U S WEST Communications is granted authorization to provide in-region, interLATA services in Arizona. In essence, this Commission must make a "predictive judgment" about whether Section 272 satisfaction appears likely.

U S WEST Long Distance Satisfies Section 272(a)

U S WEST Long Distance was formed as a separate affiliate, organized and operating in compliance with Section 272(a) of the Act. U S WEST Long Distance is a duly formed and existing corporation organized under the laws of the State of Colorado as shown in Exhibit JLB-1. It was incorporated on November 14, 1995.

U S WEST Long Distance is a wholly owned subsidiary of U S WEST, Inc., a Delaware corporation. As shown in Exhibit JLB-2, U S WEST Long Distance and U S WEST Communications are both subsidiaries of U S WEST, Inc. In addition, U S WEST Long Distance owns no stock of U S WEST Communications nor does U S WEST Communications own any stock of U S WEST Long Distance. Thus, as both a legal and practical matter, the two companies are separate.

U S WEST Long Distance currently holds a certificate of authority to transact business from the Secretary of State in each of the fourteen (14) states that comprise U S WEST Communications' territory. U S WEST Long Distance's "Certificate of Disclosure" for Arizona provides U S WEST Long Distance with authority to operate in the state. See Exhibit JLB-3.

Section 272(b)

Section 272(b) contains five "structural separations" that U S WEST Communications and U S WEST Long Distance must maintain for as long as the requirements of Section 272 are in force. First, Section 272(b)(1) requires U S WEST Long Distance to operate independently from U S WEST Communications. Several facts show that U S WEST Long Distance satisfies this provision:

a. U S WEST Long Distance does not and will not jointly own, with U S WEST Communications, telecommunications transmission and switching facilities or the land and buildings on which such facilities are located.

b. U S WEST Long Distance is not currently providing to U S WEST Communications operations, installation, or maintenance services in connection with U S WEST Communications' switching and transmission facilities, nor will it provide them to U S WEST Communications in the future for as long as Section 272 is in force.

c. U S WEST Long Distance will not accept from U S WEST Communications operation, installation, or maintenance services in

connection with U S WEST Long Distance's switching and transmission facilities.

d. U S WEST Long Distance does not currently own any transmission or switching facilities. It will begin operations in Arizona as a non-facilities based reseller. U S WEST Long Distance entered into a contract to resell AT&T services in September, 1998.

Second, Section 272(b)(2) requires that U S WEST Long Distance maintain books, records, and accounts that are separate from the books, records, and accounts of U S WEST Communications. Several facts show that U S WEST Long Distance satisfies this provision:

a. The accounting of the two entities is not commingled.

b. U S WEST Long Distance has and will continue to account for all transactions between U S WEST Long Distance and U S WEST Communications in accordance with the applicable requirements of Part 32 of the FCC's accounting rules, as modified by the rules adopted by the FCC in the Accounting Safeguards Report and Order, Appendix B.

c. U S WEST Long Distance has established and maintains a Chart of Accounts that is separate from U S WEST Communications' Chart of Accounts as shown in proprietary Exhibit JLB-4.

d. U S WEST Long Distance follows Generally Accepted Accounting Principles ("GAAP"), as adopted by the FCC in Docket 96-150. U S WEST Long Distance does not maintain its books, records, and accounts in accordance with Part 32, Uniform Systems of Accounts ("USOA"), nor is it required to do so.

e. U S WEST Long Distance issues a separate set of financial statements from those of U S WEST Communications as shown in proprietary Exhibit JLB-5 and JLB-6. Although these statements are not publicly released, the financial information is consolidated into U S WEST, Inc.'s publicly available financial reports.

f. U S WEST Long Distance maintains separate internal financial controls from U S WEST Communications as shown in proprietary Exhibit JLB-7.

g. U S WEST Long Distance has its own federal tax identification number that is separate from U S WEST Communication's federal tax identification number.

1

2 h. U S WEST Long Distance has assets that are separate from U S WEST
3 Communications' assets. U S WEST Long Distance documents and
4 tracks these assets in its own property records as shown in proprietary
5 Exhibit JLB-8.
6
7 i. U S WEST Long Distance pays applicable taxes and fees to various
8 taxing and regulatory agencies separately from U S WEST
9 Communications.
10
11 j. U S WEST Long Distance complies with state and FCC regulatory
12 reporting requirements separately from U S WEST Communications.
13
14 Third, Section 272(b)(3) requires U S WEST Long Distance to have separate
15 officers, directors and employees from U S WEST Communications. U S WEST
16 Long Distance satisfies this provision as shown by the following facts:
17
18 a. U S WEST Long Distance has no officers, directors, or employees that
19 are also officers, directors, or employees of U S WEST Communications.
20
21 b. No director of U S WEST Long Distance will also act as a director of
22 U S WEST Communications and, as long as the requirements of Section

272 remain in force, no director of U S WEST Long Distance will also simultaneously act as a director of U S WEST Communications.

c. U S WEST Long Distance has a board of directors that currently consists of one (1) person – Kathy R. Stephens. Ms. Stephens is not an officer or director of U S WEST Communications. Exhibit JLB-9 provides a complete listing of U S WEST Long Distance's board of directors and officers, all of whom are not employees, officers, or directors of U S WEST Communications. In the FCC's recent order pertaining to BellSouth's Louisiana Section 271 filing, the FCC stated that, "...We disagree with Sprint's contention that having one director for BSLD is insufficient to satisfy the requirement of section 272(b)(3) because one director cannot provide the collective oversight and consideration for the effective realization of the Board of Director's substantial responsibilities. Neither the statute nor our implementing regulations require a BOC to...establish a minimum number of Board members." BellSouth Louisiana II at ¶ 330.

d. U S WEST Long Distance and U S WEST Communications maintain separate payrolls and will continue to do so in the future. U S WEST Long Distance currently employs a separate staff from U S WEST Communications of approximately 100 employees. No U S WEST Long

Distance employee is an employee of U S WEST Communications and, as long as applicable Section 272 requirements exist, no employees of U S WEST Long Distance will be simultaneously employed by U S WEST Communications.

e. Separations between U S WEST Long Distance and U S WEST Communications employees are maintained throughout. For example, U S WEST Long Distance's payroll is administered by U S WEST Communications under an affiliate contractual agreement, as required by and in compliance with Section 272(b)(5). U S WEST Long Distance employees that perform functions supporting other U S WEST affiliates, including U S WEST Communications, are required to report that time. U S WEST Long Distance then charges the affiliate this reported time using rates set in accordance with applicable FCC requirements as documented in the relevant task orders. The methods and procedures for time reporting for affiliates are shown in proprietary Exhibit JLB-10.

f. U S WEST Long Distance initiates a series of activities when an employee accepts employment with another company in the U S WEST family. The departing U S WEST Long Distance employee must notify his/her manager of their decision to leave; a letter of resignation may accompany their notice, but is not required. A resignation date is then determined and

1 prior to this date, the departing U S WEST Long Distance employee must
2 turn in their corporate credit card, identification badge, corporate calling
3 card, and remote system access card. Once the resignation date has
4 passed, the ex-employee is removed from U S WEST Long Distance's
5 payroll.
6
7 g. All U S WEST Long Distance employees report directly to or through
8 U S WEST Long Distance lines of organization to the U S WEST Long
9 Distance General Manager, a position which is currently vacant, as shown
10 on Exhibit JLB-11.
11
12 Separation between U S WEST Communications, the Bell Operating Company
13 ("BOC"), and U S WEST Long Distance is maintained throughout. U S WEST
14 Long Distance's General Manager reports directly to the President of U S WEST,
15 Inc. Ms. Kathy Stephens is the Vice President and Acting General Manager of
16 U S WEST Long Distance and will hold that title until the General Manager's
17 position is formally filled. The FCC found in its recent order in BellSouth's
18 Louisiana Section 271 filing (FCC 98-271), Paragraph 330, that "...[N]either the
19 statute nor our implementing regulations require a BOC to outline the reporting
20 structure of its affiliate's Board of Directors..." to show compliance with this
21 section of this Act. To meet its burden of proof, the Section 272 subsidiary must

1 only provide evidence that its officers, directors, and employees are separate
2 from those of the BOC.
3 The U S WEST Long Distance General Manager has a fiduciary obligation to the
4 U S WEST Long Distance Board of Directors to manage the business in the best
5 manner possible. The U S WEST Long Distance Board of Directors has, in turn,
6 an obligation and responsibility to its shareholder, U S WEST, Inc.
7
8 It is important to note that while Congress anticipated the need for structural
9 separation between a BOC and the Section 272 subsidiary, the Act specifically
10 contemplates that a BOC and its Section 272 subsidiary would be affiliates under
11 a single parent company. The very structure utilized by U S WEST, Inc. is
12 expressly sanctioned and expected by the express terms of Section 272. As
13 affiliates, U S WEST Long Distance and U S WEST Communications have
14 unique financial and business responsibilities and obligations to their boards of
15 directors and ultimately to their shareholders, notwithstanding Section 272
16 requirements. The fact that the U S WEST Long Distance General Manager
17 reports to the President and Chief Executive Officer ("CEO") of U S WEST, Inc.
18 should in no way be construed as non-compliance with Section 272(b)(3) of the
19 Act.
20
21 Fourth, Section 272(b)(4) states that the Section 272 affiliate cannot obtain credit
22 under any arrangement that would permit a creditor, upon default by U S WEST

Long Distance, to have recourse upon the assets of U S WEST Communications. Several facts establish U S WEST Long Distance's satisfaction of this provision:

a. U S WEST Long Distance has not requested, nor will it request, any U S WEST Communications entity, to co-sign a contract or any other agreement with U S WEST Long Distance which would permit a creditor to obtain recourse to U S WEST Communications' assets in the event of a default by U S WEST Long Distance.

b. U S WEST Long Distance is capitalized separately from U S WEST Communications. Debt financing for unregulated subsidiaries, under the current structure, is obtained through a separate U S WEST subsidiary, U S WEST Capital Funding, Inc. The financing through U S WEST Capital Funding is separate from financing for U S WEST Communications and does not provide creditors with recourse to U S WEST Communications' assets. U S WEST Communications issues its own commercial paper to obtain financing for telecommunications operations.

c. The Master Services Agreement ("MSA") between U S WEST Communications and U S WEST Long Distance states that contracts

entered into by U S WEST Long Distance are the sole responsibility of U S WEST Long Distance and that U S WEST Long Distance has no recourse to U S WEST Communications' assets. In case of default, liability is limited to charges for costs incurred under the Agreement.

Fifth and finally, 272(b)(5) requires that all transactions between U S WEST Long Distance and U S WEST Communications be at arm's length, with any such transactions reduced to writing and available for public inspection. U S WEST Long Distance satisfies this provision as shown by the following facts:

a. All transactions between U S WEST Long Distance and U S WEST Communications are documented as part of a MSA, Service Agreement ("SA"), Billing and Collections Agreement ("B&C"), stand alone contract, or purchased as a tariffed service offering. The SA between U S WEST Long Distance and U S WEST Communications is provided as Exhibit JLB-12; the other agreements are provided as exhibits to Ms. Teresa Million's affidavit.

b. All transactions between U S WEST Long Distance and U S WEST Communications are posted on U S WEST's home page:

www.uswest.com/com/insideusw/policy/docs/long_distance.html

c. U S WEST Long Distance, as an added protection, is required to contact its Interexchange Carrier ("IXC") account representative to obtain access services from U S WEST Communications. IXC account representatives are the contact people who ensure that all IXCs have equivalent access to U S WEST Communications. U S WEST Communications' IXC account representative, as with any IXC, contacts the representative in the U S WEST Communications business unit providing the requested service and a manager in the U S WEST Communications Technical Accounting-Affiliate Transaction group.

d. U S WEST Long Distance has assigned responsibility for negotiation and administration of agreements with U S WEST Communications to the same employee responsible for these activities with unaffiliated vendors and suppliers.

Section 272(g)

Section 272(g) of the Act provides the guidelines U S WEST Long Distance and U S WEST Communications must follow relative to joint marketing. U S WEST Long Distance will not market or sell interLATA services with U S WEST Communications until U S WEST Long Distance is authorized to provide interLATA service in Arizona by the FCC. U S WEST Long Distance understand

1 its obligations under previous FCC 271 orders (BellSouth South Carolina and
2 Louisiana) relative to Section 272, and are prepared to follow the joint marketing
3 rules. However, in this application U S WEST Long Distance will not be
4 providing proposed marketing scripts or plans nor is it required to do so. As
5 stated in the FCC order for BellSouth – South Carolina, regarding proposed
6 telemarketing script, "We do not require applicants to submit proposed marketing
7 scripts as a precondition for Section 271 approval, nor do we expect to review
8 revised marketing scripts on an ongoing basis once Section 271 authorization is
9 granted. Applicants are free to tell us how they intend to joint market, although
10 we do not require them to do so." BellSouth South Carolina at ¶ 236. For
11 purposes of Section 272(g), it should be sufficient for U S WEST Long Distance
12 to say that it understands and will abide by this provision.
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16 In an effort to ensure that its employees understand their responsibilities and
17 obligations as it relates to Section 272, U S WEST has set up training sessions
18 to ensure continual adherence to Section 272. All U S WEST employees,
19 including those in U S WEST Long Distance, are required to undergo annual
20 compliance training and testing, and to certify that they understand and will
21 comply with company policies including regulatory requirements. This annual
22 compliance training includes modules on Affiliate Transactions, including the

requirements from FCC Docket 96-150 and Section 272 of the Act. New hires to U S WEST and employees recently promoted to management are obligated to go through this training within ten (10) days of hire/promotion.

In addition to U S WEST's training efforts, all current and new U S WEST Long Distance employees receive further Section 272-specific training. U S WEST Long Distance trained all of its current employees during specially scheduled training sessions, using materials shown in proprietary Exhibit JLB-13. This same training material is also included in the U S WEST Long Distance orientation that all new employees are required to attend within 30 days of joining the organization.

U S WEST Long Distance will use the U S WEST, Inc. hotline for reporting all Section 272 compliance issues. The hotline number is 1-800-333-8938. Any employee can call this number and get answers to their Section 272 issues as well as report suspected Section 272 violations.

CONCLUSION

My affidavit demonstrates how U S WEST Long Distance will satisfy Sections 272(a), (b), and (g) of the Act, as well as the FCC's related rules. I also explain the steps U S WEST Long Distance has taken to ensure its continued

1 satisfaction of Section 272. Additionally, my affidavit addressed U S WEST
2 Long Distance's employee training and awareness efforts to, again, assure
3 continued satisfaction of Section 272.
4
5 This concludes my affidavit.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	**DOCKET NO. T-00000B-97-238**

EXHIBITS OF

JUDITH L. BRUNSTING

MARCH 25, 1999

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JIM IRVIN
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IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	**DOCKET NO. T-00000B-97-238**

AFFIDAVIT OF

JUDITH L. BRUNSTING

MARCH 25, 1999

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IDENTIFICATION OF AFFIANT

My name is Judith L. Brunsting. I am Director, Regulatory, at U S WEST Long Distance, Inc. ("U S WEST Long Distance"). I am responsible for the regulatory and public policy issues for U S WEST Long Distance. I am a graduate of Nettleton Business College with a degree in Accounting. I have more than 30 years experience in the telecommunications industry with an emphasis in engineering, marketing, regulatory, and planning. I have held positions in Network, Public Policy, and the Carrier organizations within U S WEST Communications. In 1995, I became the Director, Regulatory, for Time Warner Communications. I assumed my position as Director, Regulatory, for U S WEST Long Distance in 1997.

PURPOSE OF AFFIDAVIT

The purpose of my affidavit is to provide the Commission with information relating to progress U S WEST Long Distance has made with regard to Section 272 of the Act and to show that U S WEST Long Distance is prepared to satisfy Section 272 requirements once U S WEST Communications obtains Section 271 authority.

Although the decisions regarding Section 272 satisfaction is left solely to the FCC, I understand that U S WEST Communications wants to ensure a complete

1 record in this proceeding. Therefore, I will demonstrate that U S WEST Long
2 Distance will follow Sections 272(a) "Separate Affiliate Required for Competitive
3 Activities", 272(b) "Structural and Transactional Requirements", and 272(g) "Joint
4 Marketing" of the Communications Act of 1996 ("Act"), and related rules as
5 promulgated by the Federal Communications Commission ("FCC"), upon
6 U S WEST Communications' receipt of in-region, interLATA authority in the state
7 of Arizona.
8
9 My affidavit also discusses the understanding that U S WEST Long Distance has
10 concerning the nondiscriminatory safeguards described in Section 272(c) of the
11 Act. Although not specifically directed at the long distance affiliate, U S WEST
12 Long Distance understands that, with the exception of express exemption set
13 forth in of Section 272(g), U S WEST Communications may not provide greater
14 access to U S WEST Long Distance than any other interexchange carrier in the
15 provision of services or standards. Further, U S WEST Long Distance
16 understands that all transactions between U S WEST Long Distance and
17 U S WEST Communications must be accounted for and in accordance with
18 standard accounting principles. My affidavit demonstrates the business
19 processes U S WEST Long Distance has in place to provide information and
20 show the support for the services it receives.
21

1 My affidavit also explains the steps U S WEST Long Distance has taken to
2 ensure it satisfies these aspects of Section 272, including U S WEST Long
3 Distance's employee training and awareness efforts.
4
5 **EXECUTIVE SUMMARY**
6
7 My affidavit provides the Commission with information relating to progress
8 U S WEST Long Distance has made with regard to Section 272 of the Act. This
9 affidavit provides an overview of U S WEST Long Distance's processes and
10 procedures which establish that U S WEST Long Distance is prepared to offer
11 service in compliance with Section 272. My affidavit is submitted to ensure as
12 complete a record as possible. The affidavit of Ms. Teresa Million, an employee
13 of U S WEST Communications, provides additional evidence of how these
14 requirements are being implemented within that organization.
15
16 I will demonstrate that U S WEST Long Distance will satisfy all of the relevant
17 requirements of Section 272, and the related rules promulgated by the FCC,
18 following U S WEST Communications' receipt of in-region, interLATA authority in
19 Arizona. U S WEST Long Distance is a separate affiliate that will offer
20 originating interLATA services in Arizona upon approval.
21

1 There are three provisions of Section 272 that directly affect U S WEST Long
2 Distance as a Section 272 affiliate, subsections (a), (b), and (g). U S WEST
3 Long Distance is prepared to satisfy each of these provisions.
4
5 Section 272(a) of the Act requires that U S WEST provide long distance services
6 through a separate long distance affiliate. Long distance services will be offered,
7 upon approval, by a separate long distance affiliate, U S WEST Long Distance.
8
9 Section 272(b) requires that the long distance affiliate maintain separate books,
10 records and accounts, have its own directors, officers, and employees, obtain
11 credit that will not provide recourse to the assets of U S WEST Communications,
12 and conduct all transactions with U S WEST Communications on an arm's length
13 basis, with all such transactions reduced to writing and available to the public for
14 inspection. U S WEST Long Distance is satisfying and will continue to satisfy
15 these requirements of the Act.
16
17 Section 272(g) sets forth guidelines on how U S WEST Long Distance and
18 U S WEST Communications can jointly market interLATA long distance services.
19 U S WEST Long Distance is aware of and will adhere to these requirements of
20 the Act.
21

I will also discuss the substantial employee training and awareness efforts that U S WEST Long Distance has implemented to ensure the requirements of Section 272 of the Act are implemented and followed.

U S WEST LONG DISTANCE IS PREPARED TO ADHERE TO SECTION 272

Before discussing the facts supporting that U S WEST Long Distance is prepared to satisfy Section 272, it is important to distinguish the difference between Section 272 and Section 271 satisfaction. Section 271 sets forth the standards that must be satisfied before U S WEST Communications can get into the in-region interLATA market. Section 272 states how U S WEST Communications must offer such interLATA services once it receives Section 271 authority. Thus, there is no specific requirement that U S WEST Long Distance meet Section 272 obligations now. U S WEST Long Distance must present evidence that it is prepared to operate under the terms of Section 272 once U S WEST Communications is granted authorization to provide in-region, interLATA services in Arizona. In essence, this Commission must make a "predictive judgment" about whether Section 272 satisfaction appears likely.

U S WEST Long Distance Satisfies Section 272(a)

U S WEST Long Distance was formed as a separate affiliate, organized and operating in compliance with Section 272(a) of the Act. U S WEST Long Distance is a duly formed and existing corporation organized under the laws of the State of Colorado as shown in Exhibit JLB-1. It was incorporated on November 14, 1995.

U S WEST Long Distance is a wholly owned subsidiary of U S WEST, Inc., a Delaware corporation. As shown in Exhibit JLB-2, U S WEST Long Distance and U S WEST Communications are both subsidiaries of U S WEST, Inc. In addition, U S WEST Long Distance owns no stock of U S WEST Communications nor does U S WEST Communications own any stock of U S WEST Long Distance. Thus, as both a legal and practical matter, the two companies are separate.

U S WEST Long Distance currently holds a certificate of authority to transact business from the Secretary of State in each of the fourteen (14) states that comprise U S WEST Communications' territory. U S WEST Long Distance's "Certificate of Disclosure" for Arizona provides U S WEST Long Distance with authority to operate in the state. See Exhibit JLB-3.

Section 272(b)

Section 272(b) contains five "structural separations" that U S WEST Communications and U S WEST Long Distance must maintain for as long as the requirements of Section 272 are in force. First, Section 272(b)(1) requires U S WEST Long Distance to operate independently from U S WEST Communications. Several facts show that U S WEST Long Distance satisfies this provision:

a. U S WEST Long Distance does not and will not jointly own, with U S WEST Communications, telecommunications transmission and switching facilities or the land and buildings on which such facilities are located.

b. U S WEST Long Distance is not currently providing to U S WEST Communications operations, installation, or maintenance services in connection with U S WEST Communications' switching and transmission facilities, nor will it provide them to U S WEST Communications in the future for as long as Section 272 is in force.

c. U S WEST Long Distance will not accept from U S WEST Communications operation, installation, or maintenance services in

connection with U S WEST Long Distance's switching and transmission facilities.

d. U S WEST Long Distance does not currently own any transmission or switching facilities. It will begin operations in Arizona as a non-facilities based reseller. U S WEST Long Distance entered into a contract to resell AT&T services in September, 1998.

Second, Section 272(b)(2) requires that U S WEST Long Distance maintain books, records, and accounts that are separate from the books, records, and accounts of U S WEST Communications. Several facts show that U S WEST Long Distance satisfies this provision:

a. The accounting of the two entities is not commingled.

b. U S WEST Long Distance has and will continue to account for all transactions between U S WEST Long Distance and U S WEST Communications in accordance with the applicable requirements of Part 32 of the FCC's accounting rules, as modified by the rules adopted by the FCC in the Accounting Safeguards Report and Order, Appendix B.

c. U S WEST Long Distance has established and maintains a Chart of Accounts that is separate from U S WEST Communications' Chart of Accounts as shown in proprietary Exhibit JLB-4.

d. U S WEST Long Distance follows Generally Accepted Accounting Principles ("GAAP"), as adopted by the FCC in Docket 96-150. U S WEST Long Distance does not maintain its books, records, and accounts in accordance with Part 32, Uniform Systems of Accounts ("USOA"), nor is it required to do so.

e. U S WEST Long Distance issues a separate set of financial statements from those of U S WEST Communications as shown in proprietary Exhibit JLB-5 and JLB-6. Although these statements are not publicly released, the financial information is consolidated into U S WEST, Inc.'s publicly available financial reports.

f. U S WEST Long Distance maintains separate internal financial controls from U S WEST Communications as shown in proprietary Exhibit JLB-7.

g. U S WEST Long Distance has its own federal tax identification number that is separate from U S WEST Communication's federal tax identification number.

h. U S WEST Long Distance has assets that are separate from U S WEST Communications' assets. U S WEST Long Distance documents and tracks these assets in its own property records as shown in proprietary Exhibit JLB-8.

i. U S WEST Long Distance pays applicable taxes and fees to various taxing and regulatory agencies separately from U S WEST Communications.

j. U S WEST Long Distance complies with state and FCC regulatory reporting requirements separately from U S WEST Communications.

Third, Section 272(b)(3) requires U S WEST Long Distance to have separate officers, directors and employees from U S WEST Communications. U S WEST Long Distance satisfies this provision as shown by the following facts:

a. U S WEST Long Distance has no officers, directors, or employees that are also officers, directors, or employees of U S WEST Communications.

b. No director of U S WEST Long Distance will also act as a director of U S WEST Communications and, as long as the requirements of Section

272 remain in force, no director of U S WEST Long Distance will also simultaneously act as a director of U S WEST Communications.

c. U S WEST Long Distance has a board of directors that currently consists of one (1) person – Kathy R. Stephens. Ms. Stephens is not an officer or director of U S WEST Communications. Exhibit JLB-9 provides a complete listing of U S WEST Long Distance's board of directors and officers, all of whom are not employees, officers, or directors of U S WEST Communications. In the FCC's recent order pertaining to BellSouth's Louisiana Section 271 filing, the FCC stated that, "...We disagree with Sprint's contention that having one director for BSLD is insufficient to satisfy the requirement of section 272(b)(3) because one director cannot provide the collective oversight and consideration for the effective realization of the Board of Director's substantial responsibilities. Neither the statute nor our implementing regulations require a BOC to...establish a minimum number of Board members." BellSouth Louisiana II at ¶ 330.

d. U S WEST Long Distance and U S WEST Communications maintain separate payrolls and will continue to do so in the future. U S WEST Long Distance currently employs a separate staff from U S WEST Communications of approximately 100 employees. No U S WEST Long

Distance employee is an employee of U S WEST Communications and, as long as applicable Section 272 requirements exist, no employees of U S WEST Long Distance will be simultaneously employed by U S WEST Communications.

e. Separations between U S WEST Long Distance and U S WEST Communications employees are maintained throughout. For example, U S WEST Long Distance's payroll is administered by U S WEST Communications under an affiliate contractual agreement, as required by and in compliance with Section 272(b)(5). U S WEST Long Distance employees that perform functions supporting other U S WEST affiliates, including U S WEST Communications, are required to report that time. U S WEST Long Distance then charges the affiliate this reported time using rates set in accordance with applicable FCC requirements as documented in the relevant task orders. The methods and procedures for time reporting for affiliates are shown in proprietary Exhibit JLB-10.

f. U S WEST Long Distance initiates a series of activities when an employee accepts employment with another company in the U S WEST family. The departing U S WEST Long Distance employee must notify his/her manager of their decision to leave; a letter of resignation may accompany their notice, but is not required. A resignation date is then determined and

1 prior to this date, the departing U S WEST Long Distance employee must
2 turn in their corporate credit card, identification badge, corporate calling
3 card, and remote system access card. Once the resignation date has
4 passed, the ex-employee is removed from U S WEST Long Distance's
5 payroll.
6
7 g. All U S WEST Long Distance employees report directly to or through
8 U S WEST Long Distance lines of organization to the U S WEST Long
9 Distance General Manager, a position which is currently vacant, as shown
10 on Exhibit JLB-11.
11
12 Separation between U S WEST Communications, the Bell Operating Company
13 ("BOC"), and U S WEST Long Distance is maintained throughout. U S WEST
14 Long Distance's General Manager reports directly to the President of U S WEST,
15 Inc. Ms. Kathy Stephens is the Vice President and Acting General Manager of
16 U S WEST Long Distance and will hold that title until the General Manager's
17 position is formally filled. The FCC found in its recent order in BellSouth's
18 Louisiana Section 271 filing (FCC 98-271), Paragraph 330, that "...[N]either the
19 statute nor our implementing regulations require a BOC to outline the reporting
20 structure of its affiliate's Board of Directors..." to show compliance with this
21 section of this Act. To meet its burden of proof, the Section 272 subsidiary must

1 only provide evidence that its officers, directors, and employees are separate
2 from those of the BOC.
3 The U S WEST Long Distance General Manager has a fiduciary obligation to the
4 U S WEST Long Distance Board of Directors to manage the business in the best
5 manner possible. The U S WEST Long Distance Board of Directors has, in turn,
6 an obligation and responsibility to its shareholder, U S WEST, Inc.
7
8 It is important to note that while Congress anticipated the need for structural
9 separation between a BOC and the Section 272 subsidiary, the Act specifically
10 contemplates that a BOC and its Section 272 subsidiary would be affiliates under
11 a single parent company. The very structure utilized by U S WEST, Inc. is
12 expressly sanctioned and expected by the express terms of Section 272. As
13 affiliates, U S WEST Long Distance and U S WEST Communications have
14 unique financial and business responsibilities and obligations to their boards of
15 directors and ultimately to their shareholders, notwithstanding Section 272
16 requirements. The fact that the U S WEST Long Distance General Manager
17 reports to the President and Chief Executive Officer ("CEO") of U S WEST, Inc.
18 should in no way be construed as non-compliance with Section 272(b)(3) of the
19 Act.
20
21 Fourth, Section 272(b)(4) states that the Section 272 affiliate cannot obtain credit
22 under any arrangement that would permit a creditor, upon default by U S WEST

Long Distance, to have recourse upon the assets of U S WEST Communications. Several facts establish U S WEST Long Distance's satisfaction of this provision:

a. U S WEST Long Distance has not requested, nor will it request, any U S WEST Communications entity, to co-sign a contract or any other agreement with U S WEST Long Distance which would permit a creditor to obtain recourse to U S WEST Communications' assets in the event of a default by U S WEST Long Distance.

b. U S WEST Long Distance is capitalized separately from U S WEST Communications. Debt financing for unregulated subsidiaries, under the current structure, is obtained through a separate U S WEST subsidiary, U S WEST Capital Funding, Inc. The financing through U S WEST Capital Funding is separate from financing for U S WEST Communications and does not provide creditors with recourse to U S WEST Communications' assets. U S WEST Communications issues its own commercial paper to obtain financing for telecommunications operations.

c. The Master Services Agreement ("MSA") between U S WEST Communications and U S WEST Long Distance states that contracts

entered into by U S WEST Long Distance are the sole responsibility of U S WEST Long Distance and that U S WEST Long Distance has no recourse to U S WEST Communications' assets. In case of default, liability is limited to charges for costs incurred under the Agreement.

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11 purposes of Section 272(g), it should be sufficient for U S WEST Long Distance
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U S WEST Long Distance will use the U S WEST, Inc. hotline for reporting all Section 272 compliance issues. The hotline number is 1-800-333-8938. Any employee can call this number and get answers to their Section 272 issues as well as report suspected Section 272 violations.

CONCLUSION

My affidavit demonstrates how U S WEST Long Distance will satisfy Sections 272(a), (b), and (g) of the Act, as well as the FCC's related rules. I also explain the steps U S WEST Long Distance has taken to ensure its continued

1 satisfaction of Section 272. Additionally, my affidavit addressed U S WEST

2 Long Distance's employee training and awareness efforts to, again, assure

3 continued satisfaction of Section 272.

4

5 This concludes my affidavit.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	**DOCKET NO. T-00000B-97-238**

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Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-2
Exhibit of Judith L. Brunsting

U S WEST INC. SUBSIDIARIES LIST

U S WEST, Inc.
1801 California Street, Suite 5100
Denver, CO 80202
(303) 672-2825
Facsimile (303) 308-1658

USWEST

Keith D. Nieb
Manager - General Corporate Administration

MEMORANDUM

TO: Recipients of List of Subsidiaries

FROM: Law Department - General Corporate Section

DATE: February 10, 1999

SUBJECT: U S WEST, Inc. and its Subsidiaries

Attached is the list of U S WEST, Inc., and its subsidiaries, current as of February 1, 1999. This list supersedes all previous lists.

ADDITIONS:

Direct Subsidiary of U S WEST Communications, Inc.:

Paragraph I.D.7.: U S WEST Database Services, Inc. (CO 12/23/98)

Direct Subsidiaries of U S WEST, Inc.:

Paragraph I.M.: U S WEST Internet Ventures, Inc. (CO 12/18/98); amended name from U S WEST Data Investments, Inc. 01/19/99.

Paragraph I.S.: U S WEST Transoceanic, Inc. (DE 01/22/99)

Direct Subsidiaries of U S WEST Transoceanic, Inc.:

Paragraph I.S.1.: Transoceanic Operations, Inc. (DE 01/22/99)

Paragraph I.S.2.: U S WEST Hong Kong, L.L.C. (DE 01/22/99)

Direct Subsidiaries of U S WEST Hong Kong, L.L.C..:

Paragraph I.S.2.a.: U S WEST (Asia), Limited (HK 01/23/98); amended name from Acute Strategy Company Limited (pending)

Note: The following symbols indicate:

I. Ultimate Parent
  A. Level 1 subsidiaries
    1. Level 2 subsidiaries
      a. Level 3 subsidiaries
        (1) Level 4 subsidiaries
          (a) Level 5 subsidiaries

Also Note: If you received this list via e-mail, and do not need/wish to, OR you know someone who did not receive this list that should, please respond to this message.

NEW U S WEST, INC.
AND ITS SUBSIDIARIES

I. **U S WEST, Inc. (DE 12/23/97); amended name from USW-C, Inc. 06/12/98; merger of U S WEST Communications Group, Inc. (CO) into USW-C, Inc. 06/12/98; amended name from U S WEST Communications Group, Inc. (DE) 02/04/98**

- A. U S WEST Advanced Technologies, Inc. (CO 05/09/85); amended name from U S WEST Technologies, Inc.; 04/25/95 amended name from U S WEST Advanced Technologies 01/01/94.
- B. U S WEST Business Resources, Inc. (CO 12/16/83); amended name from U S WEST Materiel Resources, Inc. 03/22/88; amended name from U S WEST Systems, Inc. 09/05/85.
  - 1. U S WEST Business Resources, Inc. (DE 10/11/85); amended name change from U S WEST Materiel Resources, Inc. 04/20/88; in the process of dissolution.
- C. U S WEST Capital Funding, Inc. (CO 06/10/86)
- D. U S WEST Communications, Inc. (CO 07/17/11); merger of Northwestern Bell Telephone Company and Pacific Northwest Bell Telephone Company into The Mountain States Telephone and Telegraph Company 01/01/91; amended name from The Mountain States Telephone and Telegraph Company 01/03/91; d/b/a Mountain Bell; d/b/a/ Mountain States Telephone and Telegraph Corporation.[1]
  - 1. Block 142 Parking Garage Association (CO Non-profit 01/07/82)
  - 2. El Paso County Telephone Company (CO 08/10/15)
  - 3. Malheur Home Telephone Company (OR 11/7/10)
  - 4. Mubeta Development Co. (CO 11/26/71)
  - 5. Training Partnerships, Inc. (CO Non-profit 05/15/87)
  - 6. 1200 Landmark Center Condominium Association, Inc. (NE Non-profit 10/15/91)
  - 7. U S WEST Database Services, Inc. (CO 12/23/98)
  - 8. U S WEST Wireless, L.L.C. (DE 05/15/97)
- E. U S WEST Communications Federal Services, Inc. (CO 11/10/88)
- F. U S WEST Communications Services, Inc. (CO 03/01/84); (Consolidation of Interline Communications Services, Inc. and Firstel Information Systems, Inc. named U S WEST Services, Inc.; amended name from U S WEST Information Systems, Inc. 03/07/89; amended name from U S WEST Services, Inc. 08/01/85; d/b/a/ Command Data Systems; d/b/a U S WEST Public Safety Group, (formerly the Emergency Systems Division of U S WEST Enterprises.)

---

[1] U S WEST Communications, Inc. owns 1/7 share of National Telecommunications Alliance, Inc.

1. Please Hold Promotions, Inc. (AZ 03/12/85); acquired in an intercompany stock transfer 08/01/98; in the process of dissolution.

G. U S WEST Dex Holdings, Inc. (DE 05/25/95); amended name from U S WEST Media Group, Inc. 06/24/98

1. U S WEST Dex, Inc. (CO 10/14/83); amended name from U S WEST Marketing Resources Group, Inc.11/21/96; merger of all wholly owned subsidiaries into U S WEST Marketing Resources Group, Inc. 12/31/90; amended name from LANDMARK Publishing Company on 06/88; d/b/a U S WEST Marketing Resources International being used as branch office in Belgium.
   a. Interactive Video Enterprises, Inc. (CO 02/24/94); amended name from U S WEST Interactive Video Enterprises, Inc. 06/01/94; In the process of dissolution.
   b. LOCALTouch Holdings, Inc. (CO 02/25/94); in the process of dissolution.
      (1) LOCALTouch Directory Services, Inc. (CO 02/25/94); in the process of dissolution.

H. U S WEST Education Foundation (WA Non-profit 04/29/85)

I. U S WEST Enhanced Services, Inc. (WA 03/27/84); amended name from Comm+Systems, Inc. 11/01/90; amended name from PNB Enhanced Services, Inc. 06/29/84

J. U S WEST Federal Relations, Inc. (DE 10/11/83); amended name from U S WEST, Inc. 05/11/95

K. U S WEST Foundation (CO Non-Profit 02/11/85); amended name from Mountain Bell Foundation 07/18/88

L. U S WEST Information Technologies, Inc. (CO 04/18/97)

M. U S WEST Internet Ventures, Inc. (CO 12/18/98); amended name from U S WEST Data Investments, Inc. (01/19/99)

N. U S WEST Interprise America, Inc. (CO 03/24/95); amended name from !nterprise America, Inc. 04/27/95; d/b/a !nterprise America, Inc.

O. U S WEST IP Holdings, Inc. (DE 09/09/97)

P. U S WEST Investment Management Company (CO 08/21/95)

Q. U S WEST Long Distance, Inc. (CO 11/14/95); amended name from U S WEST Communications Systems Corporation 07/12/96; amended name from U S WEST Solutions Corporation 12/21/95

R. U S WEST SPF Co. (CO 03/13/89)

S. U S WEST Transoceanic, Inc. (DE 01/22/99)
   1. Transoceanic Operations, Inc. (DE 01/22/99)
   2. U S WEST Hong Kong, L.L.C. (DE 01/22/99)

a. U S WEST (Asia), Limited (HK 01/23/98); amended name from Acute Strategy Company Limited (pending)

T. U S WEST Y2K, Inc. (DE 06/03/98)

U. Western Re, Inc. (VT 06/03/98)

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-3
Exhibit of Judith L. Brunsting

U S WEST LONG DISTANCE'S "CERTIFICATE OF DISCLOSURE" FOR ARIZONA

1 0 4 5 0 1 2 3 3

ARIZONA CORPORATION COMMISSION
CORPORATIONS DIVISION

Phoenix Address: 1300 West Washington
Phoenix, Arizona 85007-2929

Tucson Address: 400 West Congress
Tucson, Arizona 85701-1347

CERTIFICATE OF DISCLOSURE
A.R.S. § 10-202.D

U S WEST Long Distance, Inc.
EXACT CORPORATE NAME

CHECK APPROPRIATE BOX (A or B)
ANSWER "C"

THE UNDERSIGNED CERTIFY THAT:

A. [X] No persons serving either by elections or appointment as officers, directors, trustees, incorporators and persons controlling or holding over 10% of the issued and outstanding common shares or 10% of any other proprietary, beneficial or membership interest in the corporation:

1. Have been convicted of a felony involving a transaction in securities, consumer fraud or antitrust in any state or federal jurisdiction within the seven-year period immediately preceding the execution of this Certificate.
2. Have been convicted of a felony, the essential elements of which consisted of fraud, misrepresentation, theft by false pretenses, or restraint of trade or monopoly in any state or federal jurisdiction within the seven-year period immediately preceding the execution of this Certificate.
3. Have been or are subject to an injunction, judgment, decree or permanent order of any state or federal court entered within the seven-year period immediately preceding the execution of this Certificate wherein such injunction, judgment, decree or permanent order:
   (a) Involved the violation of fraud or registration provisions of the securities laws of that jurisdiction; or
   (b) Involved the violation of the consumer fraud laws of that jurisdiction; or
   (c) Involved the violation of the antitrust or restraint of trade laws of that jurisdiction.

B. [ ] For any person or persons who have been or are subject to one or more of the statements in Items A.1 through A.3 above, the following information MUST be attached:

1. Full name, prior name(s) and aliases, if used.
2. Full birth name.
3. Present home address.
4. Prior addresses (for immediate preceding 7-year period).
5. Date and location of birth.
6. Social Security number.
7. The nature and description of each conviction or judicial action, date and location, the court and public agency involved and file or cause number of case.

C. Has any person serving as an officer, director, trustee or incorporator of the corporation served in any such capacity or held or controlled over 20% of the issued and outstanding common shares, or 20% of any other proprietary, beneficial or membership interest in any corporation which as been placed in bankruptcy, receivership or had its charter revoked, or administratively or judicially dissolved by any state or jurisdiction?

Yes _____ No X

IF YOUR ANSWER TO THE ABOVE QUESTION IS "YES", YOU MUST ATTACH THE FOLLOWING INFORMATION FOR EACH CORPORATION:

1. Name and address of the corporation.
2. Full name (including aliases) and address of each person involved.
3. State(s) in which the corporation:
   (a) Was incorporated.
   (b) Has transacted business.
4. Dates of corporate operation.

D. The fiscal year end adopted by the corporation is December 31

Under penalties of law, the undersigned incorporator(s)/officer(s) declare(s) that I (we) have examined this Certificate, including any attachments, and to the best of my (our) knowledge and belief it is true, correct, and complete. THE SIGNATURE(S) MUST BE DATED WITHIN THIRTY (30) DAYS OF THE DELIVERY DATE.

BY Robert D. Tregemba

PRINT NAME Robert D. Tregemba

TITLE Asst. Secretary DATE 7/17/96

BY _____

PRINT NAME _____

TITLE _____ DATE _____

DOMESTIC CORPORATIONS: ALL INCORPORATORS MUST SIGN THE INITIAL CERTIFICATE OF DISCLOSURE. If within sixty days, any person becomes an officer, director, trustee or person controlling or holding over 10% of the issued and outstanding shares or 10% of any other proprietary, beneficial, or membership interest in the corporation and the person was not included in this disclosure, the corporation must file an AMENDED certificate signed by at least one duly authorized officer of the corporation.

FOREIGN CORPORATIONS: MUST BE SIGNED BY AT LEAST ONE DULY AUTHORIZED OFFICER OF THE CORPORATION.

C/F: 0002-Business Corporations
Rev. 1/96 (ARIS. - 13 - 1/1/96)

1 0 4 1 7 1 2 3 3

APPLICATION FOR NEW AUTHORITY

TO TRANSACT BUSINESS

IN ARIZONA

EXPEDITED
AZ CORP. COMMISSION
DELIVERED

JUL 24 1996

FILED BY 2b
TERM
DATE 7-24

F-0768528-0

We are a foreign corporation currently authorized to transact business in Arizona under the name:

U S WEST Communications Systems Corporation

and must now file the attached Application for Authority pursuant to A.R.S. §10-1504 because we have changed the following in our domicile jurisdiction:

- [x] Our actual corporate name (or the name under which we originally obtained authority in Arizona).
- [ ] The period of our duration.
- [ ] The state, province or country of our incorporation.

Attached to this Application is a certified copy of this amendment. We do not need to file copies of our Articles of Incorporation and any amendments already on file with our original application.

Also enclosed is the appropriate filing fee (U.S.) in the amount of $175.00.

By [signature]
Asst. Secretary, 7/17/96
[Title] [Date]

CF.0050
Rev. 1/96

(ARIZ. - 703 - 1/1/96)

APPLICATION FOR AUTHORITY

TO TRANSACT BUSINESS IN ARIZONA

BY

U S WEST Long Distance, Inc.

A (n) Colorado CORPORATION
(State, Province or Country)

1. The exact name of the foreign corporation is

U S WEST Long Distance, Inc.

If the exact name of the foreign corporation is not available for use in this state, then the fictitious name adopted for use by the corporation in Arizona is:

_____ (FN).

2. The name of the state, province or country in which the foreign corporation is incorporated is:

Colorado

3. The foreign corporation was incorporated on the 14 day of November 1995

and the period of its duration is Perpetual.

4. The street address of the principal office of the foreign corporation in the state, province or country of its incorporation is:

1801 California Street, Suite 2020,
Denver, Colorado 80202

5.a. The name and street address of the statutory agent for the foreign corporation in Arizona is:

C T Corporation System
3225 North Central Avenue, Phoenix,
Arizona 85012

CF: 0024
Rev. 1/96

(ARIZ. - 703)

5.b. The street address of the known place of business of the foreign corporation in Arizona IF DIFFERENT from the street address of the statutory agent is:

_____

_____

_____

6. The purpose of the corporation is to engage in any and all lawful business in which corporations may engage in the state, province or country under whose law the foreign corporation is incorporated, with the following limitations, if any: (If none, so state.)

none

7. The names and usual business addresses of the current directors and officers of the foreign corporation are: (Attach additional sheets if necessary.)

See attached list of directors and officers _____, _____ [title]

_____

_____

_____, _____ [title]

_____

_____

_____, _____ [title]

_____

_____

_____, _____ [title]

_____

_____

8. The foreign corporation is authorized to issue[1] _____ shares, itemized as follows:

(Attach additional sheets if necessary)

1 _____ shares of Common/(No series) [class or series] stock at

X no par value or par value of $_____ per share.

_____ shares of _____ [class or series] stock at

_____ no par value or par value of $_____ per share.

_____ shares of _____ [class or series] stock at

_____ no par value or par value of $_____ per share.

9. The foreign corporation has issued 1 shares, itemized as follows:

(Attach additional sheets if necessary)

1 shares of Common (No series) [class or series] stock at

X no par value or par value of $ per share.

shares of [class or series] stock at

no par value or par value of $ per share.

shares of [class or series] stock at

no par value or par value of $ per share.

10. The character of business the foreign corporation initially intends to conduct in Arizona is:

To provide inter-LATA long distance telecommunications services for residential and business customers.

This application is accompanied by:

A Certificate of Disclosure containing the information set forth in Arizona Revised Statutes Section 10-202.D.

A certified copy of our articles of incorporation, all amendments (AZ Const. Art. XIV, § 8) and a certificate of existence or document of similar import duly authenticated by the official having custody of corporate records in the state, province or country under whose laws we are incorporated (A.R.S. § 10-1503.B).

The filing fee(s) (U.S.) made payable to the Arizona Corporation Commission.

DATED this 17th day of July, 1996

U S WEST Long Distance, Inc.
[Name of Corporation]

Executed By: Robert D. Tredemba

Robert D. Tredemba, Asst. Secretary
[print name] [title]

ACCEPTANCE OF APPOINTMENT BY STATUTORY AGENT

The undersigned hereby acknowledges and accepts the appointment as statutory agent of this corporation effective this 23 day of July, 1996

C T CORPORATION SYSTEM

Marcia J Sunahara
Signature

MARCIA J SUNAHARA
[Print name]

07/15/1996

Directors and Officers
U S WEST Communications Systems Corporation

Effective

DIRECTORS:

12/21/1995

Richard K. Coleman, Jr. Director
SSN : 249-06-3817
Primary : 1801 California Street
Address : Suite 3100
Denver, Colorado 80202

12/21/1995

Kathy R. Stephens Director
SSN : 518-76-0954
Primary : 1801 California Street
Address : Suite 3100
Denver, Colorado 80202

OFFICERS:

12/21/1995

Richard K. Coleman, Jr. President
SSN : 249-06-3817
Primary : 1801 California Street
Address : Suite 3100
Denver, Colorado 80202

12/21/1995

Kathy R. Stephens Vice President & Treasurer
SSN : 518-76-0954
Primary : 1801 California Street
Address : Suite 3100
Denver, Colorado 80202

12/21/1995

Paul A. Lit Secretary
SSN : 193-38-6294
Primary : 9785 Maroon Circle
Address : Suite G104
Englewood, Colorado 80112

05/13/1996

Brenda G. Jennings Assistant Secretary
SSN : 406-84-8378
Primary : 7800 East Orchard Road
Address : Suite 480
Englewood, Colorado 80111

05/13/1996

Robert D. Tregemba Assistant Secretary
SSN : 520-52-2195
Primary : 1801 California Street
Address : Suite 2060

Denver, Colorado 80202

Assistant Treasurer

01/01/1996

Todd J. Burnett

SSN : 522-92-8874

Primary : 188 Inverness Dr. W.

Address : Suite 500

Englewood, CO 80112

ARTICLES OF AMENDMENT

TO THE

ARTICLES OF INCORPORATION

OF

U S WEST COMMUNICATIONS SYSTEMS CORPORATION

Pursuant to the provisions of the Colorado Business Corporation Act, the undersigned incorporator of the corporation adopted the following Articles of Amendment to the Articles of Incorporation:

FIRST: The name of the Corporation is U S WEST Communications Systems Corporation.

SECOND: The following amendment was adopted by the Shareholders of the Corporation on July 10, 1996, in the manner prescribed by the Colorado Business Corporation Act:

RESOLVED, that ARTICLE ONE of the Articles of Incorporation of U S WEST Systemss Corporation be, and it hereby is, amended to read as follows:

"ARTICLE ONE. The name of the Corporation is U S WEST Long Distance, Inc."

THIRD: The number of shares of the Corporation outstanding at the time of such adoption was one (1); and the number of share entitled to vote thereon was one (1).

FOURTH: The number of shares voted for such amendment was one (1).

DATED this 12th day of July, 1996.

U S WEST Communications Systems Corporation

By Kathy R. Stephens
Kathy R. Stephens, Vice President

BY Robert D. Tregemba
Robert D. Tregemba, Assistant Secretary

csc\csc2aoa.doc

COMPUTER UPDATE COMPLETE

ARIZONA CORPORATION COMMISSION
CORPORATION DIVISION

Phoenix Address: 1300 West Washington
Phoenix, Arizona 85007

Tucson Address: 400 West Congress
Tucson, Arizona 85701-1347

CERTIFICATE OF DISCLOSURE
A.R.S. Sections 10-202 [illegible]

U S WEST COMMUNICATIONS SYSTEMS CORPORA[illegible]
EXACT CORPORATE NAME

CHECK APPROPRIATE BOX(ES) A or B
ANSWER "C"

THE UNDERSIGNED CERTIFY THAT

A. No persons serving either by elections or appointment as officers, directors, incorporators and persons controlling, or holding more than 10% of the issued and outstanding common shares or 10% of any other proprietary, beneficial or membership interest in the corporation:

X 1. Have been convicted of a felony involving a transaction in securities, consumer fraud or antitrust in any state or federal jurisdiction within the seven-year period immediately preceding the execution of this Certificate.

2. Have been convicted of a felony, the essential elements of which consisted of fraud, misrepresentation, theft by false pretenses, or restraining the trade or monopoly in any state or federal jurisdiction within the seven-year period immediately preceding the execution of this Certificate.

3. Have been or are subject to an injunction, judgment, decree or permanent order of any state or federal court entered within the seven-year period immediately preceding the execution of this Certificate where such injunction, judgment, decree or permanent order:
(a) Involved the violation of fraud or registration provisions of the securities laws of that jurisdiction, or
(b) Involved the violation of the consumer fraud laws of that jurisdiction, or
(c) Involved the violation of the anti-trust or restraint of trade laws of that jurisdiction.

B. For any person or persons who have been or are subject to one or more of the statements in Items A.1 through A.3 above, the following information MUST be attached.

1. Full name and prior name(s) used
2. Full birth name
3. Present home address
4. Prior addresses (for immediate preceding 7 years)
5. Date and location of birth
6. Social Security number
7. The nature and description of each conviction or judicial action, date and location, the court and public agency involved and file or cause number of case.

D.C. FEB 05 1996

STATEMENT OF BANKRUPTCY, RECEIVERSHIP OR REVOCATION
A.R.S. Sections 10-122.01 and 10-1083

C. Has any person serving (a) either by election or appointment as an officer, director, trustee or incorporator of the corporation or, (b) major stockholder possessing or controlling any proprietary, beneficial or membership interest in the corporation, served in any such capacity or hold such interest in any corporation which has been placed in bankruptcy or receivership or had its charter revoked?

YES ____ NO X

IF YOUR ANSWER TO THE ABOVE QUESTION IS "YES", YOU MUST ATTACH THE FOLLOWING INFORMATION FOR EACH CORPORATION:

1. Name and address of the corporation
2. Full name, including alias, and address of each person involved
3. State(s) in which the corporation
   (a) Was incorporated
   (b) Has transacted business
4. Dates of corporate operation
5. A description of the bankruptcy, receivership or charter revocation, including the date, court or agency involved and the file or cause number of the case.

Under penalties of law, the undersigned incorporators/Officers declare that we have examined this Certificate, including any attachments, and to the best of our knowledge and belief it is true, correct, and complete.

BY: Rick Coleman DATE: JAN 2[illegible]
Rick Coleman
TITLE: President

BY: Paul Lee DATE: 1/2/95
Paul Lee
TITLE: Secretary

BY: _____ DATE: _____
TITLE: _____

BY: _____ DATE: _____
TITLE: _____

NOTE: If the Corporation has been in existence for more than sixty (60) days, the Certificate must be signed by two (2) executive officers or directors.

FISCAL DATE: _____

[illegible] 4/24/95

EXPEDITED
AZ CORP. COMMISSION
DELIVERED

FEB 0 2 1996

FILED BY Christine Gyma
TERM
DATE 2/2

F-0768528-0

APPLICATION FOR AUTHORITY OF

U S WEST Communications Systems Corporation
Exact Corporate Name

TO: **ARIZONA CORPORATION COMMISSION**
Corporations Division
P.O. Box 6019, Phoenix, AZ 85005
(or)
400 West Congress, Tucson, AZ 85701

PURSUANT TO THE PROVISIONS OF SECTION 10-1503 & 10-1504 , ARIZONA BUSINESS CORPORATION ACT, THE UNDERSIGNED CORPORATION HEREBY APPLIES FOR AUTHORITY TO TRANSACT BUSINESS IN ARIZONA

FIRST This application is

X (1) An original application pursuant to A.R.S Sec. 10-1503

__ (2) An application for new authority pursuant to A.R.S Sec.10-1504 as a result of

(a) A change in the corporation's name as set forth in the second paragraph

(b) A desire to pursue in this State different or additional purposes than those set forth in the corporation's prior Application for Authority as more fully described in the ninth paragraph herein.

SECOND: The name of the corporation is U S WEST Communications Systems Corporation

THIRD If the name of the corporation does not contain the word "association", "bank", "corporation", "company", "incorporated" or "limited" or does not contain an abbreviation of one of such words, then the name of the corporation with the word or abbreviation which it elects to add thereto for use in ARIZONA is.

FISCAL YEAR END. 12/31

CT 7/24
Rev 7/94 PAPIZ 1138 8/23/93

[illegible] It is incorporated under the laws of Colorado

[illegible] The date of its incorporation is [illegible]

and the period of its duration is Perpetual

[illegible] The address of its principal office in the jurisdiction under the laws of the state or county in which it is incorporated is 1801 California Street

Denver, Colorado 80202

SEVENTH The address of the proposed known place of business in Arizona is

[X] In care of Statutory Agent

[ ]

EIGHTH The name and address of the proposed statutory agent in Arizona is C T Corporation System

3225 North Central Avenue

Phoenix, Arizona 85012

NINTH A brief statement of the character of the business which the corporation initially intends to conduct in Arizona and the purpose for which the corporation is organized is

U S WEST Communications Systems Corporation was established to provide inter-LATA long distance telecommunications services for residential and business customers.

and the transaction of all lawful business for which corporations may be incorporated under the Arizona Business Corporation Act

TENTH The names and respective addresses of its directors and officers are:

NAME	OFFICE	ADDRESS	DATE OF TAKING OFFICE
See attached list of officers and directors			

ELEVENTH The aggregate number of shares which it is authorized to issue, itemized by class, par value of shares, shares without par value, and series, if any, within a class is

Number of Shares	Class	Series	Par Value Per Share or Statement That Shares Are Without Par Value
One	Common	N/A	No Par Value

TWELFTH The aggregate number of its issued shares, itemized by class, par value of shares, shares without par value, and series, if any, within a class is

Number of Shares	Class	Series	Par Value Per Share or Statement That Shares Are Without Par Value
One	Common	N/A	No Par Value

THIRTEENTH The amount of its stated capital, as defined in the Arizona Business Corporation Act is:

$ 1.00

FOURTEENTH The application is accompanied by a copy of its Articles of Incorporation and all amendments thereto, duly authenticated within 60 days of delivery of these documents, by the proper officer of the State or County under the laws of which it is incorporated.

FIFTEENTH Has any person(s): (a) serving either by election or appointment as an officer, director or trustee, incorporator of the corporation, (b) controlling or holding 20% of the proprietary, beneficial or membership interest in the corporation, served in any such capacity or held such interest in any corporation which has been placed in bankruptcy or receivership or had its charter revoked?

YES ___ NO X

If your answer to the above question is "YES", you MUST attach the following information for each such corporation

1. Name and address of the corporation
2. Full name, including alias(es) and address(es) of each person or person(s) involved.
3. State(s) in which the corporation:
   (a) Was incorporated
   (b) Has transacted business
4. Dates of corporate operation
5. A description of the bankruptcy, receivership or charter revocation, including the date, the court or agency involved, and the file or cause number of the case.

SIXTEENTH Under penalties of law, I declare that I will comply with the provisions of A.R.S.Sec. 10-128.01.

Under penalties of law, I declare that I have examined this application and to the best of my knowledge and belief it is true, correct and complete.

U S WEST Communications Systems Corporation
(CORPORATE NAME)

By: Rick K Coleman
President Rick Coleman

By: Paul Lit
Secretary Paul Lit

I, C T Corporation System, having been designated to act as Statutory Agent, hereby consent to act in that capacity until removed or resignation is submitted in accordance with the Arizona Revised Statutes.

Marcia J Lundkvist
(Signature of Statutory Agent)

12/27/1995

Directors and Officers
U S WEST Communications Systems Corporation

DIRECTORS:

Richard Coleman — Director
Primary Address: 1801 California Street
Suite 2020
Denver, Colorado 80202

Kathy R. Stephens — Director
Primary Address: 1801 California Street
Suite 2020
Denver, Colorado 80202

OFFICERS:

Richard Coleman — President
Primary Address: 1801 California Street
Suite 2020
Denver, Colorado 80202

Kathy R. Stephens — Vice President & Treasurer
Primary Address: 1801 California Street
Suite 2020
Denver, Colorado 80202

Paul A. Lit — Secretary
Primary Address: 9785 Maroon Circle
Suite G104
Englewood, Colorado 80112

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-4
Exhibit of Judith L. Brunsting
March 25, 1999

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE CHART OF ACCOUNTS

Confidential/Proprietary Designation Rationale:

This exhibit categorizes the Chart of Accounts for U S WEST Long Distance. This contains detailed confidential information about payroll and salaries, and information about marketing and revenue streams. Because this information is would be valuable to our competitors, it is proprietary.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-5
Exhibit of Judith L. Brunsting
March 25, 1999

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE INCOME STATEMENT

Confidential/Proprietary Designation Rationale:

This exhibit categorizes the Income Statement of U S WEST Long Distance. The Income Statement lists the revenues and operating expenses of U S WEST Long Distance. Because this information would be valuable to our competitors, it is proprietary.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-6
Exhibit of Judith L. Brunsting
March 25, 1999

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE BALANCE SHEET

Confidential/Proprietary Designation Rationale:

This exhibit categorizes the Balance Sheet of U S WEST Long Distance. The Income Statement lists the assets and liabilities of U S WEST Long Distance. Because this information would be valuable to our competitors, it is proprietary.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE POLICIES AND PROCEDURES

Confidential/Proprietary Designation Rationale:

This exhibit contains the Policies & Procedures manual of U S WEST Long Distance. This manual is an account of the internal methods and procedures used for procuring goods. Because this information would be valuable to our competitors, it is proprietary.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-8
Exhibit of Judith L. Brunsting
March 25, 1999

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE ACTIVE ASSETS REPORT

Confidential/Proprietary Designation Rationale:

This exhibit categorizes the Active Assets Report of U S WEST Long Distance. It lists all the equipment used by U S WEST Long Distance to conduct its business. Because this information would be valuable to our competitors, it is proprietary.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-9
Exhibit of Judith L. Brunsting

U S WEST LONG DISTANCE BOARD OF DIRECTORS

U S WEST Long Distance, Inc.

Directors and Officers as of Sunday, August 02, 1998

Directors

Minimum: 1 Maximum: 5 Current: 1. Authorised number : 2 Quorum : 0

Name	Elected	Citizenship	Residence
Kathy R. Stephens	12/21/95		

[A] indicates an Associate Director

Officers

Title	Name	Appointed
Assistant Secretary	Christian A. Pedersen	4/3/98
Vice President & Treasurer	Kathy R. Stephens	12/21/95
Secretary	Karen Tatelman	4/4/97

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE TIME REPORTING FOR SERVICES PERFORMED FOR THE BENEFIT OF AFFILIATES AND OTHER THIRD PARTIES

Confidential/Proprietary Designation Rationale:

This exhibit contains a description of how time reporting is performed for the benefit of affiliates and other third parties. It provides the framework for how U S WEST Long Distance employees track time spent on projects. Because this information would be valuable to our competitors, it is proprietary.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-11
Exhibit of Judith L. Brunsting
March 25, 1999

U S WEST LONG DISTANCE ORGANIZATION CHART

USWEST
LONG DISTANCE

Kathy Stephens
VP & (Acting) GM

VACANT

Ford Fay
Acting VP Operations
Susan Bartholomew

David :erch
Director Service Mgmt
Michael Carter
Dahlia Castillo
Todd Crouch
Chuck Gallup
Ellsworth Grant
Steve Gustafson
Barry Hay
Colleen LeClaire
Kasey Morgan
Trish Pryde
Leslee Strohm

Steve Norby
Director
Technology Management
George Mayfield

Gwen Lyons
Director Network Implementation & Optimization
Trish Bliss
Nick Franks
Michael Friend
Rob Peterson
Brenda Waterhouse

Bill Lannan
Director
Revenue Assurance
Diane Ambrose
Deb Brallier
Teddi Davis
Sohndra Edmonds
Pat Finn
Esther Harnsberger
Tony Nelson

Mark Hernandez
VP Information Systems and Services
Kathy McBride

Bob Reed
Director Planning & Integration/Delivery Management
Nancy Aragon
Barbara Johnston
Christi Sundby
Mark Waddell
George Wade
Project Manager

Pat Hoffert
Systems Manager
DSS/Tools
Business Analyst-DSS

Lori Redovian
Systems Manager
Customer Care, Billing & Financial Systems
Teddi Davis
Lorna Dubose
Ron Minobe
Nelda Welle
Janice Zamora

Bob Salazar
Systems Manager
Network Management Systems
Angela Jones
Karen Kraas
Dan Sanchez

Debbie Walker
Systems Manager
Desktop, Intranet
Mike Grant
Brett Shouse
Pat Wheeler

Kathy Stephens
VP Business Planning
Rosiland Carthen

Judy Brunsting
Director Regulatory
Nancy Arevalo
Laurel Neher
Robin Terry

John Pitek
Acting VP Marketing
Johnna Hoff

Roger Adams
Senior Manager
Public Relations
Annette Bricker

VACANT
Director Product Mgmt
Bill Elliot
Randy Kendrick
Andrew Kaufman
Beth Kwiat

VACANT
Director Product Development (Acting)
Deb Messenger
Jeff Tench
John Zeitlin

Hal Sorstokke
Director Official Communication Services
Laura Martinez
Ruth Pesina

VACANT
Director Market Management
Suzanne Brennan
Annette Bricker
Barry Cunningham
Laura Martinez
Sandra McKenzie
Scott Russell
Penny Warfel

Dave Desmond
Executive Director
Service Delivery

Terry Bate
Director Customer Service
Kerri Coffey
Julie Grannan
Diane Martinez
Bob Pepper
Erron Reynolds
Matt Richter
Joyce Riley
Jean Troxel
Penny Yunke

Marcia Sutliff
Director
Program Management & Planning
Rick Schimmel
Program Office
Project Manager

Kevin Phelps
Director Financial Planning and Analysis
Lynn Marquez

Reynald Clemons
John Hill
Rawlene LeBaron
Rebecca Hulen
Lee Nindorf
Kim Tran
Mark Pomeroy

Tavia Campbell
Director
Human Resources

Tim Chavez

Karen Tatelman
Legal

2-8-99

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-12
Exhibit of Judith L. Brunsting

SERVICE AGREEMENT

AMENDMENT THREE

This is Amendment Three to the Services Agreement, Agreement Number AP96102 ("Agreement"), between U S WEST Communications, Inc. ("USW"), and U S WEST Long Distance, Inc. ("USWLD"), formerly U S WEST Communications Systems Corporation, dated April 1, 1996.

RECITALS

USW and USWLD entered into that certain Agreement for Services Number AP96102 dated April 1, 1996 as amended by Amendment Number 1 dated July 1, 1996, as amended by Amendment Number 2 dated February 12, 1998, and USW and USWLD wish to Amend the Agreement under the terms and conditions contained herein.

The following Agreement shall replace the previous Agreement in its entirety. All existing task orders shall be incorporated under this Agreement.

SERVICES AGREEMENT

U S WEST LONG DISTANCE, INC.
and
U S WEST COMMUNICATIONS, INC.

THIS AGREEMENT is made as of the first day of April 1996, by and

BETWEEN: **U S WEST Long Distance, Inc.**, a Colorado corporation (hereafter "USWLD)

AND: **U S WEST Communications, Inc.**, a Colorado corporation (hereinafter "USW").

The parties agree as follows:

Article 1 - TERM OF AGREEMENT

This Agreement shall become effective as of April 1, 1996 and will remain in full force and effect until either party provides sixty (60) calendar days written notice of termination to the other party. The parties agree to undertake a review of the contract every twenty-four months. If this Agreement is terminated prior to the completion of any Services, USW shall pay for all charges billed and owing to USWLD for Services performed up to and including the date of termination, provided Services performed are in accordance with the terms and conditions of this Agreement. USWLD shall complete any such work in progress prior to the termination of the Agreement, and USWLD shall perform such services in accordance with the terms and conditions of this Agreement.

Article 2 - SERVICES

A. USWLD shall provide services ("Services") to USW as set forth in the attached Exhibits (incorporated herein by this reference). The Exhibits describe Services that USWLD may provide to USW upon request by USW. Such requests for Services shall be specified and documented on a Task Order (incorporated herein as Exhibit A) and include, at a minimum, the following information:

- Description/Location of Service/s Requested
- Dates of Commencement and Completion of Service/s Requested
- Deliverables, Performance Standards, Special Conditions
- Units and Price per Unit for Requested Service/s
- Costing Methodology

USWLD may require additional information as it deems necessary for the provision, tracking, and billing of Services.

B. The parties shall comply with the U.S WEST Technology Fair Compensation Policy when Services requested include technical information, software, inventions, functional specifications, and other researched or developed products or Services.

C. In the event of any conflict between the general terms and conditions of this Agreement and the special terms and conditions contained in a Task Order, Appendices or Attachments, the special terms and conditions shall prevail.

Article 3 - COMPENSATION

Services provided by USWLD shall be priced consistent with FCC accounting safeguards pursuant to docket 96-150 concerning transactions between USW and its affiliates. Where USWLD reasonably deems it necessary in order to comply with such rules and regulations, USWLD reserves the right to revise prices, provided that revisions occur no more than semi-annually. If applicable, USWLD and USW agree to any necessary true-up compensation (bill or credit) which may result from such necessary price revisions. Upon request by USW, USWLD agrees to provide supporting information to substantiate any such price revisions, the reasons therefore and any resulting true-up.

Article 4 - BILLING

A. USWLD shall submit invoices to USWC for Services provided in accordance with the terms and conditions of this Agreement on a monthly basis unless otherwise specified in the Task Order. USWC shall notify USWLD of the address to which invoices are to be sent.

B. Invoices shall include the following billing information as a minimum:

1) Invoice number
2) Payment due date
3) Date of Service
4) Description of charges
5) Applicable taxes
6) Total charge

C. The bill recipient is responsible for recording the obligation upon receipt of the invoice WITHOUT REGARD TO ACCEPTANCE unless the billing has been billed to the wrong entity. Once the payable has been recorded, the bill recipient may withhold cash payment of the invoice for disputed items only. Formal disputes must be initiated with the billing company contact no later than sixty (60) days from receipt of the invoice. Any amount billed and uncontested as of the 60th day from receipt of the invoice shall be construed to be a proper charge to the bill recipient.

Interest should not be accrued on cash payments withheld by the bill recipient for disputed amounts during the period of the dispute. However, in order to discourage withholding of payments without due cause, if any portion of the disputed amount is resolved in favor of the billing company, interest shall be accrued from thirty (30) days after payment was due until the amount owed is paid. If the dispute is resolved in favor of the bill recipient, the billing company shall issue a credit to the bill recipient for the full amount. Payment of invoiced amounts that are undisputed or uncontested shall be remitted in full within thirty (30) calendar days after receipt of the invoice. Payment shall be sent to the address indicated on the invoice. Invoiced amounts not paid by the effective payment due date may be assessed interest on any outstanding balance until the amount is paid in full. Interest shall be accrued at a rate of one and one-half percent (1.5%) per month, or the highest rate allowed by applicable law, whichever is lower. Such interest shall be reflected on the invoice issued the month after the payment is deemed to be past due.

D. The billing company shall have sixty (60) days from formal notification of the dispute to respond to the dispute.

E. It is the responsibility of each affiliate to effectively communicate and resolve these disputes. If necessary, the issue in dispute should be escalated to the highest level required in order to achieve resolution within the allotted time frame. If all of this fails, refer the matter to the Directors of Technical Accounting at U S WEST, Inc. and at USWC, or their respective designees, for a ruling. Should such efforts prove ineffective, U S WEST, Inc. will, if asked, mediate the issue after a review of the related substantiating documentation. The matter may also be referred for mediation by an external party if both companies have agreed in writing to this type of mediation. (See Article 10 Dispute Resolution.)

F. The billing company may not render a bill for services more than ninety (90) days after those services have been provided unless both companies have agreed in advance to a longer billing period.

Article 5 - RECORDS AND AUDITS

USW or its authorized representative shall have the right to audit USWLD's books and records which relate to performance obligations under this Agreement and the charges billed for Services rendered hereunder, including, but not limited to, wage rates, details of expenses incurred and time records, provided such audits are conducted during normal business hours and USWLD is given thirty (30) calendar days written notice. Such books and records shall be kept in a timely and accurate manner and in accordance with Generally Accepted Accounting Principles (GAAP).

Article 6 - PROPRIETARY INFORMATION

A. Both parties are hereby granted a non-exclusive nontransferable license to use information provided by the other for the purpose of carrying out the terms of this Agreement. Neither party shall publish, circulate or otherwise distribute or disclose any such information that is marked proprietary or confidential to any third party not affiliated with USWLD or USW, unless and until (1) the party whose confidential information is requested gives written authorization and such third party executes a confidentiality agreement containing terms substantially similar to the ones contained in this Agreement and all attachments thereto; (2) such information has come into the public domain through no fault of USWLD or USW; (3) such information is otherwise in the possession of USWLD or USW free of any obligation of confidentiality, or (4) such party is required to do so by regulatory mandate.

B. Any third party information provided by USWLD or USW to the other party shall be deemed USWLD or USW information according to its source, and shall be treated accordingly. If such information is subject to a separate agreement with the third party, the party receiving information agrees to hold and use the information in strict accordance with the separate agreement, provided it has knowledge of the separate agreement, unless otherwise instructed in writing by the party providing the information.

Article 7 - INDEPENDENT CONTRACTOR

USWLD hereby declares and agrees that it is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of USW; that USWLD does not have the authority to act for USW or to bind USW in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of USW; that any persons provided by USWLD shall be solely the employees or agents of USWLD under its sole and exclusive direction and control. USWLD and its employees or agents are not entitled to USW's unemployment insurance benefits as a result of performing under this Agreement. USWLD shall be solely responsible for all matters relating to payment of its employees and agents, including compliance with worker's compensation, unemployment, disability insurance, social security withholding, and all other federal, state and local, rules and regulations. USWLD shall indemnify and hold USW harmless from any causes of action arising out of USWLD's liability to its employees or agents.

Article 8 - WARRANTY

Services shall be performed in a professional manner, consistent with industry standards, and meet the satisfaction of USW. USW reserves the right to inspect Services at any time prior to acceptance. USWLD warrants that the Services will be provided free from defects in performance, will conform to all specifications described in Exhibit A, and will be fit and sufficient for the purposes expressed in, or reasonably inferred from this Agreement.

Article 9 - LIMITATION OF LIABILITY

Neither party is liable to the other for consequential, incidental, indirect, punitive or special damages, including commercial loss and loss profits, however caused and regardless of legal theory or foreseeability, directly or indirectly arising under this Agreement. Notwithstanding the foregoing, the parties are liable in accordance with the provisions of this Agreement and this limitation of liability shall not apply to the indemnification obligations under this Agreement.

Article 10 - DISPUTE RESOLUTION

Any claim, controversy or dispute which arises between the parties, their agents, employees, officers, directors or affiliates ("Dispute") which the parties are unable to settle through consultation and negotiation may be mediated under the Commercial Mediation Rules of the American Arbitration Association ("AAA") by a mutually acceptable mediator. Any Dispute which cannot be resolved through negotiation or mediation shall be resolved by binding arbitration as provided in this Article. The arbitrability of claims shall be determined under the Federal Arbitration Act, 9 USC Secs. 1-16. Notwithstanding the foregoing, the parties may cancel or terminate this Agreement in accordance with its terms and conditions without being required to follow the procedures set forth in this Article.

A single arbitrator engaged in the practice of law, who is knowledgeable about the subject matter of this Agreement and the matter in Dispute, shall conduct the arbitration under the rules of the AAA then in effect, except as otherwise provided herein. The arbitrator shall be selected in accordance with AAA procedures from a list of qualified people maintained by the AAA. The arbitration shall be conducted in Denver, Colorado, and all expedited procedures prescribed by the AAA rules shall apply. The laws of Colorado shall govern the construction and interpretation of this Agreement. The arbitrator's decision and

award shall be final, conclusive and binding, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

Either party may request from the arbitrator injunctive relief to maintain the status quo until such time as the arbitration award is rendered or the Dispute is otherwise resolved. The arbitrator shall not have authority to award punitive damages. Each party shall bear its own costs and attorneys' fees, and the parties shall share equally the fees and expenses of the mediator and arbitrator.

If any party files a judicial or administrative action asserting claims subject to arbitration, as prescribed herein, and another party successfully stays such action and/or compels arbitration of said claims, the party filing said action shall pay the other party's costs and expenses incurred in seeking such stay and/or compelling arbitration, including reasonable attorneys' fees.

USWLD agrees that in the event of any Dispute between the parties, it will continue to provide Services without interruption.

Article 11 - HEADINGS NOT CONTROLLING

The headings of sections and clauses are inserted for convenience only and are not intended to affect the meaning or interpretation of this Agreement.

Article 12 - NOTICES

Any notice, instruction, direction or demand under the terms of this Agreement must be in writing. Notification will be deemed to have taken place upon delivery, if delivery is by hand, or five (5) days after posting if sent by certified mail, return receipt requested. The representatives of the parties to whom notices shall be sent are:

USWLD
U S WEST Long Distance, Inc.
Room 2800
1801 California Street
Denver, CO 80202 Attn: Contract Manager

USW
U S WEST Communications, Inc.
Contract Development & Services
188 Inverness Drive West, Suite 600
Englewood, CO 80112 Attn: Contract Representative

Article 13 - CONSTRUCTION

This Agreement shall be interpreted and construed in accordance with the laws of the state of Colorado.

Article 14 - ASSIGNMENT

This Agreement shall be binding upon the parties' respective successors and permitted assigns. Neither party may assign or delegate this Agreement and/or any of its rights and obligations hereunder without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any such attempted assignment shall be void. However, either party may assign this Agreement and delegate any of its rights and/or obligations hereunder to its parents, subsidiaries, subsidiaries of its parents, or other affiliates, without the consent of the other party. Any assignment of amounts payable is void to the extent that it attempts to impose on USW obligations to the assignee, or to preclude USW from dealing solely and directly with USWLD in all matters under this Agreement.

Article 15 - FORCE MAJEURE

With the exception of payment of charges due under this Agreement, a party shall be excused from performance if its performance is prevented by acts or events beyond the party's reasonable control including but not limited to: severe weather and storms; earthquakes or other natural occurrences; strikes or other labor unrest; power failures; computer failures not the result of error of either party; nuclear or other civil or military emergencies; or acts of legislative, judicial, executive, or administrative authorities.

Article 16 - RIGHTS UPON ORDERLY TERMINATION

Upon termination of this Agreement by expiration or otherwise, or any portion of the Services hereunder, each party shall, upon request, forthwith return to the other party all papers, material and properties of the other party held by such party and required to be returned by this Agreement. In addition, each of the parties will assist the other party in the orderly termination of this Agreement or any portion of the Services hereunder.

Article 17 - REGULATORY SUPPORT

A. USW and USWLD agree that to the extent USW is under the regulation of federal or state agencies, USWLD will provide full cooperation and support for USW's responses to relevant regulatory inquiries or discovery requests concerning this Agreement or relationships derived from this Agreement.

B. Should a regulatory agency request information, including but not limited to proprietary, trade secret, or confidential information, the disclosure of which, in the opinion of USWLD or USW, might be detrimental to the operation of USWLD, USW agrees to request an appropriate order to preserve the confidentiality of the information. USWLD agrees to provide support in the request of said order.

Article 18 - THIRD-PARTY BENEFICIARY

Nothing in this Agreement is intended to create any rights in a third-party beneficiary.

Article 19 - AMENDMENT

This Agreement and its attached Exhibit(s) may be amended from time to time, in whole or in part, upon written agreement between the parties.

Article 20 - INDEMNITY

USWLD shall indemnify and hold harmless USW, its owners, parents, subsidiaries, affiliates, agents, directors and employees against all Liabilities to the extent they arise from or in connection with: (1) the fault or negligence of USWLD, its officers, employees, agents, subcontractors and/or representatives; and/or (2) the furnishing, performance or use of any Services under this Agreement or any product liability claims relating to any Services; and/or (3) failure by USWLD, its officers, employees, agents, subcontractors and/or representatives to comply with the Article entitled "Compliance with Laws;" and/or (4) assertions under workers' compensation or similar employee benefit acts by USWLD or its employees, agents, subcontractors, or subcontractors' employees or agents.

USW shall indemnify and hold harmless USWLD, its owners, parents, subsidiaries, affiliates, agents, directors and employees against all Liabilities to the extent they arise from or in connection with: (1) the fault or negligence of USW its officers, employees, agents, subcontractors and/or representatives; and/or (2) the furnishing, performance or use of any Services under this Agreement or any product liability claims relating to any Services; and/or (3) failure by USW, its officers, employees, agents, subcontractors and/or representatives to comply with the Article entitled "Compliance with Laws," and/or (4) assertions under

workers' compensation or similar employee benefit acts by USW or its employees, agents, subcontractors, or subcontractors' employees or agents.

Article 21 - AFFILIATE

For purposes of this Agreement, ("Affiliate") means any entity which directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with one of the parties hereto. For the purpose of this Agreement, "control" means (i) in the case of corporate entities, direct or indirect ownership of more than ten percent, and (ii) in the case of non-corporate entities, direct or indirect ownership of more than ten percent.

Article 22 - WAIVER

The failure of either party to exercise any right shall not be construed to be a waiver unless agreed upon in writing. A waiver in any one instance will not constitute an amendment to this Agreement or indicate any continued waiver of such right on any other occasion.

Article 23 - COMPLIANCE WITH LAWS

The parties shall obtain and maintain at its own expense all permits and licenses and pay all fees required by law with respect to any Services and/or performance of this Agreement. The parties shall, in connection with performance of and Services under this Agreement, comply with all applicable federal, state, and local laws, ordinances, rules, regulations, court orders, and governmental or regulatory agency orders ("Laws"), including, without limitation:

1. The Telecommunications Act of 1996 and all rules, regulations and orders issued in connection with that Act and this Agreement shall, to the greatest extent possible, be construed to be consistent with the same.

2. Laws relating to non-discrimination in employment, fair employment practices, equal employment opportunity, employment opportunities for veterans, non-segregated facilities, and/or employment of the disabled, except to the extent a party is exempt therefrom; and the Laws and contract clauses required by those Laws to be made a part of this Agreement are incorporated herein by this reference.

3. The Laws referred to in the Article entitled "Independent Contractor".

USWLD acknowledges that Purchase(s) and/or Confidential Information ("Exports") may be subject to U.S. and applicable foreign export laws or regulations. USWLD shall perform its obligations under this Agreement in a manner consistent with the requirements of all applicable U.S. and all applicable foreign laws and regulations, including the U.S. export laws and regulations, the Foreign Corrupt Practices Act, and anti-boycott laws, and U.S. export laws and regulations prohibiting the unauthorized export or re-export of certain items to residents of countries listed in U.S. Export Administration Regulations.

The requirements of this Article shall survive the expiration, termination or cancellation of this Agreement. All provisions of this Article shall also apply to all subcontractors, and similar terms shall be included in all USWLD's contracts with subcontractors.

Article 24 - SEVERABILITY

Any term or provision of this Agreement which is held to be invalid, void, unenforceable or illegal will in no way affect, impair or invalidate the remaining terms or provisions, which will remain in full force and effect, consistent with the original intent of the parties. However, if such provision is an essential element of the Agreement, the parties shall promptly attempt to negotiate a substitute therefore.

Article 25 - DEFAULT OR BREACH

In the event of a material breach of any of the terms of this Agreement, the aggrieved party shall give the other party written notice of such breach and request cure within thirty (30) calendar days from notice receipt as provided herein. If the described breach is not cured within the thirty (30) calendar day period, then this Agreement may, upon written notice, be terminated immediately without charge or liability, except for work performed by USWLD and costs incurred by USW under this Agreement up until the date of termination.

Article 26 - CANCELLATION FOR DEFAULT

Either party may cancel this Agreement and/or any Order(s), in whole or part, without liability, by giving written notice of breach or default if the other (1) becomes insolvent, unable to pay debts when due, or the subject of bankruptcy proceedings not terminated within thirty (30) days of any filing; or makes a general assignment for the benefit of creditors; or if a receiver is appointed for substantially all of its property; or (2) materially breaches or defaults on its obligations under this Agreement and, if the breach or default can be cured, fails to cure the breach or default within thirty (30) days after receipt of written notice to cure; or (3) commits breaches on obligations other than payment, repetitively, or at least three separate significant times within any four-month period. Customer may cancel any Order(s) in whole or in part, without liability, if USWLD fails to Deliver conforming Services under that Order on time.

If Services are being provided, USW shall have the right to take over and complete the Services at USWLD's expense.

If USW cancels this Agreement and/or any Order(s) for USWLD's default or breach, it shall be entitled to recover from USWLD all losses, damages and expenses incurred as a result of USWLD's default or breach. USWLD shall refund to USW amounts previously paid for Services which, due to such cancellation, cannot reasonably be used by USW, and shall bear all expenses for their removal and return. USWLD shall, at USW's option, promptly remove Services or bear the cost of removal. USWLD shall restore or bear the expenses of restoration of USW's property to its original condition at the direction of USW and refund to USW all monies previously paid for such Services.

If USWLD cancels this Agreement and/or any Order(s) for USW's default or breach, it may recover from USW reasonable expenses incurred as a direct result of USW's default or breach, which shall not exceed the amounts which USW has not yet paid under the terms hereof. USW shall not be liable for incidental, consequential or indirect damages, including but not limited to lost profits or unallocated overhead.

Article 27 - SEVERAL LIABILITY AND JOINT DISCOUNTS

The term USW as used herein may be applicable to one or more parties and the singular shall include the plural. If more than one party is referred to as USW herein, then their obligations and liabilities shall be several, not joint. Notwithstanding the foregoing, all Services under this Agreement and/or related agreements shall be cumulative for purposes of determining: (1) whether USW has met any minimum purchase requirements; (2) credits which may be applicable; (3) USW's forecasts; (4) the level of discount, if any, which shall apply to any Services.

Article 28 - INSURANCE

Both parties shall obtain and maintain insurance with coverage or limits consistent with U S WEST, Inc. practices and policies. Such insurance shall be commensurate with the type and/or amount of Service performed under this Agreement and the cost for such insurance shall be borne by the party performing the Service.

Either party may provide some or all of the insurance coverage required above through self-insurance in a manner consistent with U S WEST, Inc. practices and policies.

Each party shall also require its subcontractors, if any, to maintain appropriate levels of insurance and agrees to furnish the other party with certificates or adequate proof of such insurance, if requested. Either party may consult with U S WEST, Inc. - Risk Management for an evaluation of the appropriate insurance for subcontractors.

Article 29 - CONTRACT ADMINISTRATION

A. Each party shall appoint a Contract Manager who shall be responsible for the management of the relationship between the parties. Interpretations, amendments, negotiations, modifications, requests for audits and/or examinations relating to this Agreement shall be initiated and managed by the Contract Managers.

B. USWLD shall appoint a Contract Manager with overall responsibilities for the Services offered in this Agreement. The Contract Manager shall be responsible to oversee that the Services are provided as specified in the Exhibit, initiate billing and monitor payment and provide further information regarding the Service and/or billing if USW requests. The Contract Manager shall resolve such inquiries within thirty (30) days.

C. If the Contract Manager is unable to provide sufficient information to USW regarding the Services delivered and/or the amounts invoiced, Dispute Resolution procedures will be initiated.

Article 30 - SUBCONTRACTORS

Each party will be responsible for the proper performance of any subcontractor it hires which may be used to assist in the performance of Services; however, neither party will subcontract any work without the other party's prior written consent, which shall not be unreasonably withheld.

Article 31 - NONEXCLUSIVE AGREEMENT

It is expressly understood and agreed that this Agreement does not grant to USWLD any exclusive privileges or rights and USW may contract with other suppliers for the procurement of comparable Services. Except as specifically identified in a Task Order, USW makes no guarantee or commitment for any minimum or maximum amount of Services hereunder.

Article 32 - SURVIVAL

All obligations and duties which by their nature extend beyond the expiration or termination of this Agreement shall survive and remain in effect beyond any expiration or termination.

Article 33 - ENTIRE AGREEMENT

This Agreement including its Exhibit(s) constitutes the entire Agreement between the parties, and supersedes all prior agreements, representations, negotiations, statements, or proposals related to the subject hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed by their duly authorized representatives.

U S WEST Long Distance, Inc.	**U S WEST Communications, Inc.**
Signature	Signature
Name Printed or Typed	Name Printed or Typed
Title	Title
Date	Date

EXHIBIT A
TASK ORDER

This Task Order is issued pursuant to Agreement No. AP96102 dated the _____ day of _____, 1996, by and between U S WEST Long Distance, Inc. ("USWLD") and U S WEST Communications, Inc. ("USW"). The particular terms and conditions of the Task Order are as follows:

1. Description of Services

2. Dates for commencement and completion

3. Description of deliverables, performance standards, and any special conditions

4. Pricing methodology and estimated costs

5. Billing and payment procedures

U S WEST Long Distance, Inc.	**U S WEST Communications, Inc.**
_____	_____
Signature	Signature
_____	_____
Name Printed or Typed	Name Printed or Typed
_____	_____
Title	Title
_____	_____
Date	Date

EXHIBIT B

Reserved for future use.

NETWORK OPERATIONS SERVICES

USWLD shall provide to USW, Network Operations Services as permitted under the Telecommunications Act of 1996, as long as Services do not constitute performing operating, installation, or maintenance functions associated with facilities that USWLD owns or leases from a provider other than USW. These services include the following:

Management of USW's official communications services which includes intraLATA and interLATA services.

Procure, provision, activate all interLATA services.

Consulting Services.

- Long distance network planning and design
- Assist in customer/network provisioning of inter and intraLATA services for official communications services
- Assist in customer/network activation of inter and intraLATA services for official communications services
- Assist with daily operations as it pertains to traffic maintenance and network performance

USWLD charges USW in accordance with FCC rules and regulations for the management fee associated with the official communications services. The toll charges from interexchange carriers are charged at the costs at which the services are procured.

REVENUE ASSURANCE SERVICES

USWLD shall provide to USW, upon request, revenue assurance services related to fraud and bad debt information as well as error correction and detection for toll related products and services. In the event that USWLD develops revenue assurance systems for internal processes, USW could potentially request to purchase various systems, modules, or output from these systems which USW may find useful. These systems or resulting data include the following:

Revenue Assurance Systems/Process Services:

Development of systems for billing error correction and detection processes.

Analysis of USW's customers' calls to assure all calls were recorded properly.

Provide Clearinghouse reconciliation to assure that out of region third party billed and collect calls are sent to the clearinghouse for billing. This includes rating and tracking out of region calls and sending them (via electronic files) to the clearinghouse for billing to ensure that USW is compensated for calls.

Analysis of pre-bill and post-bill traffic to ensure fraud is kept to a minimum. (Fraud tests can be conducted either during calls or after calls have been completed.) USWLD will provide detailed reporting on fraud and bad debt information, as obtained.

USW shall pay USWLD for the services requested and provided herein in accordance with FCC rules and regulations.

PRODUCT AND PROJECT MANAGEMENT SERVICES

USWLD shall provide to USW, upon request, Product and Project Management Services for toll related products and services, including the following:

Product Design

- Develop concepts for new, tactical and strategic long distance products and services.

Product Development

- Develop customer requirements including service performance requirements in all impacted Information Services and Network and vendor systems.

- Define service delivery requirements for the customer life cycle.

- Develop and obtain business case approval for product implementation.

- Develop and implement alpha and beta tests and perform post-roll out monitoring and evaluation.

Product Life Cycle Management

- Manage product life cycle staging (introduction, growth, maturity and decline).

- Assess and monitor post-product roll out financial, infrastructure and technical success.

- Enhance and adjust product functionality and service delivery process to address dynamic market expectations and maintain competitive position and financial integrity.

- Monitor and assess product market and competitor size and directions and evaluate current and future evolution of offerings.

- Develop and maintain product plans and product performance reporting, with the responsibility of assuring revenue plan, margin and product mix objectives are met.

Product Marketing

- Develop product pricing and promotional strategies.

- Implement and monitor product pricing and product promotions aimed at customer acquisition and retention.

- Work with internal organizations to create and deliver product training, product bulletins, sales brochures and materials, bid tools, etc., and when requested provide account-specific product support.

- Manage content of all internal and external product communications.

- Support the development of new distribution channels to target markets.

Project Management

- Provide procurement of the network and platform management for card services, i.e., calling, prepaid, etc.

- Secure resources for customer care and billing and collections support.

- Support ongoing enhancements and day-to-day monitoring of the platform associated with USW's cards, including but not limited to the following:
    - service management and monitoring of the network and platform,
    - product enhancement projects for a direct connection to the card validation center for fraud detection, redundant processing node, consolidation of nationwide rating and taxing with bill printing functions, and merger of Directory Assistance functionality into USW operations.

USW shall pay USWLD for such services in accordance with FCC rules and regulations.

MARKETING COMMUNICATIONS SERVICES

USWLD shall provide to USW, upon request, Marketing Communications services including the following:

Consult with USW on the marketing communications strategies, plans, and implementation for toll products and services.

Design, budget, production, and distribution of tangible marketing communications vehicles such as, collateral, print, Out Of Home (billboards), fulfillment kits and related execution, training and motivational support tools, television production, radio production, and other incremental items to communicate the products and services internally and externally.

Coordinate with USW Brand Management for support of USW's brand name.

USW shall pay USWLD for such services in accordance with FCC rules and regulations.

Arizona Corporation Commission
Docket No. T-00000B-97-0238
U S WEST Communications – JLB-11
Exhibit of Judith L. Brunsting

U S WEST LONG DISTANCE ORGANIZATION CHART

USWEST
LONG DISTANCE

Kathy Stephens
VP & (Acting) GM

VACANT

Ford Fay
Acting VP Operations
Susan Bartholomew

David :erch
Director Service Mgmt
Michael Carter
Dahlia Castillo
Todd Crouch
Chuck Gallup
Ellsworth Grant
Steve Gustafson
Barry Hay
Colleen LeClaire
Kasey Morgan
Trish Pryde
Leslee Strohm

Steve Norby
Director
Technology Management
George Mayfield

Gwen Lyons
Director Network
Implementation &
Optimization
Trish Bliss
Nick Franks
Michael Friend
Rob Peterson
Brenda Waterhouse

Bill Lannan
Director
Revenue Assurance
Diane Ambrose
Deb Brallier
Teddi Davis
Sohndra Edmonds
Pat Finn
Esther Harnsberger
Tony Nelson

Mark Hernandez
VP Information Systems
and Services
Kathy McBride

Bob Reed
Director Planning &
Integration/Delivery
Management
Nancy Aragon
Barbara Johnston
Christi Sundby
Mark Waddell
George Wade
Project Manager

Pat Hoffert
Systems Manager
DSS/Tools
Business Analyst-DSS

Lori Redovian
Systems Manager
Customer Care, Billing
& Financial Systems
Teddi Davis
Lorna Dubose
Ron Minobe
Nelda Welle
Janice Zamora

Bob Salazar
Systems Manager
Network Management
Systems
Angela Jones
Karen Kraas
Dan Sanchez

Debbie Walker
Systems Manager
Desktop, Intranet
Mike Grant
Brett Shouse
Pat Wheeler

Kathy Stephens
VP Business Planning
Rosiland Carthen

Judy Brunsting
Director Regulatory
Nancy Arevalo
Laurel Neher
Robin Terry

John Pitek
Acting VP Marketing
Johnna Hoff

Roger Adams
Senior Manager
Public Relations
Annette Bricker

VACANT
Director Product Mgmt
Bill Elliot
Randy Kendrick
Andrew Kaufman
Beth Kwiat

VACANT
Director Product
Development (Acting)
Deb Messenger
Jeff Tench
John Zeitlin

Hal Sorstokke
Director Official
Communication Services
Laura Martinez
Ruth Pesina

VACANT
Director Market
Management
Suzanne Brennan
Annette Bricker
Barry Cunningham
Laura Martinez
Sandra McKenzie
Scott Russell
Penny Warfel

Dave Desmond
Executive Director
Service Delivery

Terry Bate
Director Customer
Service
Kerri Coffey
Julie Grannan
Diane Martinez
Bob Pepper
Erron Reynolds
Matt Richter
Joyce Riley
Jean Troxel
Penny Yunke

Marcia Sutliff
Director
Program Management
& Planning
Rick Schimmel
Program Office
Project Manager

Kevin Phelps
Director Financial Planning
and Analysis
Lynn Marquez

Reynald Clemons
John Hill
Rawlene LeBaron
Rebecca Hulen
Lee Nindorf
Kim Tran
Mark Pomeroy

Tavia Campbell
Director
Human Resources

Tim Chavez

Karen Tatelman
Legal

2-8-99

CONFIDENTIAL/PROPRIETARY INFORMATION
CLASSIFICATION RATIONALE

State: Arizona

Docket No. T-00000B-97-0238

Description/Title of Information: U S WEST LONG DISTANCE EMPLOYEE TRAINING

Confidential/Proprietary Designation Rationale:

This exhibit categorizes 272 Training for U S WEST Long Distance employees. The training advises employees of the company's interpretation of Section 272 of the Telecommunications Act of 1996. Because this information would be valuable to our competitors, it is proprietary.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF JUDITH L. BRUNSTING**
STATE OF COLORADO	)	
	:	**SS**
COUNTY OF DENVER	)	

Judith L. Brunsting, of lawful age being first duly sworn, deposes and states:

1. My name is Judith L. Brunsting. I am Director, Regulatory of U S WEST Long Distance, Inc. in Denver, Colorado.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Judith L. Brunsting

Judith L. Brunsting

SUBSCRIBED AND SWORN before me this 23rd day of March, 1999.

Nancy R Arevalo

Notary Public

My Commission expires:

8/27/02

AFFIDAVIT OF MILLION

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

TERESA K. MILLION

U S WEST COMMUNICATIONS

MARCH 25, 1999

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Identification of Affiant

My name is Teresa K. Million. I am a Manager, FCC Regulatory Accounting at U S WEST Communications, Inc. ("U S WEST Communications") which is a Bell Operating Company ("BOC"). I am responsible for ensuring U S WEST Communications' regulatory accounting compliance with the Federal Communications Commission's (FCC) affiliate transactions requirements, including Section 272 of the Telecommunications Act of 1996 (the "Act"). I have a Juris Doctor from the University of Denver, College of Law. I am licensed to practice law in the state of Colorado. I also have a Master of Business Administration from Creighton University and a degree in Animal Science from the University of Arizona.

I have more than 15 years experience in the telecommunications industry with an emphasis in tax and regulatory compliance. I began my career with Northwestern Bell Telephone Company, now U S WEST Communications, in 1983, where I administered Shared Network Facilities Contracts with AT&T that emanated from divestiture. I held a variety of positions within the U S WEST, Inc. Tax Department over a period of ten years, including tax accounting, audit, and state and federal tax research and planning responsibilities. In 1997, I assumed my current position, which has responsibility for affiliate transactions compliance, specifically Section 272 compliance.

Purpose of Affidavit

The purpose of my affidavit is to demonstrate that U S WEST Communications is in position to comply with all the relevant requirements of Section 272 of the Act, and the related rules promulgated by the FCC, following U S WEST Communications' receipt of in-region interLATA authority in Arizona.

My affidavit addresses the primary requirements of Section 272 of the Act, which is intended to promote pro-competitive behavior in the long distance market absent full competition in the local exchange marketplace. There are eight requirements designed to prohibit anti-competitive discrimination and cost shifting between a BOC and its long distance affiliate. I also review the employee training and awareness efforts that U S WEST Communications has undertaken to ensure that the requirements of Section 272 are implemented.

Executive Summary

The specific provisions of Section 272 include: Section 272(a), Separate Affiliate Requirement; Section 272(b), Structural and Transactional Requirements; Section 272(c), Nondiscrimination Safeguards; Section 272(d), Biennial Audit Requirement; Section 272(e), Fulfillment of Requests for Telephone Exchange Service; Section 272(f), Sunset Provisions; and Section 272(g) Joint Marketing.

Section 272(a) requires that U S WEST Communications provide long distance services through a separate long distance affiliate. U S WEST Communications will offer such long distance services, upon Section 271 approval, through its long distance affiliate, U S WEST Long Distance, Inc. (" U S WEST LD").

1 Section 272(b) requires that the long distance affiliate maintain separate books,
2 records and accounts; have its own directors, officers and employees; obtain
3 credit that will not provide recourse to the assets of U S WEST Communications;
4 and conduct all transactions with U S WEST Communications on an arm's length
5 basis, with all such transactions reduced to writing and available for public
6 inspection. U S WEST Communications satisfies these requirements of the Act.
7 Section 272(c) prohibits U S WEST Communications from discriminating
8 between U S WEST LD and any other entity in the provision or procurement of
9 goods, services, facilities, and information, or in the establishment of standards.
10 U S WEST Communications satisfies this requirement of the Act.
11 Section 272(d) requires that U S WEST Communications obtain and pay for a
12 joint Federal/State audit every two years to determine whether the company has
13 complied with the requirements of Section 272 and the regulations promulgated
14 under Section 272. In particular, the audit will determine whether the company
15 has complied with the separate accounting requirements of Section 272(b).
16 U S WEST Communications will adhere to these provisions of the Act.
17 Section 272(e) requires that U S WEST Communications fulfill requests from
18 unaffiliated entities for telephone exchange service and exchange access within
19 the same period, under the same terms and conditions, and at an amount that is
20 no more than that for which it provides such services to U S WEST LD. I will
21 demonstrate that U S WEST Communications satisfies these requirements of
22 the Act.

1 Section 272(f) contains sunset provisions which state that the limitations on
2 manufacturing, long distance, and interLATA information services will end on a
3 date certain unless extended by FCC rule or order. In addition, Section 272(f)
4 preserves the existing authority of the FCC to prescribe safeguards consistent
5 with the public interest, convenience and necessity. U S WEST
6 Communications will adhere to this section as required by the FCC.
7 Section 272(g) permits U S WEST Communications to join in the marketing and
8 sale of U S WEST LD's interLATA service once U S WEST LD is authorized to
9 provide interLATA services under Section 271(d). Such joint marketing of
10 services will be exempt from the nondiscrimination provisions of Section 272(c).
11 Otherwise, U S WEST LD is prohibited from marketing or selling U S WEST
12 Communications' telephone exchange services unless other similar entities are
13 permitted to do the same. U S WEST Communications will adhere to these
14 provisions of the Act.
15 Finally, Section 272(h) gave U S WEST Communications one year to conform
16 with the requirements of Section 272 to the extent that it was engaged in any
17 interLATA long distance or interLATA information services already in February
18 1996. Because U S WEST Communications was not engaged in any such
19 activities, this transitional period does not apply to U S WEST Communications.
20 **Section 272**
21 **Section 272(a) – Separate Affiliate Requirement**

1 Section 272(a) of the Act states that any interLATA long distance service that
2 originates from a BOC customer in a state shall be provided through an affiliate
3 that is separate from the BOC. U S WEST Communications complies with the
4 separate affiliate requirement of Section 272(a).
5 U S WEST Communications is a BOC within the meaning of the Act. U S WEST
6 Communications has not and will not provide in-region, interLATA services
7 originating within the U S WEST 14 state region as long as the structural
8 obligation of Section 272 applies to this activity.
9 When U S WEST Communications receives the necessary Section 271 approval
10 from the FCC, interLATA long distance service originating from within Arizona
11 will be offered exclusively through U S WEST Long Distance, Inc. (" U S WEST
12 LD"). U S WEST LD, a wholly owned subsidiary of U S WEST, Inc., is fully
13 separate from U S WEST Communications, which is also a wholly owned
14 subsidiary of U S WEST, Inc. U S WEST Communications owns no stock of
15 U S WEST LD; nor does U S WEST LD own any stock of U S WEST
16 Communications. Please refer to the affidavit of Ms. Judith L. Brunsting for a
17 further explanation of the structure and organization of U S WEST LD.
18 **Section 272(b) – Structural and Transactional Requirements**
19 Section 272(b) places five structural and transactional requirements on the
20 interactions between U S WEST Communications and its separate affiliate,
21 U S WEST LD. These separate affiliate requirements are addressed in further
22 detail in CC Docket 96-149, the Non-Accounting Safeguards Order, and CC

1 Docket 96-150, the Accounting Safeguards Order. Specifically, Section 272(b)
2 requires that U S WEST LD:
3 (1) shall operate independently from U S WEST Communications;
4 (2) shall maintain books, records, and accounts in the manner prescribed
5 by the Commission which shall be separate from the books, records,
6 and accounts maintained by U S WEST Communications of which it
7 is an affiliate;
8 (3) shall have separate officers, directors, and employees from U S WEST
9 Communications;
10 (4) may not obtain credit under any arrangement that would permit a
11 creditor, upon default, to have recourse to the assets of U S WEST
12 Communications; and,
13 (5) shall conduct all transactions with U S WEST Communications on an
14 arms' length basis, with all such transactions reduced to writing and
15 available for public inspection.
16 These five requirements formalize some of the well-known tenets of corporate
17 law. They also provide the FCC with measurable indicators that U S WEST
18 Communications and U S WEST LD operate independently.
19 Corporate law and the theory of corporations as separate independent entities
20 can be traced far back in legal history. This theory of independence provides the
21 presumption that corporations, as separate entities, are able to conduct business
22 and enter into contracts and obligations, while limiting the liability of shareholders

1 and owners. It is very difficult to overcome this presumption of the corporation
2 as a separate entity.
3 In limited, very rare circumstances, courts have relied upon a doctrine known as
4 "piercing the corporate veil" to look beyond the corporate form and hold a parent
5 company responsible for the activities of its subsidiary. U S WEST
6 Communications and U S WEST LD do not have a parent/subsidiary
7 relationship; rather they are brother/sister corporations.
8 Where courts have been willing to impose the liabilities of one corporation upon
9 another, they have emphasized the complete failure of the entities to follow any
10 notion of the requisite corporate formalities. That failure must result in such a
11 close relationship between the two companies that one is, in essence, the alter
12 ego of the other. Otherwise, as a matter of law, two corporations, each with its
13 own board of directors, are deemed to have an independent existence.
14 **Section 272(b)(1) - Operate Independently**
15 U S WEST Communications and U S WEST LD currently operate independently
16 and in compliance with the requirements of the Non-Accounting Safeguards
17 Order. U S WEST Communications and U S WEST LD do not and will not jointly
18 own telecommunications switching or transmission facilities, or the land or
19 buildings where those facilities are located for so long as such a restriction
20 applies under the rules.
21 Not only is there no joint ownership of network facilities, but no facilities identified
22 under this rule have been transferred to U S WEST LD. Any plans for switching

1 and transmission facilities to be owned by U S WEST LD are discussed in the
2 affidavit of Ms. Judith L. Brunsting.
3 In addition, services provided to U S WEST LD by U S WEST Communications
4 do not include performing operating, installation, or maintenance functions
5 associated with facilities that U S WEST LD may own or lease from a provider
6 other than U S WEST Communications. Nor does U S WEST LD perform such
7 functions associated with U S WEST Communications' facilities.
8 U S WEST Communications satisfies the Section 272(b)(1) requirement for
9 operational independence and will remain in compliance for as long as this
10 requirement is in effect.

1 **Section 272(b)(2) - Separate Books, Records, and Accounts**

2 Section 272(b)(2) requires that U S WEST Communications maintain books,
3 records, and accounts in the manner prescribed by the FCC that are separate
4 from the books, records and accounts maintained by U S WEST LD. U S WEST
5 Communications and U S WEST LD are separate legal entities and as such the
6 accounting of the two entities is not commingled.

7 The systems on which U S WEST Communications processes its financial
8 transactions are designed to recognize the unique entity codes assigned to the
9 separate legal entities of U S WEST Communications and U S WEST LD.
10 Under these systems, it is not possible for one entity to enter transactions using
11 an entity code belonging to another entity.

12 This requires separateness by ensuring each company will have its own books,
13 keep its own records, and have its own Chart of Accounts. It also permits
14 consolidated reporting at U S WEST, Inc. as required for Federal and State tax,
15 as well as for SEC purposes.

16 U S WEST Communications follows GAAP and regulatory accounting rules as
17 required by the FCC. U S WEST Communications' original books, records, and
18 accounts are maintained in accordance with Part 32, Uniform System of
19 Accounts for Telecommunications Companies and Part 64.901, Allocation of
20 Costs. Annual reports are publicly filed via the FCC's Automatic Reporting and
21 Management Information Systems (ARMIS) and are accompanied by the opinion
22 of independent accountants, Arthur Andersen, L.L.C.

1 The affidavit of Ms. Judith L. Brunsting further describes the accounting practices
2 of U S WEST LD, its Chart of Accounts, Time Reporting Procedures, and other
3 evidence that establishes that U S WEST LD's books, records, and accounts are
4 separate from those of U S WEST Communications.
5 U S WEST Communications will continue to maintain books, records, and
6 accounts that are separate for U S WEST LD and comply with Part 32, Part 64,
7 and the Accounting Safeguards Order in CC Docket 96-150 for so long as this
8 requirement is in effect.
9 **Section 272(b)(3) - Separate Officers, Directors, and Employees**
10 Section 272(b)(3) requires that U S WEST Communications and U S WEST LD
11 have separate officers, directors, and employees. U S WEST LD's Chief
12 Operating Officer is not an officer of U S WEST Communications, nor is any
13 U S WEST Communications' officer or employee also an officer of U S WEST
14 LD. U S WEST Communications' Board of Directors is comprised of Sol Trujillo,
15 Chief Executive Officer, and Al Spies, Chief Financial Officer. Neither Mr. Trujillo
16 nor Mr. Spies is an officer or director of U S WEST LD. As long as this
17 requirement of Section 272 applies, no officer or director of U S WEST
18 Communications will simultaneously be an officer or director of U S WEST LD.
19 U S WEST Communications and U S WEST LD also have separate employees
20 who are paid from separate payrolls. In order for an employee to "transfer" from
21 one company to the other, the employee must be terminated and then re-hired
22 by the other company. Employees are required to return I.D. badges, corporate

1 credit cards, pagers, cell phones, etc. and have them re-issued by the hiring
2 company according to that company's practices.
3 U S WEST Communications employees who provide services to U S WEST LD
4 do so under contract. These transactions under contract are conducted at
5 "arms' length" and are reduced to writing and available for public inspection
6 consistent with Section 272(b)(5). The Master Services Agreement ("MSA")
7 constitutes the umbrella agreement for services provided by U S WEST
8 Communications to U S WEST LD. The MSA requires U S WEST
9 Communications to perform its obligations as an independent contractor and not
10 as an agent or employee of U S WEST LD. See Article 6 of the MSA, which is
11 included as Exhibit TKM-1. The MSA is available on the U S WEST Internet
12 Home Page at http://www.uswest.com/com/insideusw/policy/ as required by the
13 Accounting Safeguards Order.
14 This evidence demonstrates that U S WEST Communications and U S WEST
15 LD currently satisfy the requirement to have separate officers, directors, and
16 employees. U S WEST Communications and U S WEST LD will continue to do
17 so for as long as required under Section 272.
18 **Section 272(b)(4) - No Recourse to U S WEST Communications' Assets**
19 Section 272(b)(4) prohibits U S WEST LD from obtaining credit under any
20 arrangement that would permit a creditor, upon default, to have recourse to BOC
21 assets. U S WEST Communications employs three mechanisms to comply with
22 this requirement.

1 First, U S WEST Communications is capitalized separately from U S WEST LD.
2 Second, U S WEST Communications issues its own commercial paper to obtain
3 financing for telecommunications operations. This is separate from debt
4 financing for unregulated affiliates, which is obtained through a subsidiary of
5 U S WEST, Inc. and is guaranteed by the assets of the unregulated affiliates.
6 U S WEST Communications does not and will not provide creditors of its
7 unregulated affiliates with recourse to U S WEST Communications' assets.
8 Finally, neither U S WEST, Inc. nor U S WEST Communications has co-signed a
9 contract or any other instrument that would allow U S WEST LD to obtain credit
10 in a manner that grants the creditor recourse to U S WEST Communications'
11 assets in the event of default by U S WEST LD. U S WEST Communications
12 will continue to satisfy this Section 272 requirement for as long as it applies.
13 **Section 272(b)(5) - Transactions at Arms' Length, In Writing and Publicly**
14 **Available**
15 Section 272(b)(5) requires that all transactions between U S WEST
16 Communications and U S WEST LD must be conducted at arms' length,
17 reduced to writing, and available for public inspection. The FCC has stated that
18 the purpose of this requirement is to determine that such transactions are
19 conducted in compliance with its accounting rules.
20 All services provided by U S WEST Communications to U S WEST LD are either
21 tariffed services or are provided under separate contract. Tariffed services have

always been a matter of public record. All other contracts are also available for public inspection.

U S WEST LD does not currently obtain tariffed special and switched access services from U S WEST Communications. However, when it is granted approval under Section 271, U S WEST LD will be required to obtain such services under the same terms and conditions as unaffiliated interexchange carriers. To meet the "arms' length" requirement, U S WEST will place orders for these tariffed services in the same manner as other interexchange carriers, and those orders will be processed by the Interexchange Carrier Service Center ("ICSC") in a nondiscriminatory manner. Consistent with the treatment of other interexchange carriers, the ICSC has assigned account representatives to U S WEST LD.

Other tariffed services, such as retail telephone services, already meet the arms' length requirement. These services are provided and billed to U S WEST LD through the same processes, the same billing system, and at the same tariffed rates as for non-affiliated telecommunications customers. For example, in order to obtain business exchange lines for internal use by its employees, U S WEST LD must work through an account manager in Business & Government Solutions ("BGS"). BGS is the large business retail marketing organization for U S WEST. When ordering service from BGS, U S WEST LD is subject to the same treatment as any other large business customer, including unaffiliated interexchange carriers, for the provision of retail telecommunications services.

1 Processes are also established so that U S WEST LD purchases non-tariffed
2 products, services, facilities and information under contract. Such transactions
3 are documented in stand-alone agreements or "umbrella" services agreements.
4 The MSA, attached as Exhibit TKM-1, governs services that U S WEST
5 Communications provides to U S WEST LD. The Services Agreement ("SA") is
6 for services that U S WEST LD provides to U S WEST Communications.
7 Associated Work Orders and Task Orders represent specific transactions
8 provided under these contracts and contain rates, terms and conditions.
9 Business unit affiliate managers are responsible for administration and billing of
10 services contained in these agreements.
11 In addition, U S WEST Communications and U S WEST LD have entered into
12 stand alone agreements such as the Billing and Collections and "Your Bill"
13 contracts, attached as Exhibits TKM-2 and TKM-3.
14 All current agreements, contracts, Work Orders and Task Orders are available
15 for public inspection and posted on the Internet as required at the U S WEST
16 Internet Home Page at http://www.uswest.com/com/insideusw/policy/, the
17 contents of which are intended to be a part of this record. Past transactions,
18 including tariffed services and asset transfers are also summarized and posted in
19 sufficient detail to determine compliance with the FCC's accounting rules.
20 In summary, U S WEST Communications and U S WEST LD comply with the
21 provisions of Section 272(b). They operate independently in compliance with the
22 Non-Accounting Safeguards Order, CC Docket 96-149; maintain separate books

1 and records; have separate officers, directors and employees; and obtain debt
2 financing independently. U S WEST Communications is also in compliance with
3 the FCC's requirements for affiliate transactions. The transactions between
4 U S WEST Communications and U S WEST LD are tariffed and/or represented
5 by contracts that are made publicly available. These contracts are accounted for
6 in compliance with FCC rules as described in Part 32, section 32.27, and the
7 Accounting Safeguards Order, CC Docket 96-150.

8 **Section 272(c) - Nondiscrimination Safeguards**

9 Section 272(c) requires U S WEST Communications to treat U S WEST LD the
10 same way that it treats other interexchange carriers. Section 272(c)(1) prohibits
11 U S WEST Communications from discriminating between U S WEST LD and
12 any other entity in the provision or procurement of goods, services, facilities, and
13 information, or in the establishment of standards.

14 U S WEST Communications is committed to providing its services to U S WEST
15 LD on a nondiscriminatory basis. To ensure that U S WEST LD's access is on
16 an equal basis, it is required to contact its ICSC account representatives to
17 obtain services available to every interexchange carrier. Services provided to
18 U S WEST LD are extended to nonaffiliated interexchange carriers under the
19 same terms and conditions, and at the same rates. For example, provision of
20 services to U S WEST LD such as Billing and Collections have been based upon
21 standard offerings of those same services to unaffiliated interexchange carriers
22 since long before U S WEST LD existed.

1 U S WEST LD does not currently have access to U S WEST Communications'
2 Operation Support Systems ("OSS"). These systems are used to support local
3 retail efforts (e.g., ordering and pre-ordering interfaces, repair and maintenance,
4 etc.) related to local exchange services, and are available only to Competitive
5 Local Exchange Carriers ("CLECs"). Since U S WEST LD is not a CLEC, it does
6 not have access to U S WEST Communications' OSSs. If U S WEST LD were
7 to obtain CLEC status some time in the future, U S WEST Communications
8 would require it to access OSS interfaces in the same manner as other CLECs.
9 This would be in keeping with U S WEST Communications' current practice,
10 which requires U S WEST LD to access services through its ICSC account
11 representatives.
12 As described above, retail telecommunications services are provided at tariffed
13 rates and are obtained through a BGS account manager in U S WEST's retail
14 marketing organization. Through this process, U S WEST LD receives the same
15 treatment as any other large business customer, including unaffiliated
16 interexchange carriers, for the provision of retail telecommunications services.
17 Each non-tariffed service available to U S WEST LD is reduced to writing in a
18 stand-alone contract or MSA and associated Work Order. These agreements
19 are available for public inspection of the U S WEST Internet Home Page site at
20 http://www.uswest.com/com/insideusw/policy. With the exception of joint
21 marketing services, which will not be subject to nondiscrimination, these services
22 are also available to unaffiliated entities under the same terms, conditions and at

1 the same rates. All future transactions will also be reduced to writing and made
2 available on the U S WEST Internet Home Page site.
3 U S WEST Communications has not previously offered services such as payroll,
4 human resources, or accounts payable outside the corporate family. However,
5 U S WEST Communications is prepared to offer these, and any other services it
6 offers to U S WEST LD, on a nondiscriminatory basis as required by Section
7 272(c)(1).
8 Section 272(c)(2) requires U S WEST Communications to account for all
9 transactions with U S WEST LD in accordance with accounting principles
10 designated or approved by the FCC. U S WEST Communications complies with
11 this requirement for all transactions with U S WEST LD, including joint marketing
12 services.
13 U S WEST Communications' books are kept in compliance with GAAP and
14 regulatory accounting rules as required by the FCC. Affiliate transactions are
15 recorded in compliance with Part 32, Uniform System of Accounts for
16 Telecommunications Companies, specifically the Affiliate Transactions rules of
17 Section 32.27, and Part 64, Subpart 1, Allocation of Cost as modified by the FCC
18 in CC Docket 96-150, the Accounting Safeguards Order.
19 The FCC has promulgated affiliate transactions rules under the Accounting
20 Safeguards Order, which apply the following valuation hierarchy to U S WEST
21 Communications' transactions with U S WEST LD: 1) tariff rates apply to tariffed
22 services; 2) for non-tariffed services, Prevailing Company Price ("PCP") is

1 presumed for services subject to the nondiscrimination rules of Section 272
2 because rates must be made available to both U S WEST LD and third parties
3 on similar terms; and 3) services that are neither tariffed nor offered at PCP are
4 valued at fully distributed cost or fair market value, whichever is higher for
5 services provided to U S WEST LD by U S WEST Communications, and
6 whichever is lower for services provided to U S WEST Communications by
7 U S WEST LD. During 1997, U S WEST Communications engaged the services
8 of the independent accounting firm of Arthur Andersen, L.L.C. to conduct studies
9 to determine fair market values for comparison purposes for services that it
10 provided to its affiliates.
11 U S WEST Communications files reports publicly via the FCC's Automatic
12 Reporting and Management Information Systems ("ARMIS") each year. The
13 opinion of U S WEST Communications' auditor, Arthur Andersen, which is filed
14 with the ARMIS Report 43-03, the Joint Cost Report, certifies that U S WEST
15 Communications complies with GAAP and the FCC accounting rules.
16 Additionally, U S WEST, Inc. files a 10K report with the Securities and Exchange
17 Commission each year. U S WEST Communications' Part 64 Cost Allocation
18 Manual is also filed with the FCC annually. These filings and audit help to
19 ensure that U S WEST Communications accounts for all transactions in
20 accordance with the accounting principles approved by the FCC.
21 **Section 272(d) - Biennial Audit**

1 Section 272(d) requires that U S WEST Communications obtain and pay for a
2 joint Federal/State audit every two years. An independent auditor must
3 determine whether the company has complied with the requirements of Section
4 272 and the regulations promulgated under Section 272. In particular, the audit
5 is intended to determine whether the company has complied with the separate
6 accounting requirements of Section 272(b).
7 The FCC has chosen to fulfill the audit requirement by selecting a type of audit
8 known in the accounting industry as an "agreed-upon-procedures" audit.
9 Although the model or framework for such an audit has been selected, it will still
10 be up to the joint Federal/State biennial audit oversight team to determine the
11 exact scope of each particular audit conducted for each particular BOC.
12 The first biennial audit will be conducted 12 months after U S WEST
13 Communications receives its first Section 271 approval. U S WEST
14 Communications will engage an independent auditor to conduct the biennial
15 audit according to the audit requirements agreed upon by the Federal/State
16 biennial audit oversight team. As is U S WEST Communications' practice, it will
17 cooperate to the fullest extent possible in providing any data necessary to assist
18 the auditor in accomplishing its objective. The results of the audits will be
19 provided to the FCC and state regulatory commissions as required.
20 The auditor, the FCC and the Arizona Corporation Commission will have access
21 to the financial accounts and records of U S WEST Communications and
22 U S WEST LD as necessary to verify that all transactions conducted between

1 them are appropriate under the specific requirements of Section 272. The FCC
2 and the Commission will have access to the working papers and supporting
3 materials of the auditor who performs the audit with appropriate protection for
4 proprietary information.

5 **Section 272(e) - Fulfillment of Certain Requests**

6 Section 272(e)(1) provides for nondiscriminatory provision of telephone
7 exchange service and exchange access for unaffiliated entities.

8 Section 272(e)(2) prohibits U S WEST Communications from providing any
9 facilities, services, or information concerning its provision of exchange access to
10 U S WEST LD unless such facilities, services, or information are made available
11 to other providers of interLATA services in that area under the same terms and
12 conditions.

13 Section 272(e)(3) requires U S WEST Communications to charge U S WEST
14 LD, or impute to itself, rates for telephone exchange service and exchange
15 access that are no less than the amount that would be charged to any
16 unaffiliated interexchange carrier for such service.

17 Section 272(e)(4) allows U S WEST Communications to provide interLATA or
18 intraLATA facilities or service to U S WEST LD only if such services or facilities
19 are made available to all carriers at the same rate and under the same terms
20 and conditions.

21 U S WEST Communications does not and will not discriminate in favor of
22 U S WEST LD in the provision of telephone exchange service or exchange

1 access. U S WEST LD does not currently obtain special and switched access
2 services from U S WEST Communications. Upon obtaining Section 271
3 approval in the state of Arizona, U S WEST LD will be required to obtain such
4 services under the same tariffed terms and conditions as are available to
5 unaffiliated interexchange carriers. U S WEST LD will contact its carrier account
6 representative for these tariffed services through the use of the same procedures
7 that are available to other interexchange carriers. Orders will be processed by
8 the ICSC in a nondiscriminatory manner.
9 Other tariffed telephone exchange services are provided and billed to U S WEST
10 LD through the same processes, the same billing system, and at the same
11 tariffed rates as those used for nonaffiliated telecommunications customers.
12 This ensures that U S WEST LD receives the same treatment, the same due
13 date intervals, and the same rates as any other customer, including unaffiliated
14 interexchange carriers, for the provision of retail telecommunications services.
15 **Section 272(f) - Sunset**
16 Section 272(f)(1) provides sunset provisions for manufacturing and long
17 distance. It requires that the provisions of Section 272 (other than subsection
18 (e)) shall cease to apply three years after the date that U S WEST
19 Communications or U S WEST LD is authorized to provide interLATA services,
20 unless the FCC extends the period by rule or order.

1 Section 272(f)(2) provides sunset provisions for interLATA information services
2 of U S WEST Communications four years after the enactment of the Act, unless
3 the FCC extends the period by rule or order.
4 Section 272(f)(3) preserves the authority of the FCC to prescribe safeguards
5 consistent with the public interest, convenience, and necessity under any other
6 section of the Act.
7 U S WEST Communications will adhere to the requirements of Section 272(f) of
8 the Act until those provisions have expired.
9 **Section 272(g) - Joint Marketing**
10 Section 272(g)(1) prohibits U S WEST LD from marketing or selling telephone
11 exchange services of U S WEST Communications except under the same
12 conditions as are available to other similarly situated entities. U S WEST LD
13 does not and will not market telephone exchange services unless U S WEST
14 Communications permits other entities offering the same or similar service to
15 market and sell its telephone exchange services.
16 Section 272(g)(2) prohibits U S WEST Communications from marketing or
17 selling interLATA services provided by U S WEST LD within Arizona until
18 U S WEST LD is authorized to provide interLATA services in Arizona. However,
19 it is critical to recognize that once U S WEST Communications obtains Section
20 271 approval, U S WEST Communications and U S WEST LD may jointly
21 market services without regard to the nondiscrimination provision of Section
22 272(c).

1 U S WEST Communications and U S WEST LD may jointly market out-of-region
2 interLATA services that U S WEST LD is already allowed to provide. In addition,
3 they may join together in teaming arrangements with unaffiliated entities so long
4 as those are pursued on a nondiscriminatory basis.
5 U S WEST Communications does not currently market or sell interLATA services
6 in-region, and will not until U S WEST LD is authorized to provide such services
7 under Section 271. When permitted, U S WEST Communications and
8 U S WEST LD will join in the marketing and selling of interLATA services
9 pursuant to arms' length agreements, reduced to writing, available for public
10 inspection, and accounted for in accordance with the then effective rules
11 required by the FCC.
12 U S WEST Communications understands the requirements of Section 272(g)
13 and will be prepared to adopt appropriate joint marketing methodologies when
14 U S WEST LD is authorized to provide in-region interLATA services. U S WEST
15 Communications' current marketing activities, as well as its future plans for joint
16 marketing with U S WEST LD will allow it to demonstrate to the FCC its ability
17 and intention to comply with the joint marketing rules.
18 **Section 272(h) - Transition**
19 Section 272(h) gave U S WEST Communications one year from the date of
20 enactment of the Act to comply with the requirements of Section 272. This
21 transition period was provided in the event that U S WEST Communications was
22 engaged, at that time, in interLATA information or interLATA long distance

1 services, as well as manufacturing. This section of the Act does not apply to
2 U S WEST Communications, as it was not engaged in any of these activities in
3 February 1996.

4 **Employee Education and Training**

5 As U S WEST Communications has instituted processes to ensure that
6 U S WEST will conduct business subject to the provision of Section 272, it has
7 continued to inform and educate employees about those process changes, as
8 well as the Act and related FCC Orders.

9 Each year all employees are required to undergo compliance training and
10 testing, and to certify their understanding of and compliance with company
11 policies including regulatory requirements. This annual compliance training
12 includes modules on affiliate transactions, the requirements under Section 272,
13 the Accounting Safeguards Order, Part 64, and other affiliate policies. See
14 Exhibit TKM-4.

15 During 1998, U S WEST Communications began implementing an education
16 plan specifically targeted at increasing employee awareness and understanding
17 of Section 272 requirements. The plan includes placing articles in employee
18 bulletins, sending e-mail notices for all employees, and holding face-to-face
19 meetings with impacted groups.

20 In addition, for employees involved in the processing of affiliate transactions,
21 training manuals (i.e., Methods for Affiliate Transactions) have been updated and
22 training conferences held that focus specifically on the compliance requirements

1 related to Section 272 and CC Docket 96-150. U S WEST Communications will
2 continue in 1999 to work toward ensuring that, once Section 271 approval is
3 obtained, business with U S WEST LD will be conducted in compliance with
4 Section 272.

5 **Conclusion**

6 The FCC's stated purpose in developing a record regarding Section 272 in
7 U S WEST's Section 271 application is to review past and present practices in
8 order to make a predictive judgment regarding future behavior. By showing in
9 this proceeding that it is prepared to conduct business subject to the rules of
10 Section 272, U S WEST has met this requirement.

11 U S WEST Communications has demonstrated that it understands its obligations
12 under Section 272. In addition, U S WEST Communications has demonstrated
13 for each enumerated requirement that it is in position, upon approval by the
14 Commission for U S WEST to offer originating interLATA services in Arizona, to
15 satisfy the requirements of Section 272.

16 This concludes my affidavit.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

TERESA K. MILLION

U S WEST COMMUNICATIONS

MARCH 25, 1999

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
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Billing and Collection Agreement	TKM-2
"Your Bill" Agreement	TKM-3
Annual Compliance Training, Section 272 and Docket 96-150	TKM-4

Master Services Agreement

AMENDMENT 3

This is Amendment 3 to the Master Services Agreement, Agreement Number AR96001 ("Agreement"), between U S WEST Communications, Inc. ("USWC") and U S WEST Long Distance, Inc. ("USWLD"), formerly U S WEST Communications Systems Corporation, dated April 1, 1996.

RECITALS

USWC and USWLD entered into that certain Agreement for Services Number AR96001 dated April 1, 1996 as amended by Amendment Number 1 dated July 1, 1996, as amended by Amendment Number 2 dated April 3, 1998, and USWC and USWLD wish to Amend the Agreement under the terms and conditions contained herein.

The following Agreement shall replace the previous Agreement in its entirety. All existing work orders shall be incorporated under this Agreement.

MASTER SERVICES AGREEMENT

BETWEEN

U S WEST COMMUNICATIONS, INC.

AND

U S WEST LONG DISTANCE, INC.

Agreement No. AR96001

MASTER SERVICES AGREEMENT

U S WEST COMMUNICATIONS, INC.

AND

U S WEST LONG DISTANCE, INC.

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Agreement No. AR96001

MASTER SERVICES AGREEMENT

U S WEST COMUNICATIONS, INC.

AND

U S WEST LONG DISTANCE, INC.

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(Continued)

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Exhibit T	CARRIER SERVICES

MASTER SERVICES AGREEMENT

U S WEST COMMUNICATIONS, INC.
AND
U S WEST LONG DISTANCE, INC.

THIS AGREEMENT is made as of the first day of April 1996, by and

Between: U S WEST Communications, Inc. (hereinafter USWC)

And: U S WEST Long Distance, Inc. (hereinafter USWLD).

The parties agree as follows:

Article 1
DESCRIPTION OF SERVICES

A. USWC shall provide services ("Services") to USWLD as set forth in the attached Exhibits (incorporated herein by this reference). The Exhibits describe Services that USWC may provide to USWLD upon request by USWLD. Such requests for Services shall be specified and documented on a Work Order (incorporated herein as Exhibit P), and include at a minimum the following information:

- Description/Location of Service/s Requested
- Dates of Commencement and Completion of Service/s Requested
- Deliverables, Performance Standards, Special Conditions
- Units and Price per Unit for Requested Service/s
- Costing Methodology

USWC may require additional information as it deems necessary for the provision, tracking, and billing of Services.

B. The parties shall comply with the U S WEST Technology Fair Compensation Policy when Services requested include technical information, software, inventions, functional specifications, and other researched or developed products or Services.

C. In the event of any conflict between the general terms and conditions of this Agreement and the special terms and conditions contained in the Exhibits, the special terms and conditions shall prevail.

Article 2
TERM

This Agreement shall become effective as of April 1, 1996 and will remain in full force and effect until either party provides sixty (60) calendar days written notice of termination to the other party. The parties agree to undertake a review of the contract every twenty-four months. If this Agreement is terminated prior to the completion of any Services, USWLD shall pay for all charges billed and owing to USWC for Services performed up to and including the date of termination, provided Services performed are in accordance with the terms and conditions of this Agreement. USWC shall complete any such work in progress prior to the termination of the Agreement, and USWC shall perform such services in accordance with the terms and conditions of this Agreement.

Article 3
COMPENSATION

Services provided by USWC shall be priced consistent with FCC rules and regulations concerning transactions between USWC and its affiliates. Where USWC reasonably deems it necessary in order to comply with such rules and regulations, USWC reserves the right to revise prices, provided that revisions occur no more than semi-annually. If applicable, USWLD and USWC agree to any necessary true-up compensation (bill or credit) which may result from such necessary price revisions. Upon request by USWLD, USWC agrees to provide supporting information to substantiate any such price revisions, the reasons therefore and any resulting true-up.

Article 4
BILLING

A. USWC shall submit invoices to USWLD for Services provided in accordance with the terms and conditions of this Agreement on a monthly basis unless otherwise specified in the Work Order. USWLD shall notify USWC of the address to which invoices are to be sent.

B. Invoices shall include the following billing information as a minimum:

1. Invoice number
2. Payment due date
3. Date of Service
4. Description of charges
5. Applicable taxes
6. Total charge

C. The bill recipient is responsible for recording the obligation upon receipt of the invoice WITHOUT REGARD TO ACCEPTANCE unless the billing has been billed to the wrong entity. Once the payable has been recorded, the bill recipient may withhold cash payment of the invoice for disputed items only. Formal disputes must be initiated with the billing company contact no later than sixty (60) days from receipt of the invoice. Any amount billed and uncontested as of the 60th day from receipt of the invoice shall be construed to be a proper charge to the bill recipient.

Interest should not be accrued on cash payments withheld by the bill recipient for disputed amounts during the period of the dispute. However, in order to discourage withholding of payments without due cause, if any portion of the disputed amount is resolved in favor of the billing company, interest shall be accrued from thirty (30) days after payment was due until the amount owed is paid. If the dispute is resolved in favor of the bill recipient, the billing company shall issue a credit to the bill recipient for the full amount. Payment of invoiced amounts that are undisputed or uncontested shall be remitted in full within thirty (30) calendar days after receipt of the invoice. Payment shall be sent to the address indicated on the invoice. Invoiced amounts not paid by the effective payment due date may be assessed interest on any outstanding balance until the amount is paid in full. Interest shall be accrued at a rate of one and one-half percent (1.5%) per month, or the highest rate allowed by applicable law, whichever is lower. Such interest shall be reflected on the invoice issued the month after the payment is deemed to be past due.

D. The billing company shall have sixty (60) days from formal notification of the dispute to respond to the dispute.

E. It is the responsibility of each affiliate to effectively communicate and resolve these disputes. If necessary, the issue in dispute should be escalated to the highest level required in order to achieve resolution within the allotted time frame. If all of this fails, refer the matter to the Directors of Technical Accounting at U S WEST, Inc. and at USWC, or their respective designees, for a ruling. Should such efforts prove ineffective, U S WEST, Inc. will, if asked, mediate the issue after a review of the related substantiating documentation. The matter may also be referred for mediation by an external party if both companies have agreed in writing to this type of mediation. (See Article 20 Dispute Resolution.)

F. The billing company may not render a bill for services more than ninety (90) days after those services have been provided unless both companies have agreed in advance to a longer billing period.

Article 5
DEFAULT OR BREACH

In the event of a material breach of any of the terms of this Agreement, the aggrieved party shall give the other party written notice of such breach and request cure within thirty (30) calendar days from notice receipt as provided herein. If the described breach is not cured within the thirty (30) calendar day period, then this Agreement may, upon written notice, be terminated immediately without charge or liability, except for work performed by USWC and costs incurred by USWLD under this Agreement up until the date of termination.

Article 6
INDEPENDENT CONTRACTOR

USWC hereby declares and agrees that it is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of USWLD; that USWC does not have the authority to act for USWLD or to bind USWLD in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of USWLD; that any persons provided by USWC shall be solely the employees or agents of USWC under its sole and exclusive direction and control. USWC and its employees or agents are not entitled to USWLD's unemployment insurance benefits as a result of performing under this Agreement. USWC shall be solely responsible for all matters relating to payment of its employees and agents, including compliance with worker's compensation, unemployment, disability insurance, social security withholding, and all other federal, state and local, rules and regulations. USWC shall indemnify and hold USWLD harmless from any causes of action arising out of USWC's liability to its employees or agents.

Article 7
PROPRIETARY INFORMATION

Solely for the purposes of providing Services under this Agreement, each party grants to the other a nonexclusive, nontransferable license to use information provided by the other. Neither party shall publish, circulate, or otherwise distribute or disclose any such information that is marked proprietary or confidential to any third party other than its affiliates and its consultants who have executed a confidentiality agreement as described in (1) below unless and until (1) the original disclosing party has consented to such disclosure and such third party executes a confidentiality agreement containing terms substantially similar to the ones contained in this Agreement, (2) such information has come into the public domain through no fault of USWLD or USWC, (3) such information is otherwise in the possession of USWLD or USWC free of any obligation of confidentiality, or (4) such party is required to do so by regulatory mandate.

Any third party information provided by USWLD or USWC to the other party shall be deemed USWLD or USWC information according to its source and shall be treated accordingly. If such information is subject to a separate agreement with a third party, the party receiving information agrees to hold and use the information in strict accordance with the separate agreement, provided it has knowledge of the separate agreement, unless otherwise instructed in writing by the party providing the information.

Article 8
WARRANTY

Services shall be performed in a professional manner, consistent with industry standards, and meet the satisfaction of USWLD. USWLD reserves the right to inspect Services at any time prior to acceptance. USWC warrants that the Services will be provided free from defects in performance, will conform to all specifications described in Exhibit P, and will be fit and sufficient for the purposes expressed in, or reasonably inferred from this Agreement.

Article 9
INDEMNIFICATION

A. USWC shall indemnify and hold harmless USWLD, its owners, parents, subsidiaries, affiliates, agents, directors and employees against all Liabilities to the extent they arise from or in connection with: (1) the fault or negligence of USWC, its officers, employees, agents, subcontractors and/or representatives; and/or (2) the furnishing, performance or use of any Services under this Agreement or any product liability claims relating to any Services; and/or (3) failure by USWC, its officers, employees, agents, subcontractors and/or representatives to comply with the Article entitled "Compliance with Laws;" and/or (4) assertions under workers' compensation or similar employee benefit acts by USWC or its employees, agents, subcontractors, or subcontractors' employees or agents.

B. USWLD shall indemnify and hold harmless USWC, its owners, parents, subsidiaries, affiliates, agents, directors and employees against all Liabilities to the extent they arise from or in connection with: (1) the fault or negligence of USWLD its officers, employees, agents, subcontractors and/or representatives; and/or (2) the furnishing, performance or use of any Services under this Agreement or any product liability claims relating to any Services; and/or (3) failure by USWLD, its officers, employees, agents, subcontractors and/or representatives to comply with the Article entitled "Compliance with Laws," and/or (4) assertions under workers' compensation or similar employee benefit acts by USWLD or its employees, agents, subcontractors, or subcontractors' employees or agents.

Article 10
LIMITATION OF LIABILITY

Neither party is liable to the other for consequential, incidental, indirect, punitive or special damages, including commercial loss and loss profits, however caused and regardless of legal theory or foreseeability, directly or indirectly arising under this Agreement. Notwithstanding the foregoing, the parties are liable in accordance with the provisions of this Agreement and this limitation of liability shall not apply to the indemnification obligations under this Agreement.

Article 11
FORCE MAJEURE

Except for the payment for Services already rendered, neither party shall be held responsible for delays or failures caused by fires; strikes or similar labor difficulties; embargoes; acts of the legislative, administrative, executive, or judicial branches of government after the date hereof; regulatory requirements promulgated after the date hereof; civil or military authorities; acts of the elements; the public enemy; or other similar causes beyond its control.

In connection with this Agreement, the parties acknowledge that USWC is a common carrier, obligated to perform certain services in the event of a national disaster. Both parties agree that USWC may suspend normal functions under this Agreement and perform such functions necessitated by the national disaster to recover or restore telecommunications services as required by law. Rates and charges shall be adjusted with the consent of both parties to reflect actual usage once the national emergency has passed. USWC may require designated USWLD personnel to attend occasional emergency preparedness training sessions and such attendance shall not be unreasonably denied by USWLD.

Article 12
INSURANCE

Both parties shall obtain and maintain insurance with coverage or limits consistent with U S WEST, Inc. practices and policies. Such insurance shall be commensurate with the type and/or amount of Service performed under this Agreement and the cost for such insurance shall be borne by the party performing the Service.

Either party may provide some or all of the insurance coverage required above through self-insurance in a manner consistent with U S WEST, Inc. practices and policies.

Each party shall also require its subcontractors, if any, to maintain appropriate levels of insurance and agrees to furnish the other party with certificates or adequate proof of such insurance, if requested. Either party may consult with U S WEST, Inc. - Risk Management for an evaluation of the appropriate insurance for subcontractors.

Article 13
WAIVER

The failure of either party to exercise any right shall not be construed to be a waiver unless agreed upon in writing. A waiver in any one instance will not constitute an amendment to this Agreement or indicate any continued waiver of such right on any other occasion.

Article 14
REGULATORY SUPPORT

This agreement shall comply with all state statutes and regulations, and USWC shall bear the financial risk if it does not. The parties agree that to the extent USWC is under the regulation of federal or state agencies, USWLD will provide cooperation and support for USWC's response to regulatory inquiries or discovery requests concerning this Agreement or relationships derived from this Agreement.

Article 15
COMPLIANCE WITH LAWS

A. The parties shall obtain and maintain at its own expense all permits and licenses and pay all fees required by law with respect to any Services and/or performance of this Agreement. The parties shall, in connection with performance of and Services under this Agreement, comply with all applicable federal, state, and local laws, ordinances, rules, regulations, court orders, and governmental or regulatory agency orders ("Laws"), including, without limitation:

1. The Telecommunications Act of 1996 and all rules, regulations and orders issued in connection with that Act and this Agreement shall, to the greatest extent possible, be construed to be consistent with the same.

2. Laws relating to non-discrimination in employment, fair employment practices, equal employment opportunity, employment opportunities for veterans, non-segregated facilities, and/or employment of the disabled, except to the extent a party is exempt therefrom; and the Laws and contract clauses required by those Laws to be made a part of this Agreement are incorporated herein by this reference.

3. The Laws referred to in the Article entitled "Independent Contractor".

B. USWC acknowledges that Purchase(s) and/or Confidential Information ("Exports") may be subject to U.S. and applicable foreign export laws or regulations. USWC shall perform its obligations under this Agreement in a manner consistent with the requirements of all applicable U.S. and all applicable foreign laws and regulations, including the U.S. export laws and regulations, the Foreign Corrupt Practices Act, and anti-boycott laws, and U.S. export laws and regulations prohibiting the unauthorized export or re-export of certain items to residents of countries listed in U.S. Export Administration Regulations.

C. The requirements of this Article shall survive the expiration, termination or cancellation of this Agreement. All provisions of this Article shall also apply to all subcontractors, and similar terms shall be included in all USWC's contracts with subcontractors.

Article 16
GOVERNING LAW

This Agreement shall be governed by and construed in all respects in accordance with the laws of the State of Colorado or such other state as agreed upon by the parties.

Article 17
AMENDMENTS

Amendments, modifications, additional exhibits, and supplements to this Agreement will be enforceable provided (1) they shall be in writing, shall reference this Agreement, and shall be signed by an authorized representative of each party, and, (2) unless otherwise expressly stated, they shall not be construed to adversely affect vested rights or causes of action which have accrued prior to the effective date of such amendment, modification, additional exhibit, or supplement. The term "this Agreement" as used herein shall be deemed to include any future amendments, modifications, supplements, and additional exhibits made in accordance herewith.

Article 18
NOTICES

Where written notices, demands, or other communications are required under this Agreement, they shall be deemed duly given when made in writing and delivered to the other party's address listed below. Addresses may be changed by written notice to the other party. Notices shall be delivered by hand, overnight courier service or certified mail, return receipt requested. Notification will be deemed to have taken place upon delivery, if delivery is by hand, overnight courier service or five (5) calendar days after posting if sent by certified mail.

(USWLD)

U S WEST Long Distance, Inc.
Attention: Contract Manager
1801 California Street, Room 2800
Denver, CO 80202

(USWC)

U S WEST Communications, Inc.
Attention: Contract Representative
Contract Development & Services
188 Inverness Drive West, Suite 600
Englewood, CO 80112

Article 19
CONTRACT ADMINISTRATION

A. Each party shall appoint a Contract Manager who shall be responsible for the management of the relationship between the parties. Interpretations, amendments, negotiations, modifications, requests for audits and/or examinations relating to this Agreement shall be initiated and managed by the Contract Managers.

B. USWC shall appoint Contract Administrators for the Services offered in the specific Exhibits to this Agreement. The Contract Administrator shall be responsible to oversee that the services are provided as specified in the Exhibit, initiate billing and monitor payment and provide further information regarding the Service and/or billing if USWLD requests. The Contract Administrator shall resolve such inquiries within thirty (30) days.

C. If the Contract Administrator is unable to provide sufficient information to USWLD regarding the Services delivered and/or the amounts invoiced, the parties will notify their respective Contract Managers and Dispute Resolution procedures will be initiated.

Article 20
DISPUTE RESOLUTION

A. Any claim, controversy or dispute which arises between the parties, their agents, employees, officers, directors or affiliates ("Dispute") which the parties are unable to settle through consultation and negotiation may be mediated under the Commercial Mediation Rules of the American Arbitration Association ("AAA") by a mutually acceptable mediator. Any Dispute which cannot be resolved through negotiation or mediation shall be resolved by binding arbitration as provided in this Article. The arbitrability of claims shall be determined under the Federal Arbitration Act, 9 USC Secs. 1-16. Notwithstanding the foregoing, the parties may cancel or terminate this Agreement in accordance with its terms and conditions without being required to follow the procedures set forth in this Article.

B. A single arbitrator engaged in the practice of law, who is knowledgeable about the subject matter of this Agreement and the matter in Dispute, shall conduct the arbitration under the rules of the AAA then in effect, except as otherwise provided herein. The arbitrator shall be selected in accordance with AAA procedures from a list of qualified people maintained by the AAA. The arbitration shall be conducted in Denver, Colorado, and all expedited procedures prescribed by the AAA rules shall apply. The laws of Colorado shall govern the construction and interpretation of this Agreement. The arbitrator's decision and award shall be final, conclusive and binding, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

C. Either party may request from the arbitrator injunctive relief to maintain the status quo until such time as the arbitration award is rendered or the Dispute is otherwise resolved. The arbitrator shall not have authority to award punitive damages. Each party shall bear its own costs and attorneys' fees, and the parties shall share equally the fees and expenses of the mediator and arbitrator.

D. If any party files a judicial or administrative action asserting claims subject to arbitration, as prescribed herein, and another party successfully stays such action and/or compels arbitration of said claims, the party filing said action shall pay the other party's costs and expenses incurred in seeking such stay and/or compelling arbitration, including reasonable attorneys' fees.

E. USWC agrees that in the event of any Dispute between the parties, it will continue to provide Services without interruption.

Article 21
NON-EXCLUSIVE AGREEMENT

It is expressly understood and agreed that this Agreement does not grant to USWC any exclusive privileges or rights and USWLD may contract with other suppliers for the procurement of comparable Services. Except as specifically identified in a Work Order, USWLD makes no guarantee or commitment for any minimum or maximum amount of Services hereunder.

Article 22
ASSIGNMENT

This Agreement shall be binding upon the parties' respective successors and permitted assigns. Neither party may assign or delegate this Agreement and/or any of its rights and obligations hereunder without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any such attempted assignment shall be void. However, either party may assign this Agreement and delegate any of its rights and/or obligations hereunder to its parents, subsidiaries, subsidiaries of its parents, or other affiliates, without the consent of the other party. Any assignment of amounts payable is void to the extent that it attempts to impose on USWLD obligations to the assignee, or to preclude USWLD from dealing solely and directly with USWC in all matters under this Agreement.

Article 23
SUBCONTRACTORS

Each party will be responsible for the proper performance of any subcontractor it hires which may be used to assist in the performance of Services; however, neither party will subcontract any work without the other party's prior written consent, which shall not be unreasonably withheld.

Article 24
SURVIVAL

All obligations and duties which by their nature extend beyond the expiration or termination of this Agreement shall survive and remain in effect beyond any expiration or termination.

Article 25
RIGHTS UPON ORDERLY TERMINATION

Upon termination or other expiration of this Agreement or any portion of the Services hereunder, each party shall return the other party's papers, material, and properties upon request and as specified in this Agreement. In addition, each party will assist the other in the orderly termination of this Agreement or any portion of this Agreement.

Article 26
RECORDS AND AUDITS

USWLD or its authorized representative shall have the right to audit USWC's books and records which relate to performance obligations under this Agreement and the charges billed for Services rendered hereunder, including, but not limited to, wage rates, details of expenses incurred and time records, provided such audits are conducted during normal business hours and USWC is given thirty (30) calendar days written notice. Such books and records shall be kept in a timely and accurate manner and in accordance with Generally Accepted Accounting Principles (GAAP).

Article 27
ENTIRE AGREEMENT

This Agreement, including its Exhibits, constitutes the entire Agreement between the parties and supersedes all prior agreements, representations, negotiations, statements or proposals related to the subject hereof.

Article 28
HEADINGS NOT CONTROLLING

The headings of sections and clauses are inserted for convenience only and are not intended to affect the meaning or interpretation of this Agreement.

Article 29
THIRD-PARTY BENEFICIARY

Nothing in this Agreement is intended to create any rights in a third-party beneficiary.

Article 30
AFFILIATE

For purposes of this Agreement, ("Affiliate") means any entity which directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with one of the parties hereto. For the purpose of this Agreement, "control" means (i) in the case of corporate entities, direct or indirect ownership of more than ten percent, and (ii) in the case of non-corporate entities, direct or indirect ownership of more than ten percent.

Article 31
SEVERABILITY

Any term or provision of this Agreement which is held to be invalid, void, unenforceable or illegal will in no way affect, impair or invalidate the remaining terms or provisions, which will remain in full force and effect, consistent with the original intent of the parties. However, if such provision is an essential element of the Agreement, the parties shall promptly attempt to negotiate a substitute therefore.

Article 32
CANCELLATION FOR DEFAULT

Either party may cancel this Agreement and/or any Order(s), in whole or part, without liability, by giving written notice of breach or default if the other (1) becomes insolvent, unable to pay debts when due, or the subject of bankruptcy proceedings not terminated within thirty (30) days of any filing; or makes a general assignment for the benefit of creditors; or if a receiver is appointed for substantially all of its property; or (2) materially breaches or defaults on its obligations under this Agreement and, if the breach or default can be cured, fails to cure the breach or default within thirty (30) days after receipt of written notice to cure; or (3) commits breaches on obligations other than payment, repetitively, or at least three separate significant times within any four-month period. Customer may cancel any Order(s) in whole or in part, without liability, if USWC fails to Deliver conforming Services under that Order on time.

If Services are being provided, USWLD shall have the right to take over and complete the Services at USWC's expense.

If USWLD cancels this Agreement and/or any Order(s) for USWC's default or breach, it shall be entitled to recover from USWC all losses, damages and expenses incurred as a result of USWC's default or breach. USWC shall refund to USWLD amounts previously paid for Services which, due to such cancellation, cannot reasonably be used by USWLD, and shall bear all expenses for their removal and return. USWC shall, at USWLD's option, promptly remove Services or bear the cost of removal. USWC shall restore or bear the expenses of restoration of USWLD's property to its original condition at the direction of USWLD and refund to USWLD all monies previously paid for such Services.

If USWC cancels this Agreement and/or any Order(s) for USWLD's default or breach, it may recover from USWLD reasonable expenses incurred as a direct result of USWLD's default or breach, which shall not exceed the amounts which USWLD has not yet paid under the terms hereof. USWLD shall not be liable for incidental, consequential or indirect damages, including but not limited to lost profits or unallocated overhead.

Article 33
SEVERAL LIABILITY AND JOINT DISCOUNTS

The term USWC as used herein may be applicable to one or more parties and the singular shall include the plural. If more than one party is referred to as USWC herein, then their obligations and liabilities shall be several, not joint. Notwithstanding the foregoing, all Services under this Agreement and/or related agreements shall be cumulative for purposes of determining: (1) whether USWC has met any minimum purchase requirements; (2) credits which may be applicable; (3) USWC's forecasts; (4) the level of discount, if any, which shall apply to any Services.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first written above.

U S WEST Long Distance, Inc.	**U S WEST Communications, Inc.**
Signature	Signature
Name Printed or Typed	Name Printed or Typed
Title	Title
Date	Date

NETWORK SERVICES

U S WEST COMMUNICATIONS (USWC) shall provide Network Services (Services) to USWLD upon request, as long as the Services do not constitute performing, operating, installation, or maintenance functions associated with facilities that USWLD owns or leases from a provider other than USWC. These services include the following:

NETWORK PLANNING/ENGINEERING

Fundamental network and/or network systems planning and/or engineering.

Network services, wire center, support systems and interoffice facilities planning.

NETWORK CONSULTING/DESIGN/MISCELLANEOUS

Provision of project management to coordinate and attend meetings, prepare reports, etc. to ensure all aspects of services are being provided.

Product evaluation, product testing and quality analysis.

Consulting, as requested, of subject matter experts on a case by case basis.

USWC shall provide such Services, individually or collectively in accordance with FCC rules and regulations. The provision of such Services shall be mutually agreed upon.

HUMAN RESOURCES SERVICES

USWC shall provide Human Resources Services ("Services") to USWLD. These services include the following:

Systems Support: Provide information and subject matter expertise on USWC's Human Resource systems. Coordinate/develop and maintain programs. Revise and update programs. Develop programs to translate information into required format. Download data from one system(s) to another.

Health Services: Provide case management services related to employee sickness/accident disability and worker's compensation cases. Provide medical opinion regarding the pre-employment, transfer, and promotion processes.

Management Compensation: Provide assistance, advice and consultation in the following areas: job descriptions, job evaluations, salary structure and/or wage structure, incentive and bonus plans, performance appraisal process, technical and professional hierarchies.

Leadership Succession: Administer and maintain the U S WEST management succession plan and act as a resource to USWLD. Evaluate candidates, determine appropriate matches, and propose candidates for key positions in the corporation. Maintain administrative files on key candidates. Direct, administer and maintain the Accelerated Development Programs for USWLD. Facilitate movement of key candidates.

Management/Occupational Staffing: Obtain and process the best qualified candidate to fill USWLD's job openings. Develop and administer U S WEST Compensation Guidelines for Management new hires. Train recruiters and line managers on interviewing. Promote job tours, job orientation, and career fairs.

Interview, screen, and test potential candidates. Select qualified candidates. Analyze testing results to ensure reliable measurements of skills and/or abilities. Provide consultation and training to USWLD.

Qualify force surplus and transfer requests. Administer the processing of surplus and displaced employees. Provide counseling to surplus employees.

Education: Administration of the Tuition Assistance Plan.

Diversity Strategies/Policies: Administer the corporate guidelines that will include: policy/strategy/direction/counsel relevant to diversity. Develop and distribute compliance guidelines. Provide diversity development and administration.

University Relations: Provide for the hiring and placement of college new hires. Promote job tours, orientation and career fairs. Administer the internship program.

Relocation: Provide consultation to employees relocating as a result of company initiated moves. Act as liaison with outside vendors. Arrange for advances/reimbursements relating to moving expenses.

Labor Relations: Provide assistance, advice, and consultation in matters relating to Labor Relations. Act as bargaining agent on USWLD's behalf. Negotiate labor contracts between USWLD and the Union(s).

USWC shall provide such Services, individually or collectively, in accordance with FCC rules and regulations.

INFORMATION TECHNOLOGIES SERVICES

USWC shall provide to USWLD Information Systems Services (hereinafter individually or collectively "Services") as mutually agreed upon. All service requests will be pursuant to the service arrangement. These services include the following:

A. Consultation Services

USWC shall provide Consultation Services to USWLD as mutually agreed upon. Consulting Services may include activities such as:

1. Needs Analysis
2. Systems Design
3. Product Selection
4. Contract Negotiations
5. Procurement
6. Vendor Management
7. Project Management
8. Planning

B. Application Services

USWC shall provide Application Services to USWLD as mutually agreed upon. Application Services may include activities such as:

1. Design
2. Program Development/Testing
3. Application Service Bureaus
4. Development of Documentation
5. Maintenance
6. Enhancements
7. Training
8. End-User Help Functions

C. Data Communications Services

USWC shall make available data transmission facilities to or from USWC host systems except in those cases where such services are provided by USWLD.

D. Computer Operations

USWC shall provide the following Services related to the operation of Data Centers.

1. End-User Computing
2. Mini-computer Operations
3. Data Center Operations
4. Centralized Software Support
5. Application Service Bureaus

E. Miscellaneous Services

USWC shall provide miscellaneous services not categorized or defined above as requested by USWLD. Such services shall be provided solely at the discretion of USWC and may include activities which USWC currently provides internally in support of project mechanization requirements.

General

Prior to performance of Services included herein, USWLD shall request from USWC, on a per project basis, the specifics of the requested Services, price quotes and delivery schedules in accordance with Exhibit P, Work Order. In addition, USWLD shall complete and provide to USWC other USWC required forms to allow access to computer systems and/or for the provision of other Services. Such requests shall be signed by an authorized USWLD representative and will continue in full force and effect until written notification to cancel is provided by USWLD to USWC.

USWC shall, at its discretion, make computer systems available for access by USWLD during normal USWC working hours and those as specifically defined for the system(s) being accessed. Requests for such Services outside of the above time frames shall be negotiated and mutually agreed upon by the parties. Any equipment, such as terminals and/or data communications equipment required by USWLD to access USWC systems shall be acquired and installed at USWLD's expense and attached to USWC's systems only with prior approval from USWC.

Performance Standards

USWC shall provide Services under this Exhibit in accordance with the then existing methods and procedures of USWC or those specifically established by both parties to administer provision of Services as requested by USWLD.

Compensation

Direct expenses incurred on behalf of the USWLD for services provided to USWLD shall be tracked and billed in accordance with FCC rules and regulations. Such expenses may include, but not be limited to, supplies, training, travel, or other personal expenses related to travel. Such direct expenses shall be pre-approved by USWLD.

MARKETING SERVICES

USWC shall provide to USWLD, Marketing Services upon request. These services include the following:

- Identification of strategy and implementation of employee programs and event marketing including major customer promotions, trade shows and corporate sponsorships
- Identification, development, presentation, implementation and/or referral of sales opportunities to customers on behalf of USWLD
- Development of proposals, if needed
- Provision of tactical and strategic plans for existing and new USWLD products/services
- Identification, development and recommendation of sales plans for multimedia services to customers on behalf of USWLD
- Development, production and distribution of marketing promotional materials to customers on behalf of USWLD
- Product marketing for card services associated with launch activities including but not limited to, advertising, customer communication and feedback, product integration and vendor relationships
- Market Intelligence and Decision Support

USWC shall provide such ongoing services, individually or collectively, in accordance with FCC rules and regulations.

Exhibit E

Reserved for Future Use

FINANCE SERVICES

USWC shall provide Finance Services ("Services") to USWLD upon request. These services include the following:

Consulting, Staff Support, Policy Recommendations, Project Management, Technical/Professional Expertise

Accounting Services (may include functions such as: payroll, accounts payable, billing, tax, collections, asset tracking, budget preparation, etc.)

Miscellaneous Services (may include services not categorized or defined above as requested by USWLD and will be provided solely at the discretion of USWC and may include activities which USWC currently provides for itself)

USWC shall provide Services to USWLD in accordance with FCC rules and regulations.

ADMINISTRATIVE SERVICES/ OFFICE INFORMATION MANAGEMENT

The following Services are outsourced to Xerox Business Services (XBS)and billed back to USWLD from USWC through the affiliate billing process.

Document Reproduction
All copying, electronic printing, color copying and printing. Manage walk-up copiers and fax machines.

Document Distribution
Mail room, freight, mail metering and related services.

Graphics/Commercial Print
Creative type setting and desk top publishing.

Video Conferencing and Conference Rooms
Scheduling of conference rooms - video and audio.

Note: In January, 1999, Services outsourced to Xerox will be directly billed to USWLD and no longer billed through the affiliate process.

Exhibit H

Reserved for Future Use

Exhibit I

Reserved for Future Use

Exhibit J

Reserved for Future Use

Exhibit K

Reserved for Future Use

Exhibit L

Reserved for Future Use

Exhibit M

Reserved for Future Use

SECURITY SERVICES

USWC shall provide to USWLD Security Services (hereinafter "Services") upon request. These services include the following:

Investigating and handling USWLD employee irregularities and providing reports to the appropriate USWLD management regarding issues such as:

- U S WEST policy violations (e.g., U S WEST Code of Business Ethics and conduct, U S WEST Information Asset Protection Policy, U S WEST Drug and Alcohol Abuse Policy and Procedures, and any others not specifically mentioned)
- Acts of fraud, theft, vandalism, or other criminal activity against USWLD
- Acts, or threatened acts, of violence against other USWLD employees or damage to USWLD's property of other assets.

Serving as a liaison with law enforcement agencies and external attorneys in dealing with USWLD employee interviews or arrests, interacting in cases of theft, and coordinating other services generally related to interfacing with the above mentioned agencies and attorneys.

Responding to all legal process served on U S WEST by law enforcement agencies and other third parties for company transactional records, and assisting 911 dispatchers and law enforcement agencies in emergency situations in the 14 U S WEST states.

Consulting on, and aiding USWLD in, the development and implementation of local policies, standards, and procedures relating to:

- The U S WEST Code of Business Ethics and Conduct
- The U S WEST Information Asset Protection Policy (IAPP)
- The U S WEST Asset Protection Policy
- The U S WEST Confidentiality of Communications Policy
- The U S WEST Industrial Espionage Policy
- The 08-xx series of Computing Technology Policies, Standards and Procedures (formerly SMSes)
- The 12-05 series of Technical Policies, Standards and Processes
- Special events security
- Executive protection/key employee protection
- Workplace safety training
- Carrier support
- Hacker investigations and prevention
- Business continuity planning and development
- Any other security related information

Consulting on computer and information network and systems security, including risk assessments and recommendations involving:

- Vendor selection for PC and minicomputer security and access control systems
- Adequacy of existing security, access controls and audit trails for USWLD computer systems and networks
- Adequacy of environmental accommodations, power and communications sources, data archival practices, logical and physical access controls for USWLD computer systems and networks
- Adequacy of procedures and practices for handling, protecting and disposing of confidential information
- Adequacy of physical and administrative controls on the movement and return of U S WEST owned computer systems and other high value equipment and resources
- Adequacy of physical and administrative controls on the installation and use of computer software programs and products, and the protection of software against unauthorized copying or modification

Building security consulting, including risk assessments, area crime surveys and recommendations involving:

- Vendor selection for access control and electronic surveillance systems
- Adequacy of existing access control and electronic surveillance systems
- Adequacy of physical security and visitor control documentation and procedures
- Expert assistance in the development or upgrading of local physical security policies, standards and procedures

USWC shall provide such Services, individually or collectively, in accordance with FCC rules and regulations.

OFFICIAL TELECOMMUNICATIONS SERVICES

USWC shall provide Telephone Service to USWLD for official communications purposes in accordance with the provisions stated in USWC's tariffs.

WORK ORDER

This Work Order is issued pursuant to Agreement No. AR96001, Exhibit ___, dated the ___ day of _____,19__, by and between U S WEST Communications, Inc. and U S WEST Long Distance, Inc. As stated in the aforementioned Agreement, past due invoices are subject to a late fee of one and one-half percent per month. The particular terms and conditions of this Work Order are as follows:

1. Description/Location of Service/s requested:

2. Dates of commencement and completion of Service/s requested:

3. Deliverables, performance standards, special conditions:

4. Units and price per unit for requested service/s (Include voucher loadings, forecasted usage, and estimated costs, if known.) Actual billing will be in accordance with FCC rules and regulations. Forecasted usage:

5. Costing methodology

___ Fully Distributed Cost
___ Tariff Rate
___ Prevailing Company Price
___ Fair Market Value

U S WEST Communications, Inc.

By _____

Title _____

Date _____

U S WEST Long Distance, Inc,

By _____

Title _____

Date _____

Exhibit Q

Reserved for Future Use

Exhibit R

Reserved for Future Use

SALES OPERATIONS PLANNING AND CUSTOMER SERVICES

USWC shall provide to USWLD, upon request, Sales Operations Planning and Customer Services of USWLD products. These services include the following:

- Methods and Procedures (M&P's) development for various functional areas within USWLD. Includes M&P's for USWLD's product plans and systems requirements, i.e., calling plans, 1+, fraud methods, operator handled directory assistance, prepaid cards
- Training development for customer contact employees and individual sales channels
- Compensation plan development for sales personnel, including performance and tracking indicators
- Development and implementation of customer service and sales processes
- Other miscellaneous sales operations activities associated with long distance services.

USWLD shall pay USWC for such services in accordance with FCC rules and regulations concerning transactions between USWC and its affiliates.

CARRIER SERVICES

USWC shall provide to USWLD Carrier Services ("Services") upon request. Such Services include the following:

Switched Access Information

USWC shall provide to USWLD Switched Access Information ("SAMI") for USWLD end user usage as requested by USWLD.

Fraud Detection

Fraud detection services requires monitoring messages to minimize revenue loss due to fraud. USWC will research, verify and block suspected fraud.

Billing and Collection Agreement

TKM-2

AGREEMENT FOR THE

PROVISION OF BILLING AND COLLECTION SERVICES

FOR

INTEREXCHANGE CARRIERS

BETWEEN

U S WEST LONG DISTANCE, INC.

AND

U S WEST COMMUNICATIONS, INC.

The Parties acknowledge that this Agreement contains commercially confidential information that may be considered proprietary by either or both Parties, and agree to limit the distribution of the Agreement to those individuals in their respective organizations with a need to know the contents of the Agreement.

Notice
The information contained herein should not be disclosed to unauthorized persons.
It is meant for use by authorized representatives of U S WEST and USWLD only.

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AGREEMENT FOR THE PROVISION OF
BILLING AND COLLECTION SERVICES
FOR INTEREXCHANGE CARRIERS

This Agreement for the Provision of Billing and Collection Services for Interexchange Carriers (hereinafter "Agreement") is entered into this 1st day of April, 1997, between U S WEST Communications, Inc., a Colorado Corporation and Malheur Home Telephone Company, an Oregon corporation (hereinafter referred to as "USWC") and U S WEST Long Distance, Inc., a Colorado corporation (hereinafter referred to as "USWLD"), acting through their authorized representatives.

WHEREAS, USWLD intends to purchase from USWC and USWC intends to provide to USWLD Billing and Collection Services (hereinafter referred to as "Services") to certain End User accounts, as described in Exhibit B; and

WHEREAS, effective January 1, 1987, USWC interstate Services provided to USWLD are provided on an untariffed, contractual, basis.

NOW, THEREFORE, in consideration of the mutual benefits accruing to each party, the parties hereby covenant and agree as follows:

I. Purpose of this Agreement

A. The purpose of this Agreement is to set forth terms and conditions pursuant to which USWC will provide Services to USWLD; provided however, that said Services shall be limited to USWLD's regulated basic toll or message telephone service ("MTS") or MTS related services. For purposes of this Agreement, regulated MTS shall mean telephone calls where the primary purpose of the charge is for the transportation of the message over USWLD's facilities and not for the content of the message.

B. This Agreement shall not include Services for any unregulated telecommunications or non-MTS messages, including but not limited to, telegrams, cablegrams, voice messaging, indecent communications for commercial purposes, or pay-per-call services. For purposes of this Agreement, a pay-per-call service shall mean any service:

1. in which any person provides or purports to provide

   (a) audio information or audio entertainment produced or packaged by such person;
   (b) access to simultaneous voice conversation services; or
   (c) any service, including the provision of a product, the charges for which are assessed on the basis of the completion of the call;

2. for which the caller pays a per-call or per-time-interval charge that is greater than, or in addition to the charge for transmission of the call; or

3. which is accessed through the use of a 900 telephone number or other prefix or area code designated by the Commission; or

4. which is accessed through the use of a 500 telephone number for international calls.

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C. USWC may pr de Services for unregulated, non-M messages under separate terms and conditions mutually agreed upon by the Parties and included in an individual Exhibit to this Agreement.

D. In the event USWLD decides to act as a "clearing agent", as that term is commonly understood in the industry, USWLD understands and agrees that this Agreement shall be immediately canceled. Further, USWLD understands and agrees that a separate agreement specific for clearing agents will need to be negotiated between the parties for such services.

II. Scope of this Agreement

A. This Agreement defines the terms and conditions for which USWC will provide Services to USWLD. It includes the following Exhibits:

Exhibit A	Definitions
Exhibit B	Description of Services
Exhibit C	Price Lists
Exhibit D	Accounts Receivable Settlement Terms
Exhibit E	Treatment and Collection Policy
Exhibit F	Performance Based Pricing Plan

The above mentioned Exhibits are attached hereto and incorporated herein by reference.

III. Responsibilities of USWLD

A. Prior to the commencement of Services, USWLD shall provide USWC with a valid carrier identification code ("CIC") or pseudo CIC, issued by Bell Communications Research, Inc. ("Bellcore") or other authorized issuing entity, or an Alternate Billing Entity Code ("ABEC") for billing identification purposes. If such Bellcore assigned CIC is not available prior to commencement of Services, USWC will utilize a pseudo CIC.

B. USWLD grants USWC the right to use USWLD's name and logo on each page of the End User's bill which contains USWLD's charges. Further, USWLD grants USWC the right to include an informative message to the End User defining the relationship between USWC and USWLD.

C. USWLD assures USWC that USWLD will use commercially reasonable efforts at all times to give prompt, courteous, and efficient service to End Users, shall be governed in all dealings with End Users by the highest standards of honesty, integrity, and fair dealing, and will do nothing tending to discredit, dishonor, reflect adversely upon, or in any manner injure the reputation of USWC or the Services covered by this Agreement and the quality image associated with USWC or such Services.

D. In the course of providing operator assisted calls USWLD will comply with Paragraph C above and, in addition, USWLD will:

1. prior to the commencement of charging, identify the provider of service (using the provider name that will appear on the End User's bill), for each call USWLD responds to, thereby giving the End User a reasonable opportunity to terminate the call without incurring a charge;

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2. upon an d User's request, quote accurate ra , and charges prior to placing the End User's call, thereby giving the End User a reasonable opportunity to terminate the call without incurring a charge;

3. provide expeditious handling and connection to the appropriate agency for emergency calls. USWLD may handle emergency services directly or may contract with other providers of emergency services.

E. USWLD ensures USWC that it will provide the actual origination and destination information including telephone numbers, bill phrases and other pertinent data for each End User message. Further, USWLD agrees to send USWC billing details that accurately identify the calls that were originated e.g. calling card, collect, etc.

F. USWLD shall not submit to USWC any messages ninety (90) days or more after the date of message (hereinafter "old messages"). USWC will reject such messages to USWLD as unbillable.

G. USWLD's failure, at any time, to comply with the requirements of this Section or any other Sections of this Agreement will constitute a breach and will entitle USWC to cancel this Agreement pursuant to Section XX, and to invoke any other remedies available in law or equity.

IV. Provision of Billing and Collection Services

A. USWC interstate Services shall be provided in accordance with the terms and conditions of this Agreement.

B. USWC intrastate Services shall be provided in accordance with the Intrastate Access Service Tariffs (hereinafter "Intrastate Tariff") and the terms and conditions of this Agreement which shall supplement the Intrastate Tariff to the extent not in conflict or inconsistent therewith. To the extent of any conflict or inconsistency between this Agreement and an Intrastate Tariff, the provisions of the Intrastate Tariff shall control for so long as the intrastate services remain tariffed and, thereafter, shall be provided in accordance with this Agreement.

C. To the extent USWC and USWLD will enter into a joint marketing arrangement, USWC may offer Billing and Collection Services as part of said arrangement in accordance with the provisions of Section 272 of the Telecommunications Act of 1996. In the event an FCC ruling determines that USWC cannot offer Services as part of joint marketing arrangements, some or all of the following Services will be terminated:

   Bill Rendering Discounts (Section VII.C)
   Custom Request Service (Exhibit B.1)

D. Presentation of the bill in USWC's envelope shall be at the sole discretion of USWC unless USWLD has specified otherwise under the Custom Request Service.

E. When technically feasible, USWC will return messages to USWLD as "Unbillable" for those End User accounts that are in "Business Office Write-Off Status" as those terms are defined in Exhibit A. Further, USWC will return messages to USWLD as Unbillable for those End User accounts that are in account or entity denial status as described in Section 3 of Exhibit E.

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F. Monthly charg shall be on the basis of usage, if a, cable, multiplied by the price elements as set forth in Exhibit C.

G. In the event of a Federal Communications Commission ("FCC") order or any state regulatory order which may cause USWC an increase or decrease in the cost for providing intrastate and interstate Services, USWC reserves the right to modify its rates for intrastate and interstate Services retroactive to the effective date of such order. In such event, USWLD reserves the right to terminate this Agreement upon thirty (30) days written notice to USWC.

H USWC will provide notification to USWLD of adjustments issued by USWC via standard EMI Record or other appropriate reporting means.

I. USWC will provide notification to USWLD of uncollectibles via standard EMI record or other appropriate reporting means.

V. Developmental Charge(s)

A. USWC consists of three distinct operating regions Central, Eastern and Western (hereinafter each operating region shall be individually referred to as "USWC Region").

B. After the initial CIC, ABEC or Pseudo CIC has been implemented in each USWC Region, USWLD understands and agrees that USWC requires a custom developmental charge, ("Developmental Charge"), for each additional identifier, i.e., a CIC, ABEC or Pseudo CIC that is subsequently implemented in each USWC Region. Such Developmental Charge shall be due and payable prior to the Start Date for each USWC Region at the then current rate.

C. For purposes of this Agreement the Start Date shall mean the date when USWC receives USWLD's first live billing data to be billed to the End Users. In the event USWC receives live billing data after the first day of the month, the Start Date shall begin the first day of the following month.

VI. Service Commitment

A. USWLD understands and agrees that USWC requires an annual minimum (hereinafter "Service Commitment") in the amount of Fifty Thousand Dollars ($50,000) in recurring Service charges per USWC Region, that is implemented. Such Service Commitment is required for USWLD's actual charges incurred for Services rendered to USWLD. The Service Commitment will be due and payable as follows:

1. If the actual charges incurred by USWLD for each USWC Region do not meet or exceed the Service Commitment in a given year, then USWC will conduct a true-up for that year after the December B&C invoices are billed in January. If USWLD has not been receiving billing and collection services from USWC under a B&C agreement for a period of one year, then a proration will be applied to the actual number of months for which USWLD has received service from USWC.

2. Each year during the term of this Agreement, USWC will invoice USWLD in February for the difference between the total Service Commitment due and the actual recurring charges incurred by USWLD across all USWC Regions. In the event an Intrastate Tariff in an individual state requires a

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service com ment, then such service commitm shall apply towards the Service Con...itment described herein. Further, any amounts that exceed the Service Commitment in one or more USWC Regions may be applied towards the other USWC Region(s) and any amounts owing in one USWC Region may be satisfied by any excess in any other USWC Region(s).

3. USWLD understands and agrees that Initial Developmental Charges of $135,000, paid to implement basic processing capabilities, will not apply towards the Service Commitment. Other Custom Development Charges will apply toward the Service Commitment. USWLD agrees to pay USWC any amounts due in accordance with the provisions of Section VII below.

4. Upon termination of this Agreement, the Service Commitment will be prorated using the number of days beginning with the previous settlement period to the date of termination. USWC will invoice USWLD for the difference between the total Service Commitment due and the actual recurring charges incurred by USWLD across all USWC Regions. Such amount will be invoiced to USWLD and is due and payable in accordance with the provisions of Section VII below.

5. If termination of this Agreement occurs twelve months after the effective date of this Agreement, or sooner, USWC will conduct a true-up as follows: 1) USWC will prorate the Service Commitment for the period from the implementation date of the contract to the date of termination; and 2) will calculate the difference between the total Service Commitment due and the actual recurring and non-recurring charges incurred by USWLD across all USWC Regions. Such amount will be invoiced to USWLD and is due and payable in accordance with the provisions of Section VII below.

VII. Prices; Payment; Discount Plans

A. Prices

Except as specified in Section IV of this Agreement, and except for Services provided pursuant to an Intrastate Tariff (to the extent the tariff rates differ from the prices specified in Exhibit C), all Services provided pursuant to this Agreement shall be provided at the prices specified in Exhibit C.

B. Payment

B.1 USWLD's payment for Services shall be due on the payment due date reflected on the USWC Billing and Collection invoice ("B&C Invoice").

If a payment would be due on a Saturday, Sunday or bank holiday, payment for the amount due USWC will be as follows:

a. If such payment date falls on a Sunday or on a holiday which is observed on a Monday, the payment date shall be the first non-holiday day following such Sunday or holiday.

b. If such payment date falls on a Saturday or on a holiday which is observed on Tuesday, Wednesday, Thursday, or Friday, the payment date shall be the last non-holiday day preceding such Saturday or holiday.

B.2 Any payment received by USWC for Services rendered after the payment date or any payment received in funds which are not

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immedia / available to USWC on the payme date will be subject to a late payment penalty. If late payment charges are not permitted by local jurisdiction for this Service, this provision shall not apply. If applicable, the late payment penalty shall be the portion of the amount due USWC received after the payment date times a late factor of 0.000310 per day compounded daily for the number of calendar days from the payment date to and including the date that USWLD actually made the payment to USWC, which would result in an annual percentage rate of 12%.

B.3. Any late payment resulting from bank error will not be subject to the late payment penalty provided that USWLD can verify that it was not at fault. It is the responsibility of USWLD to notify the banks involved for resolution of the bank error.

B.4 USWC reserves the right, at its sole discretion, to deduct (net) any amounts past due and owing USWC for any Services provided to USWLD, from any funds or proceeds due USWLD from USWC, arising from the purchase of accounts receivable settlements. USWC is not required to deduct (net) amounts past due to prevent USWLD from being in default of this Agreement.

B.5 Any dispute associated with USWLD's payment shall be governed by the provisions of Section VIII of this Agreement. Should the dispute not be resolved by the Payment Date of the amount due, USWLD shall, notwithstanding the continuing existence of the dispute, pay the billed amount in accordance with the terms defined in this Agreement.

C. **Discount Plans**

C.1 USWLD understands that it may be eligible for a discounted Bill Rendering Rate, as Described in Exhibit F, Performance Based Pricing Plan.

C.2 When USWLD exceeds $450,000,000 in End User Billed Revenue in a calendar year as a direct result of submitting 1+ traffic to USWC under USWLD's primary CIC for January 1998 through December 1999, USWC and USWLD will negotiate in good faith for other discounted Bill Rendering Rates based on additional volumes under the provisions of Section IV.C.

C.2.a Such discounted rate, to be negotiated at a later date per Section XXI, will be based on a Modified Performance Based Pricing Plan or a Volume Discount Plan.

C.2.b Any discounted rates apply only to USWLD messages in a USWC shared End User bill.

C.3 The offering of discounted Bill Rendering rates are subject to Section IV.C.

VIII. Dispute Resolution

In the event of any dispute between USWC and USWLD with respect to the terms and conditions of this Agreement, or any subject matter referred to in or governed by this Agreement, except disputes in which a party seeks equitable relief, then such disputes shall be settled as follows:

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A. Escalation Pr edures

All disputes between the parties with respect to any subject listed in the preceding paragraph shall be escalated through normal business procedures to the officer level prior to the commencement of any arbitration proceeding.

B. Arbitration

1. As between the parties hereto, all questions as to rights and obligations arising under the terms of this Agreement and the Intrastate Tariffs are subject to binding arbitration.

2. Either party may make a demand for binding arbitration by filing with the other a demand in writing signed by an officer of the complaining party.

3. The parties may agree upon one arbitrator, but in the event that they cannot agree, there shall be three, one named in writing by each of the parties within ten (10) business days after demand for arbitration is given and a third chosen by the two appointed. Should either party refuse or neglect to join in the appointment of the arbitrator(s) or to furnish the arbitrator(s) with any papers or information demanded, the arbitrator(s) are empowered by both parties to proceed ex parte.

4. Arbitration shall take place in the principal headquarters city of the party against whom the demand for arbitration has been filed and a single hearing before the arbitrator(s) of the matter to be arbitrated shall take place at the time and place within said city as is selected by the arbitrator(s).

   The arbitrator(s) shall select such time and place promptly after his/her (or their) appointment, provided that the time scheduled for the hearing shall not be later than thirty (30) business days after the date of appointment of the arbitrator(s). The arbitrator(s) shall give written notice thereof to each party at least ten (10) business days prior to the date so fixed. In the event a panel of three arbitrators is necessitated by the parties' inability to agree upon a single arbitrator, such notice of the time and place of the hearing shall also identify the third member of the panel. At the hearing, any relevant evidence may be presented by either party, and the formal rules of evidence applicable to judicial proceedings shall not govern. Evidence may be admitted or excluded in the discretion of the arbitrator(s). Said arbitrator(s) shall hear and determine the matter and shall execute and acknowledge a binding decision in writing and cause a copy thereof to be delivered to each of the parties within ten (10) business days of the hearing date.

5. The determination of the panel shall be by majority vote, with each arbitrator having a single vote. The award rendered by the arbitrator (or the majority if more than one) shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.

6. Prior to the scheduled hearing date, the parties shall agree on procedures to be used in connection with the arbitration, except as they may conflict with the specific provisions contained in this Section VIII. To the extent the parties cannot agree upon procedures, the arbitration shall be conducted in accordance with the Commercial Rules of The

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America· ·bitration Association (AAA) but nc :cessarily under the auspices .. the AAA.

7. The costs of such arbitration shall be borne equally by the parties; provided, however that each party shall bear its own expense in prosecuting or defending a claim; and provided further that the arbitrator(s) shall assess the costs and expenses of an arbitration proceeding against a party if the arbitrator(s) determines that the prosecution or defense of a claim was frivolous in nature.

IX. Audit

A. For purposes of this Section, an audit or review shall mean a comprehensive audit/review encompassing multiple services and multiple departments (hereinafter "Audit"). An Audit of USWC by USWLD may consist of an Audit of USWC's operations on information described in paragraph C. below; an Audit of USWLD by USWC may consist of an Audit of USWLD's operations on information described in paragraph D. below. Each party may conduct not more than two (2) Audits in any twelve (12) month period during the term of this Agreement over all three USWC Regions. If an Audit is requested in only one or two USWC Regions, it shall be counted as one Audit. For purposes of this Section, an examination shall mean an inquiry on a single issue or a specific topic ("Examination(s)"). Examinations shall be limited to a total of three Examinations in any twelve (12) month period during the term of this Agreement regardless if the request is in one or more USWC Regions. Examinations may be conducted as needed, subject to the agreement of the party being examined, which shall not be unreasonably denied. Both parties agree that the Audit or Examination shall be limited to the subject matter outlined in the written notification as described in paragraph B. below. Any claim resulting from an Audit or Examination must be supported by a statistically valid sample.

B. In requesting an Audit or Examination, the requesting party shall give no less than forty-five (45) days written notice of intent to Audit or to commence an Examination. Such notice shall identify whether the requesting party will perform an Audit or Examination, the date upon which the Audit or Examination is to commence, the location, the requesting party's representatives, the subject matter of the Audit or Examination, specific materials to be reviewed including the number and type of accounts and message details, and the time period covering the materials or records subject to the Audit or Examination. The parties shall mutually agree on the commencement date and subject matter of such Audit or Examination; such agreement shall be reduced to writing.

C. Upon written notice by USWLD to USWC, USWLD shall have the right, through its authorized representative, to conduct an Audit or Examination pursuant to Paragraph B. above, all such records and accounts as may under recognized accounting practices contain information bearing upon (i) amounts being billed to USWLD's End Users by USWC as part of its provision of Services to USWLD, and (ii) the charges to USWLD for such Services. The information subject to the Audit or Examination will be limited to the period of time for which the Service(s) were provided. All information received or reviewed by USWLD or its authorized representative is considered confidential and is not to be distributed, provided or disclosed in any form to anyone not involved in the Audit or Examination, nor is such information to be used for any other purpose. USWC shall not be required to produce directly to USWLD's auditors source documents which contain information relating to

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other entities f vhom USWC is providing Services /here source documents contain information relating to one or more entities commingled with information relating to USWLD, USWC shall provide and USWLD shall accept extracts of such documents or masked documents which contain only information pertinent to USWLD.

D. Upon reasonable written notification by USWC to USWLD, USWC or its authorized representatives shall have the right to commence an Audit or Examination pursuant to Paragraph B. above, of such source documents, systems, records and procedures as may, under recognized accounting practices, contain information bearing upon the content of billing records sent by USWLD to USWC for billing, including but not limited to, the types and ages of billing records. Such billing records shall be limited to the messages submitted to USWC, by USWLD, for billing purposes.

E. All costs incurred by USWC, on behalf of USWLD, during the course of an Audit or Examination as ordered by a third party will be the responsibility of USWLD. A detailed estimate will be prepared based upon USWLD's written notice and/or specifications supplied by USWLD in accordance with the terms described in Exhibit B, Consulting Service. The estimate provided to USWLD via certified mail will be valid for a period of thirty (30) days from the date the estimate was received by USWLD. The estimate and any subsequent revisions must be approved in writing by USWLD prior to USWC performing such services or USWLD incurring any costs.

F. Adjustment to the charges payable to either party under this Agreement or the Intrastate Tariffs shall be made to correct errors or omissions disclosed by the Audit or Examination if mutually agreed to by the parties or directed through arbitration. Corrective action shall be initiated within thirty (30) days of the mutually agreed upon resolution of a claim or of an arbitrator's award.

X. Limitation of Liability; Warranty

A. USWLD and USWC agree to use best efforts to provide each other verbal notification immediately upon discovery of billing errors followed by written notification within thirty (30) days. Such written notification shall contain detailed information to aid in identifying the cause of the billing error and its correction. USWC agrees to extend its best efforts to correct billing errors within thirty (30) days of notification (by USWLD) or discovery (by USWC). Where meeting the thirty (30) day objective is not possible, USWC will notify USWLD of the expected resolution date. The above described warranty is the only warranty provided in connection with this Agreement. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR QUALITY.

B. USWLD will pay USWC for the correction of billing errors caused by any inaccurate or incomplete USWLD instructions whether written or verbal. Such billing errors include, but are not limited to, errors as a result of requirements defined in specifications furnished or approved by USWLD. Further, USWLD will pay for the correction of billing errors resulting from billing details passed to USWC that are not accurately identified or any other billing error resulting from USWLD's failure to perform in accordance with Section III.

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C. Absent knowi ınd willful misconduct, USWC's tot ability and USWLD's sole and exclusive remedy for any loss, cost, claim, injury, liability, or expense, including reasonable attorneys' fees, regardless of theory, shall be limited to the actual damages as follows:

1. If USWC, due to its error or omission, loses, damages or destroys USWLD's recorded messages while providing Services and USWC cannot bill or re-bill the messages, USWC, in conjunction with USWLD, will estimate the volume of the messages and associated revenue based on the most comparable previously known values less uncollectibles and adjustments. Where the most comparable values are unknown the estimated revenue associated with such unbilled messages will be mutually agreed upon.

2. If USWC, due to its error or omission, fails to process the USWLD's messages or processes the messages incorrectly, the parties agree that USWC will promptly, upon correction of the billing system error, reprocess the messages. If, however, upon mutual agreement between the parties, some or all of such reprocessing will not be done within ninety (90) days from the initial receipt of the messages and is determined unfeasible from an economic, technical or marketing perspective, such party can request that some or all of the reprocessing not be done.

3. With respect to payment of any amounts due USWLD under Paragraphs 1 and 2 above, USWC shall be entitled to recover charges for Services commensurate with such payment. USWLD is responsible for charges associated with Services provided as a result of the reprocessing and will not incur additional charges for Services associated with reprocessing the messages.

D. When USWC discovers or is notified in a timely manner that, due to its error or omission, incomplete billing information detail has been provided to USWLD, USWC will make every reasonable effort to recover and provide the detail to USWLD at no additional charge.

E. In the event the parties cannot agree that reprocessing is feasible or cannot agree on a revenue settlement, the parties agree to utilize Exhibit D, Sections 9, 10, 11 and 12, to resolve the dispute.

F. USWC assumes no liability for accuracy of messages recorded by USWLD and provided by USWLD to USWC for billing.

G. USWLD's liability to USWC (as distinct from USWLD's obligation to pay for Services provided pursuant to this Agreement) for any loss, cost, claim, injury, liability, or expense, including reasonable attorneys' fees, regardless of theory, shall be limited to the amount of actual damages incurred.

H. The parties may be liable to the other for any indirect or special damage arising out of or in connection with knowing or willful misconduct. In no event shall either party be liable to the other for consequential damages.

XI. Performance Evaluation

A. USWC has a corporate team objective which is dependent, in part, on meeting the performance and development goals of USWLD.

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B. USWLD may luate USWC's performance by wri. evaluation on a monthly basis. USWC will also conduct a performance evaluation meeting with USWLD on a quarterly basis. Any feedback received from USWLD may impact division performance evaluations and will be used by USWC to improve existing processes or performance.

XII. Data Retention

USWLD agrees to retain copies of all files transmitted or in any other fashion forwarded to USWC for a minimum of ninety (90) calendar days after date of original transmission to USWC. USWLD further agrees to retransmit or re-forward files upon request of USWC at no cost to USWC. USWLD will make best efforts to retransmit or resend such files no later than three (3) calendar days from receipt of a request from USWC. However, in the event that the original transmission cannot be received by USWC due to transmission system failure, improperly formatted data on the file, or other reason, USWLD will immediately retransmit the file upon correction of the problem causing the failure.

XIII. Indemnification

A. Each party (the "Indemnifying Party") will indemnify and hold harmless the other party ("Indemnified Party") from and against any loss, cost, claim, liability, damage expense (including reasonable attorney's fees) to third parties, relating to or arising out of negligence or misconduct by the Indemnifying Party, its employees, agents, or contractors in the performance of this Agreement. In addition, the Indemnifying Party will, to the extent of its negligence or misconduct, defend any action or suit brought by a third party against the Indemnified Party for any loss, cost, claim, liability, damage or expense relating to or arising out of negligence or misconduct by the Indemnifying party, its employees, agents, or contractors, in the performance of this Agreement.

B. The Indemnified Party will notify the Indemnifying Party promptly in writing of any written claims, lawsuits, or demand by third parties for which the Indemnified Party alleges that the Indemnifying Party is responsible under this section and tender the defense of such claim, lawsuit or demand to the Indemnifying Party. The Indemnified Party also will cooperate in every reasonable manner with the defense or settlement of such claim, demand, or lawsuit.

C. The Indemnifying Party will not be liable under this section for settlements by the Indemnified Party of any claim, demand, or lawsuit unless the Indemnifying Party has approved the settlement in advance or unless the defense of the claim, demand, or lawsuit has been tendered to the Indemnifying Party in writing and the Indemnifying Party has failed promptly to undertake the defense.

D. Under the terms of this Agreement, USWC will provide to USWLD certain information regarding USWLD's subscribers, which may include, but is not limited to, credit information. USWC is releasing to USWLD only credit information based on USWC's first-hand knowledge of its own experiences with the subscriber involved. USWLD agrees to indemnify USWC for any claim, regardless of theory, which arises against USWC based on the release of any subscriber information from USWC to USWLD.

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XIV. Taxes

A.1 General Provisions:

USWLD shall be liable for all Federal, state, or local sales, use, excise, gross receipts, or other taxes or tax-like fees, imposed on or with respect to USWLD's services (hereinafter referred to as "Tax(es)", including Taxes imposed directly on USWC and relating to USWLD's services. USWLD shall, where permissible by law, file returns or reports relating to such Taxes, and pay or remit all such Taxes and other items to the appropriate taxing authority.

A.2 USWC shall use the same tax practice and procedures (including exemption procedures) to apply, bill, and collect taxes on new and existing services that are the subject of this Agreement that it uses or would use to apply Taxes on similar or comparable USWC services, unless notified in writing to do otherwise. However, USWC shall not bill Taxes, the effect of which are passed on to End User customers pursuant to tariff or accepted state regulatory practice, unless USWLD has filed with the appropriate regulatory commission or other agency tariffs or notice that will authorize such pass-on. In such event, USWLD will provide USWC with sufficient notice and documentation to implement such pass-on. USWLD has the right to review USWC's tax procedures and supporting documentation. USWC will implement any tax law changes into its procedures as required by applicable tax law, however, in no instance shall USWC be given less than sixty (60) days to implement such changes.

A.3 USWLD understands and agrees that USWC is merely providing Services with respect to the billing and collection of Taxes hereunder. USWC shall not be responsible for billing any foreign state taxes associated with a jurisdiction outside of USWC's operating Region to USWLD's Services unless billing information, with respect to such Taxes, is provided to USWC by USWLD.

A.4 When notified by USWLD to change its tax procedures with respect to applying and billing Taxes on USWLD's services, USWC shall, within the constraints imposed by its billing system, implement such tax procedures as USWLD advises and charging USWLD for the costs of such change; provided that USWC shall pay for any change required in order to ensure that its billing system properly accounts for all taxes if such change also applies to all USWC End Users. To the extent USWC's billing system cannot accommodate such requested change without significant modifications, USWC shall continue to use the same tax procedures it uses for similar or comparable USWC services, again excepting tariffed or regulatory approved tax items as described in Paragraph A.2 above, and will be held harmless by USWLD for using such procedures except in the case of gross or willful negligence. In no event shall USWC be liable for anything other than penalties that may apply, and USWLD shall be liable for Taxes and interest owed.

A.5 USWC shall not be entitled to retain or receive from USWLD any statutory fee or share of Taxes to which the person collecting such Taxes is or may be entitled under applicable law.

A.6 USWC shall use the same tax exemption status with respect to USWLD End Users as it uses for its own customers, and to the extent necessary, furnish to USWLD copies of such information as may be in its possession

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regarding t[illegible] exemptions of End Users and serv[illegible] related to USWLD, but without warranty as to accuracy or completeness.

A.7 USWC shall furnish to USWLD on a monthly basis all information and reports reasonably necessary for USWLD to file its tax returns, according to delivery schedules provided to USWC by USWLD, from time to time, that are mutually agreed upon by the Parties. Such information and reports shall be in the format normally used by USWC in the preparation of its own tax returns unless mutually agreed otherwise. USWLD shall file all returns for all such Taxes with the applicable taxing authority and pay or remit all such Taxes to the applicable taxing authority. USWC shall have no responsibility for the filing of returns of payments of Taxes.

B.1 Taxes - Indemnity and Recourse:

USWLD shall be responsible for payment of all Taxes imposed on Services performed by USWC under this Agreement, the cost of which were not part of the price agreed upon for such Services under this Agreement. Should any Federal, State or local jurisdiction determine that any such additional Taxes are due by USWC as a result of USWC's performance of any obligation under this Agreement, USWC will so advise USWLD, allow USWLD to participate in the audit process regarding such issue, and secure USWLD's concurrence prior to making any remittance of said Tax to the jurisdiction. USWLD agrees to be liable for any such Tax, interest, penalties and surcharge, but retains the right to protest the assessment. If USWLD disagrees with any assessment of Taxes due by USWC or disagrees with an assessment of any additional Tax penalty, surcharge and interest due by USWC as a result of USWC's performance of any obligation under this Agreement, USWLD shall, at its option and expense (including payment of any such assessment prior to final resolution of the issue), have the right to seek a ruling as to the applicability of any such Tax or to protest any assessment and participate in any legal challenge to such assessment, but shall be liable for any Tax, penalty, surcharge and interest ultimately determined to be due. USWC shall, when requested by USWLD and at USWLD's expense, cooperate or participate with USWLD in any such proceeding, protest or legal challenge.

B.2 USWLD will indemnify, hold harmless, and defend (at USWLD's expense) USWC from and against any liability resulting from any Taxes, penalties and interest, loss, cost, claim, liability, damage, cause of action, or expense (including reasonable attorney's fees) relating to or arising out of USWLD's failure (to the extent not attributable to a negligent act or omission of USWC) to pay any Tax or file any return as required by law or to comply with any applicable tax laws or regulations, or relating to USWC's obligations concerning Taxes, including Taxes imposed directly on USWC and relating to USWLD's services, in accordance with this Agreement. If USWLD disagrees with an assessment of any additional Taxes, penalty, addition to Tax, surcharge, or interest due by USWC as a result of USWC's performance of any obligation under this Agreement, or disagrees with a determination that an additional charge is applicable to USWC's billing to USWLD for Services under this Agreement, USWLD shall, at its option and expense (including, if required by law, payment of any such assessment prior to final resolution of the issue) have the right to seek administrative relief, a ruling, judicial review (original and appellate level), or other appropriate review (in a manner deemed appropriate by USWLD), as to the applicability of any such Taxes, penalties, interest or additional charges, or to protest any assessment and direct any legal challenge to such assessment, but shall be liable hereunder for any such amount ultimately

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determined be due. Notwithstanding the abov such indemnity is conditioned upon USWC providing USWLD notification (such notification to be provided within five (5) business days of receipt by USWC's Tax Department of said assessment) of any proposed assessment of any additional Taxes, penalty or interest due with respect to this Agreement. USWC shall, when requested by USWLD and at USWLD's expense, cooperate or participate (but not control) with USWLD in any such proceeding, protest or legal challenge and if USWC's participation is not requested by USWLD, USWC may participate (but not control), at its own expense, in any such proceeding, protest or legal challenge.

B.3 USWC agrees to indemnify, hold harmless, and defend at USWC's expense, USWLD from and against any liability or loss arising from additional Taxes and interest (including reasonable attorney's fees) incurred by USWLD as a result of:

B.3.1 the willful failure of USWC to provide USWLD, pursuant to Section XIV hereof, accurate and complete information with which to file its Tax returns and remit payment; or

B.3.2 the willful failure of USWC to accurately calculate and bill appropriate Taxes pursuant to Section XIV hereof.

B.4 USWC agrees to indemnify, hold harmless, and defend at USWC's expense, USWLD from and against any liability or loss arising from additional penalties incurred by USWLD as a result of:

B.4.1 negligent failure of USWC to provide USWLD, pursuant to Section XIV hereof, accurate and complete information with which to file its Tax returns and remit payment; or

B.4.2 the negligent failure of USWC to accurately calculate and bill appropriate Taxes pursuant to Section XIV hereof.

C.1 Taxes - Gross Receipts Taxes:

As a supplier of billing and collection services, USWC is billing USWLD's revenues for a specific fee. USWC shall not report these billings as its own receipts for gross receipts tax purposes or any other tax purpose.

XV. Purchase of Accounts Receivable

USWC will purchase from USWLD its accounts receivable that arise from bills rendered by USWC to End Users. The purchase of accounts receivable will be limited to Amounts Due USWLD (as described in Exhibit D, Section 2) when USWC provides Services for USWLD. USWC's purchase of USWLD's accounts receivable shall be with full recourse as set forth in Exhibit D.

XVI. Limitations Period

No claim or demand under this Agreement, including demands made under the arbitration section hereof, or any other demand or claim with respect to this Agreement may be made or brought by either party more than two years after the date of the event that gave rise to the demand or claim except that: 1) the limitation period herein shall not apply to claims for revenue due USWLD from its End Users to the extent USWC has collected and retained such revenue; 2) a

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demand or claim f ndemnification under this Agreeme may be made or brought by a party for two years after the accrual of the cause of action for indemnity; and 3) any claim in the nature of fraud or concealment may be brought within two years of discovery of the existence of such fraud or concealment.

XVII. Term and Termination of Agreement

A. This Agreement will become effective on April 1, 1997 and shall continue through March 31, 2000, or until such time as this Agreement is superceded by a new agreement.

B. Either party may request that the terms and conditions of this Agreement be renegotiated or terminated for convenience and without penalty upon six (6) months written notice to the other party. USWLD's sole and exclusive obligation for termination under this Section is to make payment for all balances due and for authorized charges for any Custom Request development work completed.

XVIII. Proprietary and Confidential Information

A. General Provisions:
Designation of Proprietary Information.

In connection with the Services to be provided by USWC to USWLD hereunder, USWC and USWLD may find it necessary or beneficial for a party to disclose to or receive from the other party, specifications, files, drawings, data, records, reports, computer programs or other technical and business information ("Proprietary Information") which the disclosing party considers proprietary and confidential.

1. For the purpose of this Agreement the following shall be Proprietary Information of USWC:

   a. All traffic and usage data internally generated by USWC in the normal conduct of USWC's business of providing exchange access, information access or other telecommunications or information services.

   b. All End User Account Information.

   c. Except as otherwise specifically provided for in this Agreement, all tools and materials including, but not limited to, software, files, data bases, design documents and reports used by USWC to produce data pursuant to this Agreement.

   d. All information associated with USWC-owned public telephones.

B. <u>Protection of Proprietary Information</u>.

With respect to Proprietary Information provided to the receiving party under this Agreement, the receiving party agrees to:

1. hold the Proprietary Information in confidence and to protect it to the same degree it protects its own proprietary and confidential information;

2. restrict d osure of the Proprietary Informatic olely to those employees, contractors and agents of the receiving party (and its affiliates) with a need to know, and not disclose it to any third party;

3. advise those employees, contractors and agents of their obligations with respect to the Proprietary Information; and

4. use the Proprietary Information only for the purposes of this Agreement, except as may otherwise be mutually agreed upon in writing.

Each party acknowledges that in the performance of Services hereunder, a party's Proprietary Information may be commingled with Proprietary Information of the other party or with the Proprietary Information of third parties. Accordingly, the parties shall, to the extent practicable, use good faith efforts to ensure that such Proprietary Information shall be masked or rendered mechanically inaccessible to other party. However, there may be instances in which efforts to mask or screen such Proprietary Information are impracticable, or in which disclosure is inadvertent. In such instances, the receiving party will neither use or disclose the Proprietary Information except as required to fulfill its obligations pursuant to this Agreement.

C. **Information Not Subject to Section XVIII.**

The receiving party shall have no obligation to preserve the proprietary nature of any information which:

1. was previously known to the receiving party free of any obligation to keep it confidential, or

2. is disclosed to third parties by the disclosing party without restriction, or

3. is or becomes publicly available by other than unauthorized disclosure, or

4. is independently developed by the receiving party,

Information shall not be deemed to be in the public domain or in the receiving party's possession or knowledge merely because such information is embraced by more general information in the public domain or in the receiving party's possession or knowledge.

D. **Requests for Information.**

In the event either party is requested or required (by oral question, interrogatories, requests for information or documents, subpoena, civil investigative demand or similar legal process) to disclose Proprietary Information of the other to any lawfully constituted authority, it is agreed that the party requested or required to furnish the Proprietary Information will provide the other party with timely notice in order for that party to seek a protective order. To avoid the administrative burdens associated with such advance notice of protective arrangements, either party may respond to routine USWLD requests, legal process or lawful demand involving the disclosure of Proprietary Information. A party may disclose or provide Proprietary Information of the other party to implement, effect and enforce the party's tariffs or to meet the requirements of a court, regulatory body or government agency having jurisdiction over the party; provided that, the party making the disclosure shall notify the other party so as to give that party a reasonable opportunity to object to such disclosure. A party may not

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unreasonably hold approval of protective arrangements provided by any such court, regulatory body or government agency. Nothing in this Section requires either party to support or not support the position of any person or entity on the issue of whether any particular Proprietary Information is proprietary under applicable law or this Agreement.

E. The provisions of this Section XVIII shall survive the termination of this Agreement, and, at the same time of termination, the receiving party shall, if practicable and upon request, return the Proprietary Information of the disclosing party which is in tangible form.

XIX. Force Majeure

A. Neither party shall be held liable for any delay or failure in performance of any part of this Agreement from any cause beyond its control and without its fault or negligence, such as acts of God, acts of civil or military authority, government regulations, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, strikes, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities, or acts or omissions of transportation common carriers (collectively referred to as "Force Majeure Conditions").

B. If any such Force Majeure Condition occurs and results in a delay or failure in performance of any part of a party's obligations under this Agreement for more than sixty (60) calendar days, the other party may, by written notice given to the party whose performance was delayed or who failed to perform, immediately terminate that part of this Agreement that shall be affected by such delay or failure to perform, without penalty.

XX. Default

A. In addition to all other rights and remedies provided herein or at law or equity, either party shall have the right to cancel this Agreement in whole or in part, without any further obligation to the other (excepting obligations incurred prior to the effective date of cancellation) if the other party is in breach or default of this Agreement and such breach continues for thirty (30) days after written notification.

B. In the event USWLD is in breach or default of this Agreement as a result of submitting unregulated telecommunications or non-MTS messages, as described in Section I, Paragraph B, USWC shall have the right to terminate this Agreement immediately.

C. Either party's failure to perform any of its obligations under this Agreement, including, but not limited to, any representation or warranty made by a party herein that is misleading or materially inaccurate, shall be deemed to be a default.

D. Except for the provisions of Paragraph B above, a party may cure a material breach by taking all of the following steps: (1) notifying the non-breaching party, in writing, that the breaching party wishes to cure the breach and continue the Agreement; (2) terminating any breaching acts, omissions, or behaviors; (3) correcting any existing breaches including but not limited to paying any charges due under this Agreement; and (4) providing security

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reasonably sa actory to the non-breaching party, ich may or may not include the provisions set forth in Section VI) for example, a performance bond in an appropriate amount. Any material breach must be cured expeditiously and within the thirty (30) day notice period.

XXI. Amendments; Waivers

This Agreement or any part thereof or any Exhibits hereto or documents referred to herein may be modified or additional provisions may be added by written agreement signed by or on behalf of both parties. No amendment or waiver of any provision of this Agreement and no consent to any default under this Agreement shall be effective unless the same shall be in writing and signed by or on behalf of the party against whom such amendment, waiver or consent is claimed. In addition, no course of dealing or failure of any party to strictly enforce any term, right or condition of this Agreement shall be construed as a waiver of such term, right or condition.

XXII. Assignment

Any assignment by either party of any right, obligation or duty, in whole or in part, or of any other interest hereunder, without the written consent of the other party shall be void; provided however, that such consent is not required when the proposed assignment is to be made to any parent, subsidiary of parent, affiliate or successor of the assigning party. All obligations and duties of any party under this Agreement shall be binding on all successors in interest and assigns of such party.

XXIII. Notice and Demands

Except as otherwise provided under this Agreement, all notices, demands, or requests which may be given by any party to the other party shall be in writing and shall be deemed to have been duly given on the date delivered in person or deposited, postage prepaid, in the United States mail and addressed as follows:

U S WEST Long Distance, Inc.
1801 California St., Room 3100
Denver, Colorado 80202
Attn: Paul Lit, Director

U S WEST Communications, Inc.
1801 California St., Room 2110
Denver, Colorado 80202
Attn: Pamela Jenkins

If personal delivery is selected as the method of giving notice under this section, a receipt of such delivery shall be obtained. The address to which such notices, demands, requests, elections or other communications is to be given by either party may be changed by written notice given by such party to the other party pursuant to this Agreement.

XXIV. Third Party Beneficiaries

This Agreement shall not provide any person not a party to this Agreement with any remedy, claim, liability, reimbursement, claim of action or other right in excess of those existing without reference to this Agreement.

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XXV. Governing La

This Agreement shall be governed by the substantive laws of the State of Colorado.

XXVI. Lawfulness Of Agreement

This Agreement and the parties' actions under this Agreement shall comply with all applicable federal, state, and local laws, rules, regulations, court orders, and governmental agency orders. If a court or governmental agency with proper jurisdiction determines that this Agreement, or a provision of this Agreement, is unlawful, this Agreement, or that provision of this Agreement, shall terminate. If a provision of this Agreement is so terminated but the parties legally, commercially, and practicably can continue this Agreement without the terminated provision, the remainder of this Agreement shall continue in effect.

XXVII. Confidential Status

The parties acknowledge that this Agreement contains commercially confidential information which may be considered proprietary by either or both parties, and agree to limit distributions of the Agreement to those individuals in their respective organizations with a need to know the contents of the Agreement. The parties further agree to seek commercial confidential status for the Agreement with any regulatory commission with which the Agreement must be filed, to the extent such a designation can be secured.

XXXIII. Entire Agreement

This Agreement and any Exhibits, Attachments or Schedules attached hereto, constitute the entire understanding between the parties and supersede all prior understandings, oral or written representation, statements, negotiations, proposals and undertakings with respect to the subject matter hereof.

XXIX. Headings

The headings in this Agreement are for convenience and shall not be construed to define or limit any of the terms herein or affect the meaning or interpretation of this Agreement.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

SIGNATURE PAGE FOLLOWS

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U S WEST LONG DISTANCE, INC.

Signature

Bob Trigeminba
Printed Name

VP Operations
Title

6/9/97
Date

U S WEST COMMUNICATIONS, INC.

Signature

C. E. Osborn
Printed Name

V.P - Diversified Carrier Markets
Title

June 17, 1997
Date

MALHEUR HOME TELEPHONE COMPANY

Signature

C. E. Osborn
Printed Name

VP - Diversified Carrier Markets
Title

June 17, 1997
Date

Approved By
US West Law Department

Date 6/11/97

Initials

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EXHIBIT A

DEFINITIONS

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DEFINITIONS

Account Level Treatment

Ability to perform collection activity for the entire account for treatment as a result of technical limitations.

Accounts Receivable

An account evidencing a legally enforceable right to payment for services rendered by USWLD and lawfully billed as charges on the USWC End User bill.

Adjustments - End User

End User Adjustments are issued to debit or credit lawfully billed charges on the End User bill.

Billing Evasion

Actions with the intent to circumvent or evade the proper charges, in whole or in part, resulting from telecommunications services.

Billing Service Charges

USWC's charges to USWLD for each of the Services provided for under this Agreement.

Business Office Write-Off Status

End User accounts for which the USWC Business Office has completed all collection activities and a final bill(s) has been issued and subsequently written off by the business office.

CARE/ISI

USWLD Account Record Exchange/Industry Standard Interface (CARE/ISI) is the industry standard format for providing data in a mechanized mode.

Carrier Memorandum

A form initiated by USWC to inform USWLD of an End User dispute.

Casual Use Call

An End User call originated by dialing 10XXX.

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DEFINITIONS
(continued)

Central Region

Includes the following states: Arizona, Colorado, Idaho except the 676 LATA portion, Montana, New Mexico, Utah, Wyoming.

Dispute

An unresolved claim whereby the End User refuses to pay a specific USWLD charge(s).

Dial Tone Denial

The interruption of the End User's dial tone restricting the End User's ability to make local or long distance calls by using its telephone.

Eastern Region

Includes the following states: Iowa, Minnesota, Nebraska, North Dakota and South Dakota.

EMI Credit/Adjustment Records:

Bellcore approved exchange message interface ("EMI") records, that consist of multiple record/message types designed for the purpose of processing and billing pre billing credits or post billing adjustments.

End User

When End User is used throughout this Agreement, it shall be identified by one or more of the following elements:

1) **Account level.**

   The End User has selected USWLD as its primary interexchange carrier at the account level for one or more working lines, or has designated USWLD as such by allocation or other process.

2) **Line level.**

   The End User has selected USWLD as its primary interexchange carrier at the individual line level, or has designated USWLD as such by allocation balloting process.

3) **Casual Use.**

   An End User who occasionally makes a call, via USWLD, by dialing 10XXX or other dialing pattern is considered an End User at the account level for a single line account and at the line level for a multiline account.

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DEFINITIONS
(continued)

End User Bill Date

The date which appears on the End User bill.

End User Directed Payment

End User's ability to determine which entity or entities should receive a payment and how much of the payment each entity should receive.

Entity

Any company that shares the USWC bill.

Entity Specific Treatment or Denial

Ability to perform collection activity **or denial** for each entity on an individual basis.

Exchange Carrier (EC) Memorandum

A form that is initiated by USWLD to inform USWC of the status of an End User's account activities or to advise USWC to take action on an account.

Exchange Message Interface (EMI)

An industry standard format used for the exchange of message data between USWLD and USWC for the purpose of applying debit or credit amounts to the End User accounts.

Group Entity Treatment or Denial

Ability to perform collection activity or denial by grouping all carrier regulated charges and USWC's intraLATA charges together for treatment.

Individual Case Basis (ICB)

A non-standard Services offering for which no fixed recurring or non-recurring charge has been set.

Lag Study

A study which determines the average time from the End User bill date to when End User remits payment.

Malheur Home Telephone Company

Located in a portion of the state of Oregon and the 652 LATA portion of Idaho.

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DEFINITIONS
(continued)

Purchase of Accounts Receivable Statement

The statement sent to USWLD each month by USWC summarizing the amount due USWLD or USWC for the Purchase of Accounts Receivable settlement.

RTA

Remove from Treatment Amount (RTA) represents the dollar amount which an entity/account may have owing before it is considered to be treatable. When the amount owing is below the RTA amount, the account is removed from collection activity.

Realized Final Account Uncollectibles

Actual uncollectible amounts written off USWLD End User final bills for failure of the End User to pay lawfully billed charges.

Total Billed Revenues

The billed revenues for all messages, plus total billed taxes, plus or minus total applied correct charges and uncollectible post billing adjustments and associated tax.

Treatment and Collection

Activities performed to collect End User amounts due billed by USWC on behalf of USWLD.

Unbillable

Messages that cannot be billed to an End User account and are returned to USWLD.

Uncollectible Bad Debt Allowance

An amount withheld from the settlement as an uncollectible reserve to offset future actual uncollectible amounts written-off USWLD's End User final bills.

Weighted Average Payment Date

A single date during a settlement month which indicates the date that all USWLD message revenues were calculated as having been received and processed by USWC. The calculation is based on actual revenue and process dates of individual tapes or transmissions.

Western Region

Includes the following states: the 676 LATA portion of Idaho, Oregon and Washington.

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EXHIBIT B

DESCRIPTION OF SERVICES

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EXHIBIT B

DESCRIPTION OF SERVICES

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GENERAL TERMS AND CONDITIONS

USWC offers numerous services listed in this Exhibit B. USWC will provide only those services which USWLD has ordered and which are listed in Exhibit C. USWLD may request additional services pursuant to Section XXI of this Agreement.

USWLD may request modifications to the basic services described herein; however, such modifications shall be in accordance with the Custom Request Service.

Services and prices were established assuming standard implementation as determined by USWC. USWLD may request Services that are not specifically addressed in this description or may request modification to the Services described, such requests are commonly referred to as "Custom Requests". Custom Requests will be reviewed to determine the feasibility of implementing the requested service or modification. (see following page). In such cases where USWC agrees to fulfill USWLD's request, the specific terms, conditions and prices will be determined on an individual case basis (hereinafter referred to as "ICB") with USWLD and may require an amendment/addendum to this Agreement.

All rights, title and interest in and to all designs, studies, plans, specifications, programs and software developed for a Custom Request Service is and shall remain the property of USWC. USWLD obtains no ownership rights to such "material" or the software or documentation developed as a result of its work on a Custom Request.

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I. CUSTOM REQUEST SERVICE

A. General

USWLD may request Services that are not specifically addressed in this Agreement or may request modifications to those service elements offered by USWC as described in this Exhibit B. All requests (hereinafter " Custom Request(s)") will be reviewed to determine the mutual feasibility of implementing the Custom Request as described below. Charges for Custom Request are determined on an ICB.

B. Categories of Custom Requests

1. USWLD shall identify the category of Custom Request required. Categories of Custom Request are described below:

   a. Preauthorized Development Only - provide evaluation and begin development work.

   b. Preauthorized Development and Implementation - provide evaluation, development and implementation activities.

   c. Detailed Time and Cost - provide detailed evaluation based upon the appropriate technical specifications provided by USWLD to USWC; no development or implementation activities initiated by USWC.

   d. Order of Magnitude - provide high-level evaluation, no development or implementation activities initiated by USWC.

2. In cases where USWLD categorizes a Custom Request as (i) Preauthorized Development Only, (ii) Preauthorized Development and Implementation, or (iii) Detailed Time and Cost as set forth above, USWC shall complete its quotation of a time and cost estimate and forward to USWLD within twenty (20) Business Days. This time and cost estimate shall include the approximate number of Custom Request hours necessary for the request and the estimated dollar amount associated with the implementation or completion of the Custom Request. Implementation time shall be set in accordance with USWC's scheduling process for major system releases.

   a. Requests which USWC considers to be too complex for a twenty (20) Business Day response, or for requests not accompanied by all appropriate items specified in C.1, USWC shall notify USWLD within fifteen (15) Business Days that the stated requirement cannot be met and that a new response date shall be negotiated. Any revisions provided by USWLD to a Custom Request shall be treated as a new request.

3. In cases where USWLD categorizes a Custom Request as an Order of Magnitude, as set forth above, USWC shall complete its quotation of a time and cost estimate and forward it to USWLD. The time for quotation will be determined on an ICB. USWC will make best efforts to provide a quotation within twenty (20) Business Days. Such quotation is not binding. Once the quotation is submitted to USWLD the Custom Request is considered complete.

C. Custom Request Responses

1. When initiating a request, USWLD shall include, as appropriate, the following information needed by USWC to develop a response:

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a. Detailed Billing Specifications

b. Tariff
   i. Illustrative Tariff
   ii. Approved Tariff

c. Methods and Procedures

d. Journal Account Codes

e. End User Bill Specifications

f. Testing Requirements

g. Live Bill Sample

h. Edits

i. Other (e.g., Service Order requirements, mechanized returns, error disposition).

2. USWC will notify USWLD within five business days if any of the information described in C.1 above is incomplete. The timeframes for response as specified in Section B for providing Custom Request will begin after USWC has received all the information to complete the response or after closure of all outstanding issues, whichever is later.

3. During technical review of the Custom Request, USWC may need clarification of the requirement. If clarifications become issues, the Parties will reach mutual agreement on closure of such issues.

4. In the event that USWLD fails to provide an approved Tariff, if applicable and in accordance with C.1 above, USWC assumes no responsibility for any billing errors resulting from differences between the billing specifications and the approved Tariff. USWLD agrees to indemnify and hold harmless USWC for any loss, cost, claim, liability or damage expense resulting from such billing errors.

5. USWC responses to Custom Requests will include a detailed breakdown of Program Development charges associated with implementing USWLD's Custom Requests and applicable recurring charges. Program Development may include, but is not limited to, definition, design, machine time - CPU, miscellaneous hardware, project lead/meeting/management time, occupational time, consultation, documentation, application coding, programming, testing, system analysis, installation, development of methods and procedures, training and other functions related to software development.

D. Authorization

1. USWLD shall notify USWC within thirty (30) business days from the date of USWC's response that the Custom Response is authorized or rejected. No further communication is required on a rejected request. When USWLD fails to notify USWC within thirty (30) business days, the response will be considered void by USWC.

2. USWC shall return a confirmation notice to USWLD within ten business days of receipt of the USWLD written authorization. Any changes made by USWLD in its

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authorization of USWC's response shall be treated as a revised request subject to re-evaluation by USWC.

3. Custom responses authorized by USWLD and thereafter suspended by USWLD before development or implementation is completed shall remain valid and binding for six months from the date of receipt by USWC of USWLD's authorization.

4. USWLD shall re-negotiate an Implementation Date within ten business days with USWC for any Custom Request which has been authorized by USWLD but which USWLD suspends after development work is completed. In addition to the Custom Request costs authorized by USWLD, expenses incurred to maintain the requested changes for each release shall be billed to USWLD on an ICB; provided, however, such changes shall be maintained only upon mutual agreement between the Parties and as authorized by USWLD. If USWLD does not agree to maintain the requested changes and subsequently requests to implement such Custom Request, USWLD will be responsible for the additional costs associated with implementation.

E. Testing And Acceptance

USWC shall make its resources available to cooperatively test the Custom Request with USWLD as specified in the Detailed Time and Cost estimate. The criteria for testing and acceptance and the test plan will be mutually agreed to by both Parties as defined in the specification document. In the event the Custom Request does not conform to the agreed upon criteria, USWLD shall notify USWC in writing and USWC shall take appropriate corrective action as soon as reasonable and practical and allow USWLD to test the Custom Request again. In such event, the acceptance date shall be mutually agreed upon by the Parties.

F. Implementation

1. The Implementation Date is the date upon which a Custom Request is released by USWC for production. The Custom Request will be effective on the day following implementation.

2. Both Parties, prior to implementation, agree to sign a definition document developed by USWC for all Custom Requests over $50,000.

3. For any Custom Request, USWLD may request that USWC provide validation/verification documentation to USWLD that demonstrates the implementation of a Custom Request by USWC.

   a. Customer bill sample - If requested, USWC agrees to provide an End User bill sample to USWLD following implementation of the requested change. The End User bill sample shall be provided after the first billing cycle in which a USWLD End User may be affect by the implementation but in no case later than forty-five (45) business days following the Implementation Date. In the case where USWLD requests an End User bill sample and USWC believes that so few USWLD End Users would be affected by the implementation as to make the production of an End User bill sample for USWLD burdensome or time consuming, USWC shall notify USWLD of the problems that would be presented in producing the End User bill sample. USWLD and USWC may agree on a means other than an End User bill sample for demonstrating that implementation of the Custom Request conforms to USWLD's specifications. USWC shall provide the alternative validation/verification documentation after the first billing cycle in which a USWLD End User bill may be affect by the

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implementation but in no case later than fifteen (15) business days following the Implementation Date.

b. Other validation/verification documentation - USWLD shall specify other documentation to be provided by USWC that shall demonstrate implementation of USWLD Custom Requests. USWC shall not unreasonably withhold its agreement to provide other documentation according to USWLD's specifications.

4. USWC shall notify USWLD if USWC is unable to implement a Custom Request in the timeframe indicated in the accepted response. USWC agrees to employ best efforts to provide verbal notification within one business day after the agreed upon Implementation Date. In the event USWC fails to implement in the timeframe indicated in the accepted response, USWC agrees to extend its best efforts to implement the Custom Request immediately. USWC shall notify USWLD of the expected Implementation Date and USWC shall assume responsibility for any additional USWC Program Development and associated costs that may be required as a result of USWC's failure to meet the initial implementation timeframe.

   a. If USWC fails to meet a committed Implementation Date on any rate level change or rate restructure within two business days of the committed Implementation Date, USWC and USWLD shall mutually agree on procedures for backbilling USWLD's End Users for non-recurring and recurring charges, if applicable, for End User notification requirements, if applicable, and on the method(s) to be used to correct any toll usage affected by the missed Implementation Date.

5. When a Custom Request requires an Implementation Date sooner than USWC can meet, USWLD shall assume the responsibility for any additional costs that may be required as a result of the failure to meet the request effective date.

G. Quarterly Based Payment Plan

The Quarterly Based Payment Plan applies only to work performed by USWC or USWC's vendors under contract. Quarterly Based Payment is not applicable to work performed by AMDOCS.

1. Time and Cost Process ("T&C")

   a. USWLD will pay for work actually performed rather than the charges stated on the T&C estimate.

   b. All T&C estimates will be reviewed with USWLD to ensure that USWLD understands the number of hours associated with services provided for each subsystem. USWLD will approve and sign-off on the T&C prior to the commencement of coding for subsystems. USWC will adhere to the delivery schedule as mutually agreed based on the T&C estimates.

   c. All actual costs of a project will be tracked to ensure that the number of hours does not exceed the T&C estimate.

   d. If while tracking actual costs spent for enhancements, it appears that the original estimated costs will be exceeded, then USWC and USWLD will negotiate additional funding.

   e. This process will apply to all projects, regardless of the size of the project.

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f. Regular meetings between USWC and USWLD will be held to review the amount being billed and work being performed on behalf of USWLD.

2. USWLD Responsibilities

To facilitate the implementation of a project, USWLD must ensure that USWC has current, accurate information. Prior to USWC agreeing to any delivery-based payment, USWLD must agree to the following listed responsibilities. If any of these responsibilities are not met by USWLD, USWC will not be subject to any potential penalties associated with the project. USWC will provide USWLD a formal notification when USWLD has not met a responsibility.

A mutually agreed time-line will be established for each project which will state specific dates from which USWLD can measure its effectiveness in meeting its responsibilities.

a. Outstanding questions and issues must be resolved by negotiated dates.

b. Strategic issues must be resolved within the mutually agreed time frames.

c. Assumptions must be validated within the mutually agreed time frames.

d. USWLD's contracted vendors must deliver test tapes, information and other media to USWC on designated dates.

e. When requirements are changed after sign-off of the T&C, the changes must follow the change management process.

f. The Change Management Process must be thoroughly documented and mutually agreed upon by USWC and USWLD.

g. A time line will be established for each project which will state the specific dates upon which agreement and signature authorization are required for work to proceed to the subsequent phase.

3. Project Status Indicators

a. Red, yellow or green status will be identified on the Official Project Status Report for that particular project. Should agreement not be reached on placing a project in red status, project status will be escalated until agreement is reached.

b. Green status indicates development efforts are proceeding as scheduled.

c. Yellow Status may indicate a delay in interim deliverables, but the overall project may still be on schedule. There is risk, however, that scheduled dates may be overrun.

1. The issues causing the Yellow Status will be clearly defined and documented by the party initiating the Yellow Status. A mutually agreeable action plan will be developed and executed to address each issue causing Yellow Status.

2. If Yellow Status issues are not resolved and begin to jeopardize the overall project deliverables, the issues progress to Red Status.

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d. Red Status is an indication of severe trouble for any given project. Red Status may be caused or initiated by either party and may include, but is not limited to, unresolved issues causing development to cease, inadequate resources, or development effort is more than 40% behind timeline or budge estimates.

1. Red Status issues are escalated to the appropriate level. The parties will identify unresolved issues and refine and execute a new action plan. Resolution progress will be actively monitored.

e. Project status may be initiated by either party. Movement of the project to a more severe status level will not occur without twenty-four (24) hours prior written notification. Movement to a less severe status may occur immediately upon issue resolution.

4. USWLD Billing (B&C Invoice)

a. Billing to USWLD will occur every quarter, beginning March, 1997.

b. The months in which billing will occur are March, June, September and December.

c. Billing will include actual charges for all work completed prior to the month in which the quarter ends, with the exception of December. For example: All work completed through the end of February will be bill in March. Regardless of project status, December bills will include an estimate of work to be completed through the end of that year. A true-up for work performed will be conducted in January of the following year.

d.1 If a project is in red status due to USWLD's failure to perform its responsibilities, billing will proceed.

d.2 If, however, a project is in "red status" at the time of billing due to USWC's performance, no billing will occur until the project returns to either "yellow" or "green" status.

e. In the event USWC is performing work for multiple projects concurrently, all projects will be billed with the exception of any project in red status. Red status projects will be billed only upon returning to yellow or green status.

f. Billing for projects completed in less than one month's time will be issued at the next prescribed quarterly billing.

g. If U S WEST Technologies determines that performance of work requires the hiring of contract labor at higher than normal hourly rates, USWLD agrees to reimburse USWC at that higher labor rate plus any administrative fees not to exceed 10%.

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ATTACHMENT 1

Examples of ICB Custom Requests

Custom Requests will be handled on an ICB. These Custom Requests include, but are not limited to, the following:

1. Mechanized adjustments other than category 41 records
2. Bill format changes
3. Mechanized feeds between USWC and USWLD (or related vendors): Establish/modify/discontinue
4. Specialized services and products (unregulated)
5. 900 Pay Per Call Services
6. Data retention requirements/changes
7. Other LEC billing (IC0)
8. Reports (new, modify, or discontinue)
9. Contingency recording (Back-up recording)
10. Modification of internal USWC Methods & Procedures
11. EMI modules (new, modify, or discontinue)
12. PUC/FTC/FCC mandates which result in billing enhancements
13. Rate restructures
14. Market Messages
15. New or modifications to existing EMI category, group, or record types
16. Edit changes
17. Tax/surcharge changes - flow through Taxes/surcharges only
18. Establishment of new billing entities (pseudo or otherwise)
19. System Conversions

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II. MESSAGE BASED BILLING SERVICE

Description

USWC will provide Message Based Billing Service on the condition that USWC purchases the Accounts Receivable with a provision for uncollectible recourse. The requirement for purchasing the Accounts Receivable does not apply to Message Rating and Provisioning, and Non-Standard Data Entry.

A. Message Rating with Provisioning is the computation and application of appropriate charges to each End User message based on a USWLD provided schedule of rates and the provision of these rated messages to either USWLD or other entities.

B. Message Rating Without Provisioning is the computation and application of appropriate charges to each End User message based on a USWLD provided schedule of rates.

C. Message Bill Processing is the preparation of billing data to be included on the End User bill. Bill Processing includes acceptance of EMI formatted records, standard EMI message and pack edits to identify missing or incorrectly formatted data, toll master file processing, posting of rated messages and rate elements, posting of USWLD issued post billing adjustment records, maintenance of accounts, and pre billing unidentified message investigation.

D. Bill Rendering is the preparation of the bill, maintenance of the End User data base, performing purchase of accounts receivable settlements, mailing of the bill to the End User, processing payments, and collection services.

E. Limited Inquiry Service is the handling of telephone calls or correspondence from an End User(s) via USWC's business office regarding charges billed on behalf of USWLD. If USWLD purchases Limited Inquiry Service and the End User refuses to pay certain sustained charges, USWC may adjust these charges without prior notification to USWLD. Inquiry Service also includes the application of credits and adjustments to End User accounts.

When providing Limited Inquiry, USWC assures USWLD that USWC will use commercially reasonable efforts at all times to give prompt, courteous, and efficient service to End Users, shall be governed in all dealings with End Users by the highest standards of honesty, integrity, and fair dealing, and will do nothing tending to discredit, dishonor, reflect adversely upon, or in any manner injure the reputation of USWLD or the Services covered by this Agreement and the quality image associated with USWLD or such Services.

F. Dispute Handling Service

When USWLD does not purchase Limited Inquiry Service, USWC will handle End User disputes in accordance with the procedures set forth in Exhibit E, Section 10. USWC has established a threshold for the number of Carrier Memorandums issued to USWLD on a monthly basis. Such threshold is .1% of the total number of bills rendered for the previous month. If USWLD exceeds such threshold, USWC will apply a Dispute Handling charge.

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Price Application and Provisioning Parameters

1. For purposes of this Section, the term "messages" shall include EMI detail and/or non-detail debit records, EMI detail and/or non-detail pre billing credit records, as well as, EMI detail and/or non-detail post billing adjustment records.

   A. Message Bill Processing shall be provided only if USWLD purchases Bill Rendering. Message Bill Processing charges apply on a per message basis, by state, on a monthly basis The rate of $.0250 will be applied when USWLD submits an average of 1-14.49 messages per bill in each state. The rate of $.0175 will apply when USWLD submits an average of 14.5 or more messages per bill in each state. At the end of each month, USWC will take a composite average of messages per bill and will determine the applicable rate described above.

   B. Bill Rendering charges are applied on a per bill basis.

2. When rated message detail is data-transmitted to or received from an exchange telephone company or USWLD location a charge for the transmission (Exhibit C, VI) applies in addition to the applicable charge for Message Rating (Exhibit C, II.A or B).

3. When rated message detail is entered on magnetic tape to be provided to USWLD, the per tape charge (Exhibit C, VI) applies for each tape in addition to the applicable charge for Message Rating (Exhibit C, II.A or B).

4. USWC shall perform Limited Inquiry Service pursuant to its Inquiry Guidelines. The rate for Limited Inquiry Service is applied on a per message billed basis.

5. USWC will apply a Dispute Handling Service charge for each EC Memorandum in excess of the threshold set forth above.

6. USWC shall perform collection services pursuant to its current treatment and collection procedures as described in Exhibit E.

7. Customized billing charges will be determined on an ICB.

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III. END USER ACCOUNT ACTIVITY SERVICE
(This service is optional and may be purchased as needed)

Description

End User Account Activity Service provides USWLD the ability to debit or credit an End User account. Currently the only service available is the issuance of a USWLD initiated Adjustment.

An Adjustment is a debit or credit applied to USWLD's business or residence End User account(s) as negotiated between USWLD and its End User and communicated to USWC by USWLD.

An Adjustment may be issued by USWC when notified by USWLD.

Price Application and Provisioning Parameters

1. An End User Adjustment charge applies for each Carrier Initiated Adjustment issued by USWC on behalf of USWLD regardless whether USWLD purchases Limited Inquiry Service. Where adjustments are issued by USWC as a result of Limited Inquiry Service, an End User Adjustment charge will not apply.

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IV. ANCILLARY SERVICES
(This service is optional and may be purchased as needed)

Description

Ancillary Services are additional products that enhance the primary billing and collection services. Currently the only Ancillary Service is Marketing Message.

Marketing Message is a message containing one (1) to ten (10) lines of information or marketing data on USWLD's Detail of Charges page of the End User's bill. A Marketing Message will be printed only when USWLD's toll charges, credits and/or adjustments are present.

USWLD will author each Marketing Message. USWC retains editorial judgment and the authority to reject any Marketing Message which USWC, in its reasonable judgment, determines to:

A. Violate existing legal or regulatory restrictions;

B. Contain text which is misleading, an invasion of privacy, degrading, libelous, unlawful, profane, obscene, pornographic, in bad taste, an infringement of a trademark, trade name or copyright belonging to others;

C. Contain text which is not telecommunications related;

D. Contain text with 800 number or dial around information to access to their - facilities;

E. Directly compete with an offering of USWC.

Price Application and Provisioning Parameters

1. Marketing Message is available only to customers who purchase Bill Rendering from USWC (Exhibit C, II).

2. Custom Request charges apply for each Marketing Message requested. The per unit charge applies per Marketing Message printed.

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V. BILLING ANALYSIS SERVICE
(This service is optional and may be purchased as needed)

Description

Billing Analysis Service provides for the detection, investigation, and deterrence of billing evasion activities. USWC can further provide services such as consultation, advice and training on handling billing evasion.

A. Detection

The provision of services to identify and report to USWLD any suspected billing evasion activities involving the use of its telephone facilities.

B. Investigation

The provision of services to collect evidence and document billing evasion activities. It includes the service to coordinate the investigative activities between USWLD and law enforcement agencies.

Investigation is also the provision of services to investigate and obtain restitution for billing evasion activities. It includes, but is not restricted to, calling card fraud, third number billing fraud, remote access fraud, and theft of service by wire.

C. Deterrence

The provision of services to 1) contact and interview parties identified in billing evasion activities, 2) recover devices or materials used in billing evasion activities, in accordance with legal process, 3) review service for possible suspension of service over USWLD access lines identified in billing evasion activities, and 4) assist in publicizing billing evasion deterrence.

D. Consultation

USWC has security personnel available to advise USWLD on any aspect of an investigation. These services may include advice on conducting assorted types of interviews, using information furnished by the Message Investigation Center, providing general advice on an investigation that is stalemated.

E. Training

USWC provides training to USWLD representatives on various aspects of billing analysis.

F. Miscellaneous Charges

Miscellaneous charges incurred by USWC on behalf of USWLD such as out-of-pocket expenses for travel shall be charged to USWLD.

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Price Application and Provisioning Parameters

1. Detection

Detection charges associated with the Continuous Scan and the Documentation Scan include only the cost of attaching and operating the appropriate equipment. The Continuous Scan provided will be charged on a per office per week basis. The Documentation Scan provided will be charged on a per line per occurrence basis.

Reports produced by USWC are secured, protected, and reviewed only with those with a need to know and delivered to the authorized USWLD security representative in a mutually agreed upon manner and on a mutually agreed upon schedule.

Reports produced by USWC for USWLD and the information contained on reports will remain the property of USWLD. Copies may be provided to the authorized USWLD security representative but will not be released to any other person or company without the consent of USWLD security representative except under legal process. USWLD agrees that the reports and the information contained therein shall be used for investigative purposes only.

The minimum period for Detection Service for which charges shall apply will be determined on an ICB.

2. Investigation

Investigative Service charges include the analysis and preparation of the reports generated from Detection Service as well as from any other investigative means. All Investigative Services shall be charged on a per hour basis with the exception of Preservation of Evidence which shall be charged on a per week basis (Exhibit C, V.B.).

3. Deterrence

Deterrence Services shall be charged on a per hour basis (Exhibit C, V.C.).

4. Consultation

Consultation shall be charged on a per hour basis (Exhibit C, V.D.).

5. Training

Training shall be charged on a per hour basis (Exhibit C, V.E.).

6. Miscellaneous Charges

Miscellaneous Charges shall be charged on an ICB.

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VI. MEDIA PROVISIONING SERVICE
(This service is optional and may be purchased as needed)

Description

Media Provisioning is the exchange of data between USWC and USWLD's primary location or a location designated by USWLD.

Media Provisioning options include::

A. Magnetic Tape
B. Cartridge
C. Data Transmission

Delivery for Tapes and Cartridges will be via U.S. Mail. Special requests, such as overnight delivery by USWC to USWLD, shall be charged to USWLD on an ICB.

Data Transmission is the exchange of data between USWC and USWLD or its designees via facilities furnished and/or paid for by USWC.

Price Application and Provisioning Parameters

1. A per tape charge shall apply regardless of the amount of data contained on the magnetic tape or a cartridge when USWC provides such data to USWLD. A charge does not apply when USWLD sends a tape or cartridge to USWC. The prices are set forth in Exhibit C,VI.

2. Data Transmission charges are applied on a per record basis for data exchanged when USWC provides the dedicated or dial-up facilities from USWC location to USWLD location or its designee (Exhibit C, VI). Data transmission charges apply on both an incoming and outgoing basis.

   Data Transmission charges also apply for messages that USWC receives via the Centralized Message Distribution System (CMDS) network.

   Data Transmission charges do not apply if the facilities are provided and/or paid for by USWLD. Data transmission charges do not apply for the internal transmitting of data between USWC processing centers, except if the data being moved is solely for the purpose of updating USWLD-owned marketing support systems.

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VII. CONSULTING SERVICE
(This service is optional and may be purchased as needed)

Description

Consulting Service is the professional and/or technical advice provided to USWLD. This service may include, but is not limited to; education classes, assistance in business activities, assistance in the preparation of a user needs document, development and coordination of user specifications or for other such needs.

Price Application and Parameters

1. Consulting service charges are based on a level of expertise required as determined by USWC. Services rendered may include, but are not limited to; Support (Clerical), Subject Matter Expertise, Technical Support, and Travel Expenses.

2. The per hour charge applies for the actual work performed during normal work schedule. (see Exhibit C, VII A.,B.,C.,D.).

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EXHIBIT C

PRICE LIST

THE PRICES IN THIS PRICE LIST ARE EFFECTIVE FOR A PERIOD OF 30 DAYS FROM THE DRAFT DATE ABOVE EXCEPT AS INDICATED.

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EXHIBIT C

PRICE LIST

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SERVICES REQUESTED BY CUSTOMER

CALLING CARD

RECORDING	
MESSAGE-BASED BILLING	
MESSAGE RATING WITH PROVISIONING	
MESSAGE RATING WITHOUT PROVISIONING	
BILL RENDERING	X
MESSAGE BILL PROCESSING	X
LIMITED INQUIRY	X
END USER ACCOUNT ACTIVITY	X
ANCILLARY	X
BILLING ANALYSIS	X
MEDIA PROVISIONING	X
CONSULTING	X

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1+ TOLL SERVICES

RECORDING	
MESSAGE-BASED BILLING	
MESSAGE RATING WITH PROVISIONING	X
MESSAGE RATING WITHOUT PROVISIONING	X
BILL RENDERING	X
MESSAGE BILL PROCESSING	X
LIMITED INQUIRY	X
END USER ACCOUNT ACTIVITY	X
ANCILLARY	X
BILLING ANALYSIS	X
MEDIA PROVISIONING	X
CONSULTING	X

Services selected by USWLD are purchased and effective with the effective date of the Agreement. USWLD may change the services selected by adding or discontinuing service elements by giving USWC thirty (30) day's prior written notice.

U S WEST LONG DISTANCE, INC.

Signature

Bob Tregonba
Printed Name

V.P. Operations
Title

6/9/97
Date

ACCEPTED BY
U S WEST COMMUNICATIONS, INC.

C. E. Osborn
Signature

C. E. Osborn
Printed Name

V.P - Diversified Carrier Markets
Title

June 17, 1997
Date

MALHEUR HOME TELEPHONE COMPANY

C. E. Osborn
Signature

C. E. Osborn
Printed Name

VP - Diversified Carrier Markets
Title

June 17, 1997
Date

Approved By
US West Law Department

Date 6/11/97

Initials M.H.C.

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APPENDIX I

STANDARD SERVICES

Notice
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I. CUSTOM REQUEST SERVICE PRICE LIST

The prices used to establish the Custom Request Service will be developed on an individual case basis. (Refer to Exhibit B, I.C.5). The price estimates provided to USWLD will be valid for a period of thirty (30) days from the date of the written estimate.

Examples of cost elements used in developing price estimates are machine time, programming (coding), system design, system development, project system testing, business office methods and procedures development, order writer training, service representative training, miscellaneous hardware requirements (e.g. disks, tape, cartridges, etc.).

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II. MESSAGE BASED BILLING SERVICE PRICE LIST

	SERVICE NAME	UNIT	PRICE PER UNIT	
A.	Message Rating with Provision of Message Detail	message	$ .0055	[1]
B.	Message Rating without Provision of Message Detail	message	$ .0045	[1]
C.	MTS Services			
	1. Message Bill Processing			
	a. Average of 1-14.49 messages per bill	message	$ .0250	
	b. Average of 14.5 or more messages per bill	message	$ .0175	
	2. Bill Rendering	bill	$ .4200	
D.	Limited Inquiry Service (USWC resolves refusal to pay)	message	$ .0200	
E.	Dispute Handling Service	per EC Memo	$ 14.00	

[1] DEVELOPMENT CHARGES
In addition to the above rates, set-up charges apply and will be provided upon receipt of specifications for Message Based Billing Service in accordance with the Custom Request Service.

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III. END USER ACCOUNT ACTIVITY SERVICE PRICE LIST

SERVICE NAME	UNIT	PRICE PER UNIT
Adjustment USWC Issued	Per Adjustment/Occurrence	$ 2.50

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IV. ANCILLARY SERVICES PRICE LIST

(This service is optional and may be purchased as needed)

SERVICE NAME	UNIT	PRICE PER UNIT
Marketing Message	Bill	$.03 (custom price)
DEVELOPMENT CHARGES		
Marketing Message		ICB

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V. BILLING ANALYSIS SERVICE PRICE LIST

(This service is optional and may be purchased as needed)

SERVICE NAME	UNIT	PRICE PER UNIT
A. Detection		
1. Continuous Scan	c.o. office	ICB
2. Documentation Scan	line	ICB
B. Investigation		
1. Analysis of Evidence	hour	$70.00
2. Preparation of Prosecutive Summary	hour	$70.00
3. Collection of Detailed Evidence	hour	$70.00
4. Preparation of Affidavit	hour	$70.00
5. Preservation of Evidence	week	ICB
6. Assistance to Law Enforcement	hour	$70.00
7. Provision of Expert Witness Analysis and Deposition Preparation	hour	$90.00
8. Provision of Expert Witness Testimony	hour	$90.00
9. Coordination Services	hour	$70.00
10. Preparation Reports	hour	$70.00
C. Deterrence		
1. Recovery of Devices	hour	$70.00
2. Contact and Interview Fraud Perpetrators	hour	$70.00
3. Service Review	hour	$70.00
4. Presentation of Deterrence/ Crime Awareness Programs	hour	$70.00
D. Consultation	hour	ICB
E. Training	hour	ICB
F. Miscellaneous Charges		ICB

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VI. MEDIA PROVISIONING SERVICE PRICE LIST

SERVICE NAME		UNIT	PRICE PER UNIT
A.	Magnetic Tape	Tape	$50.00
B.	Cartridges	Cartridge	$50.00
C.	Data Transmission	Per Record Transmitted or Record Rec'd	$ .0020
D.	Delivery		ACTUAL #

Note:

Charges apply for special requests only, such as, overnight, etc.

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VII. CONSULTING SERVICES PRICE LIST

(This service is optional and may be purchased as needed)

SERVICE NAME		UNIT	PRICE PER UNIT
A.	Support (Clerical)	hour	$ 60.00
B.	Subject Matter Expertise	hour	$ 80.00
C.	Technical Support	hour	$100.00
D.	Travel Expense	NA	ICB

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APPENDIX II

CUSTOM SERVICES

Custom Services include, but are not limited to, the following:

Per Unit Charge

Full Service Inquiry	TBD
Post-Billing Message Investigation Service	TBD

Recurring Charge

Non-Standard Reports	
Earned Unbilled Report	TBD
Tracking Report (MOU)	TBD
Development of Reports	ICB

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EXHIBIT D

ACCOUNTS RECEIVABLE

SETTLEMENT TERMS

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EXHIBIT D

ACCOUNTS RECEIVABLE SETTLEMENT TERMS

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ACCOUNTS RECEIVABLE SETTLEMENT TERMS

Section 1. General

1.1 In connection with providing Services to USWLD under this Agreement, USWC agrees to purchase the Accounts Receivable of USWLD as set forth in this Exhibit. For purposes of this Exhibit, the provisions of Section I.A of the Principal Agreement shall apply; whereby, all purchase of Accounts Receivable settlement functions, described in this Exhibit, will be identified at the USWLD level only.

1.2 USWC's purchase of USWLD's Accounts Receivable shall be with full recourse in accordance with Section 2 below.

1.3 At the option of USWC, USWC reserves the right to reformat reports, with respect to USWLD's Accounts Receivable, with thirty (30) days written notice to USWLD.

1.4 USWC will provide journal/general ledger information on a mechanized file by bill period by state.

Section 2. Calculation of Amount Due USWLD/USWC

2.1 USWC will calculate the Amount Due USWLD/USWC in the Purchase of Accounts Receivable ("PAR") settlements each month under this Agreement, using the following formula:

A + B +(-) C +(-) D+(-) E = F

F - G +(-)H +(-)I +(-)J = K

Amount Due USWLD/USWC = K

Where:

A. NET BILLABLE USAGE REVENUE:

The calculation of the amount of revenue received that is eligible to be billed (net billable usage revenue) by USWC.

B. NET BILLED RECURRING AND NON-RECURRING REVENUE:

The calculation of the amount of recurring and non-recurring revenue received eligible to be billed by USWC.

C. OTHER OPERATING REVENUE BILLED:

The amount of revenue billed during the settlement period other than toll revenues or expanded billing service revenues. Certain taxes are considered Other Operating Revenue.

D. BILLED TAXES:

The amount of federal, state and local taxes billed by USWC on behalf of USWLD during the settlement period.

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E. END USER BILLING ADJUSTMENTS:

The amount of billing adjustments (and associated tax adjustments) applied to End User accounts during the settlement period. These adjustments are recoursed back to USWLD.

F. SUBTOTAL:

The sum of Net Billable Usage Revenues (Line A), Net Billed Recurring and Non-Recurring Revenue (Line B), Other Operating Revenue Billed (Line C), Billed Taxes (Line D), and End User Billing Adjustments (Line E).

G. UNCOLLECTIBLE BAD DEBT ALLOWANCE:

An amount withheld from the settlement as an uncollectible reserve to offset future actual uncollectible amounts written-off USWLD's End User final bills.

H. REALIZED FINAL ACCOUNT UNCOLLECTIBLES:

Actual uncollectible amounts written off USWLD End User final bills for failure of the End User to pay lawfully billed charges for the settlement period.

I. LATE PAYMENT CHARGES:

The amount due USWLD or USWC for late payment penalties associated with Purchase of Accounts Receivable settlement transactions.

J. MISCELLANEOUS:

Any debit or credit amounts mutually agreed to by the Parties.

K. AMOUNT DUE:

The amount due USWLD or USWC for the settlement period. It is calculated by netting the PAR Statement Subtotal (Line F), Uncollectible Bad Debt Allowance (Line G), Realized Final Account Uncollectibles (Line H) and any Late Payment Charges (Line I) and any Miscellaneous (Line J). A negative amount would indicate the amount USWLD owes USWC.

2.2 A PAR settlement will be performed by state by billing period for USWLD.

2.3 In the event that a PAR settlement for a month yields a negative Amount Due USWLD, USWC will net that amount against any amounts due USWLD from other USWC Regions for the same settlement period. In the event that a PAR settlement yields a negative Amount Due USWLD for two (2) or more consecutive PAR settlements over all USWC Regions, USWLD shall make payment to USWC for the full amount of all outstanding PAR settlements pursuant to Section 6 below.

2.4 USWC reserves the right, at its sole discretion, to deduct (net) any amounts past due and owing USWC for any Services provided to USWLD, from any funds or proceeds due USWLD from USWC, from the PAR settlements.

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Section 3. Calculation of USWLD Uncollectible Bad Debt Allowance

3.1 Effective with the first PAR Statement and Bill Period thereafter for a period of six months, USWC will apply a factor of 4% for an Uncollectible Bad Debt Allowance (hereinafter "Allowance"). Such factor will be multiplied by the Subtotal (Line F) on the PAR Statement to determine the Allowance for the first six (6) months.

3.2 After the first six months and until USWLD has established twelve months of Service, USWC will track the uncollectible bad debt amounts. If USWC determines there is a significant change in billing with respect to current billed revenue and uncollectible bad debt amounts, USWC reserves the right to increase/decrease the Allowance.

3.3 After the first twelve months of Service, on a quarterly basis, USWC will track a six month average uncollectible bad debt amount based on the most current six months of Realized Final Account Uncollectibles. If the difference between the average uncollectible bad debt amount and the Allowance is greater than ten percent (10%) of the Allowance or is greater than one hundred thousand ($100,000), such difference will be added or subtracted from the Allowance and will be reflected on the following PAR Statement. USWC reserves the right to review the uncollectible bad debt amounts more frequently than on a quarterly basis and to make an adjustment to the Allowance in accordance with the provisions described herein.

Section 4. Recourse of Realized Final Account Uncollectibles

4.1 On a monthly basis, USWC will identify all USWLD End User accounts written off by USWC as uncollectible after a final bill has been rendered at either the account or entity level and shall compute the realized uncollectibles. Such realized uncollectibles will be recoursed to USWLD on the monthly PAR Statement. USWC will provide USWLD documentation reflecting uncollectibles by Billing Telephone Number ("BTN"), at the account or entity level, by the 15th of each calendar month for the previous month's data.

Section 5. Payment Date

5.1 For any PAR settlement, the Payment Date for the payment of the Amount Due USWLD or USWC shall be the date determined by a Weighted Average Payment Date of message revenue received from USWLD and processed by USWC during the settlement month plus the average number of days until expected billing plus the number of days calculated in the most recent End User Payment Lag Study.

5.2 If such payment date falls on a Sunday or on a holiday which is observed on a Monday, the payment date shall be the first non-holiday day following such Sunday or holiday.

5.3 If such payment date falls on a Saturday or on a holiday which is observed on Tuesday, Wednesday, Thursday, or Friday, the payment date shall be the last, non-holiday day preceding such Saturday or holiday.

5.4 In the event there are no message revenues received from USWLD during a calendar month or if the PAR settlement yields a negative

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Amount Due as described in Section 2.3 above, the payment date for the Amount Due USWLD/USWC will be the last business day of the month following the PAR settlement month.

Section 6. Payment Method

6.1 Any payment to USWLD from USWC or to USWC from USWLD will be transmitted by USWC or USWLD to a designated bank account of USWLD or USWC by electronic funds (wire or ACH) transfer. Payment must result in immediately available funds upon receipt by the other party. Any portion of the Amount Due USWLD or USWC received by USWLD or USWC in funds which are not immediately available to USWLD or USWC on the payment date will be subject to a late payment penalty.

Section 7. Late Payment Penalty

7.1 With respect to the PAR settlement, any amounts owing by USWLD or USWC, which do not comply with the payment methods set forth in Section 6 above will be subject to a late payment penalty. The late payment penalty shall be the portion of the Amount Due USWLD or USWC (as defined in Section 2 above) received after the Payment Date times an interest factor. The late payment interest factor is the Commercial Paper Interest Rate as described in Section 8 below.

7.2 Any late payment resulting from bank error will not be subject to the late payment penalty provided the sending party (party making payment) can verify that it was not at fault. It is the responsibility of the sending party to notify the banks involved and coordinate resolution of the discrepancy.

Section 8. Commercial Paper Interest Rate

8.1 Except for the provisions of Section VII of the Agreement, any amounts owed by USWLD or USWC may be subject to the time value of money interest rate due to temporary dislocations of financial resources. The time value of money interest rate will be represented by the Federal Reserve AA dealer commercial paper rate as of the last work day of the appropriate month for ninety (90) day commercial paper.

Section 9. Notification of Disputed Accounts Receivable Amount

9.1 Should either party dispute any portion of the amount due; said party shall notify the other party in writing of the nature and basis of the dispute within a reasonable period of time from the date of discovery of that which gave rise to the dispute. The substantiated claim should be provided by the claiming party with sufficient detail to allow investigation by the other party.

Section 10. Payment of Disputed Accounts Receivable Amount

10.1 Should the dispute not be resolved by the Payment Date, the PAR settlement amount shall be due and payable in full as described in Section 6 above. The claiming party reserves the right to have claim against the other party for reimbursement until the dispute is resolved.

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Section 11. Ultimate Settlement of Disputed Accounts Receivable Amount

11.1 In the event that either party files a substantiated claim, the receiving party will have thirty (30) days from the notification date, or other mutually agreed period, to acknowledge receipt of the claim and inform the notifying party of the claim status. Should the claim, in whole or in part, ultimately be resolved in favor of the claiming party, that party shall be entitled to a refund, with interest, from the other party to the extent the claim was substantiated. The amount of said refund, including interest, shall be an amount equal to the substantiated claim amount plus interest calculated using the Commercial Paper Interest Rate , set forth in Section 8 above.

11.2 If the claim is received within six (6) months of the PAR settlement date, the interest will be calculated by applying the Commercial Paper Interest Rate set forth in Section 8 above from the PAR settlement payment date through the claim resolution and remittance date.

11.3 If the claim is received after six (6) months from the PAR settlement date, the interest will be calculated by applying the Commercial Paper Interest Rate set forth in Section 8 above from receipt of the claim notification through the claim resolution and remittance date.

11.4 Payment must result in immediately available funds on the Payment Date. The total amount of the claim shall be paid no later than thirty-one (31) business days after written notice to the claiming party that the claim has been resolved.

Section 12. Retention of Supporting Data Concerning Disputed Amount

12.1 Both parties shall retain such detailed information as may reasonably be required for resolution of the disputed amount during the duration of the dispute.

Section 13. End of Agreement Settlements

13.1 In the event USWLD discontinues submitting its messages for billing and/or this Agreement is terminated, USWC will prepare a PAR Statement each month for twelve months thereafter. During such time, the Allowance will be used to offset future settlement amounts due USWC. If, during the final twelve months, an amount due USWC is not covered by the Allowance, USWLD agrees to pay the amount due USWC by the payment due date. If, at the end of the final twelve months, an amount is left in the Allowance, USWC agrees to pay the amount due USWLD by the payment due date.

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EXHIBIT E

TREATMENT AND COLLECTION POLICY

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EXHIBIT E

TREATMENT AND COLLECTION POLICY

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TREATMENT AND COLLECTION POLICY

Section 1. GENERAL

1.1 This Exhibit E sets forth a general overview of treatment and collection activities performed by USWC on behalf of USWLD's End Users. Notwithstanding Section XXI of this Agreement, USWC may modify the operational procedures described in this Exhibit E upon thirty (30) day's written notice to USWLD. Any modification to such procedures will be intended to improve results. All changes required by regulatory authorities will be made in accordance with the rulings of the regulatory authority.

Section 2. END USER BILL

2.1 The End User bill will indicate the previous balance and the total amount owing at the account level.

2.2 The End User bill will identify a "pay by date" for payment of total amount owing on an account level.

Section 3. LIVE TREATMENT AND COLLECTION

3.1 Live treatment decision criteria for a given End User account is the same for all interexchange carrier customers, regardless of the restriction capabilities - Entity Specific Denial, Full Toll Denial, Full Service Denial, as those terms are described in this Section. End User accounts will be considered treatable when the Remove from Treatment Amount ("RTA") has been exceeded. The RTA shall vary dependent upon End User customer risk or non-risk credit classification as determined by USWC.

3.2 Treatment and denial activity is dependent upon the regulatory requirements of each state and technical capabilities. Subsections 3.3 through 3.5 describe the different kinds of treatment and denial activities used within USWC.

3.3 Entity Specific Treatment

A. Entity Specific Treatment is initiated when individual entity charges exceed the entity RTA.

B. Entity Specific Treatment shall be used for USWLD's End User accounts served out of Central Offices that have the technology to deny on an individual carrier basis and where approved by state regulatory rules.

C. A Deny Notice is generated to the End User when an entity(s) RTA has been exceeded on a given End User account. All entities will be displayed on the same Deny Notice and only one Deny Notice is issued to an End User in a billing month.

3.3.1 Entity Specific Denial

A. USWC shall follow its Treatment and Collection procedures up to and including denial activity. When an account reaches a denial status USWC will: i) Block LIDB; ii) Send notification to USWLD of denial activity.

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B. When an End User account has been denied, USWC shall continue treatment on USWLD's portion of the account. Treatment will include issuing entity final bills and performing the associated collection functions.

C. USWC will notify USWLD that service to the End User has been restored after the account is made current and secured as appropriate.

3.4 Group Treatment

A. Group Treatment is initiated when a group of comparable carrier charges exceeds the group RTA.

B. Group Treatment shall be used for USWLD's End User accounts where approved by state regulatory rules and where technically feasible.

C. USWLD cannot elect to be exempt from Group Treatment.

D. A Deny Notice is generated to the End User when group RTA criteria has been exceeded on a given End User account. All entities will be displayed on the same Deny Notice and only one Deny Notice is issued to an End User in a billing month.

3.4.1 Full Toll Denial

A. Full Toll Denial is the restriction of direct dialed and LIDB validated alternate billed access to all carrier networks without restricting access to the local network.

B. USWC will block via Full Toll Denial on behalf of USWLD where approved by state regulatory rules and where technically feasible.

C. USWC will notify USWLD that service to the End User has been restored after the account is made current and secured as appropriate.

3.5 Account Level Treatment

A. Account Level Treatment is initiated when total account charges exceed account RTA.

B. USWC shall utilize Account Level Treatment on behalf of USWLD in those Central Offices where Entity Specific Denial or Group Treatment is not available.

C. A Deny Notice is generated to the End User when the account level RTA has been exceeded on a given End User. The Deny Notice identifies the total amount owing for the account.

3.5.1 Full Service Denial

A. Full Service Denial is the restriction of access to all telephone network services when the combined charges for all entities, including local service charges, are not paid.

B. USWC shall block via Full Service on behalf of USWLD unless prohibited by state regulatory rules.

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C. USWC will perform denial functions which will prevent the End User from accessing the USWLD network. Denial functions include, but are not limited to, blocking network access.

D. USWC will notify USWLD that service to the End User has been restored after the account is made current and secured as appropriate.

Section 4. CUSTOMER NOTIFICATION OF DENIAL

4.1 USWC will use best efforts to notify USWLD via CARE or other mutually agreed upon medium that an End User should be denied. USWLD will again be notified via CARE, or other mutually agreed upon medium when the End User's account is restored.

Section 5. PAYMENT ALLOCATION

5.1 End Users shall have the right to direct application of payments to specific entity amounts due. In the absence of such End User payment designation, USWC shall apply payments to the receivables using a pro rata method or in accordance with state regulatory rules as described in Section 5.2 below. This pro rata is based on the percentage owing for each entity receivable to the total amount owing on the account. The percentage established for each entity shall be used as the percentage of the payment applied to each entity receivable.

5.2 In the event state regulatory rules direct USWC to use another method for designating End User payments, USWLD understands and agrees that USWC shall comply with such regulatory direction.

5.3 End Users shall be advised of their payment direction rights and of the default payment allocation method.

Section 6. ADMINISTRATION OF CUSTOMER'S RESIDENCE AND BUSINESS END USER DEPOSITS

6.1 USWC may collect a deposit on new and existing USWLD End User accounts based on known or unknown credit risk, consistent with state regulatory rules.

6.2 USWC may request a deposit on existing USWLD End User accounts when an account has been Entity Specific, Full Toll or Full Service Denied for non-payment of account charges.

6.2.1 If, on an existing account, USWC determines the USWLD deposit is not sufficient, USWC may negotiate for a larger deposit on behalf of USWLD.

6.2.2 Deposits may be waived if, in the judgment of USWC personnel, such allowance should be given. Service may be restored without deposit when, in the judgment of USWC personnel, such allowance should be given.

Section 7. DISPOSITION OF CUSTOMER'S DEPOSITS

7.1 Deposits negotiated and secured by USWC, on behalf of USWLD, will be maintained in the event of unpaid USWLD charges. USWC will return and refund USWLD's deposit to the End User using the same criteria it uses for all other customers of billing and collection services.

7.2 Deposits that are retained by USWC accumulate simple interest or at state regulatory commission prescribed interest rates. At the time of USWLD or total

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account disconnection, or such time as the End User has reestablished credit. USWC will apply the deposit (including interest) to USWLD's portion of the End User bill.

Section 8. FINAL TREATMENT AND COLLECTIONS

8.1 All final treatment is mechanized and each entity or account that is finaled will be treated until the entity or account final bill is paid or written off. Once an entity or an account is finaled, USWC will continue to attempt to collect. USWC may refer any entity or final bill to an outside collection agency for collection action.

8.2 Payments received after an entity or account is disconnected will be allocated as described in Section 5 of this Exhibit.

Section 9. CUSTOMER END USER DISPUTE HANDLING WITHOUT LIMITED INQUIRY SERVICE

9.1 A dispute is an unresolved claim whereby an End User refuses to pay a specific USWLD charge(s).

9.2 The following dispute procedures shall apply when USWLD does not purchase Limited Inquiry Service.

9.2.1 When an End User contacts USWC disputing USWLD charge(s) on the shared bill, USWC will refer the End User to USWLD. If the End User refuses to contact USWLD or has already contacted USWLD but does not consider the dispute resolved, USWC will notify USWLD via the Carrier Memorandum process. USWC will identify the End User, the charge(s) in question, the nature of the dispute and the call detail. This information is sent to USWLD as an initial notification. USWLD shall contact the End User, resolve the dispute and will respond to USWC with a detailed disposition of the dispute via the EC Memorandum within thirty (30) calendar days.

9.2.2 Subsequent to day thirty-one (31), USWC will check the End User account and:

1) If USWLD has made an Adjustment, USWC considers the charge(s) in question to be resolved.

2) If USWLD sustained the disputed charge(s), USWLD will send USWC an EC Memorandum indicating the charge(s) has been sustained and any other pertinent information. USWC will continue to pursue collection action. If the End User continues to refuse to pay the USWLD sustained charge(s), USWC will issue a Refusal to Pay adjustment to the End User's account. The End User will be advised that the charge(s) are not forgiven and that USWLD has the right to block the End User's access to the USWLD network or pursue other collection activity.

3) If USWLD has not made an adjustment or sustained the charge(s), USWC will issue the adjustment on the End Users account.

9.3 In the case of obvious fraud or abuse by the End User involving the dispute process, USWC reserves the right to refuse to adjust the charge(s) and to treat the End User on an individual case basis, up to and including denial.

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Section 10. CUSTOMER END USER DISPUTE HANDLING WITH LIMITED INQUIRY

10.1 A dispute is an unresolved claim whereby an End User refuses to pay a specific USWLD charge(s) and USWC cannot resolve the dispute.

10.2 The following procedures shall apply when USWLD purchases Limited Inquiry Service as described in Exhibit B. Section II.

10.2.1 When an End User contacts USWC disputing USWLD charge(s) on the shared bill, USWC will make every attempt to sustain the charge(s). If the End User refuses to pay for the charge(s), USWC will adjust the charge(s) as a Refusal to Pay. The thirty (30) day dispute Carrier Memorandum process does not apply. The End User will be advised that the charge(s) may not be forgiven and that USWLD has the right to block the End User's access to the USWLD network or pursue other collection activity.

10.2.2 In the event an End User disputes a portion of the USWLD charge(s), i.e., a discount amount, USWC may negotiate a partial adjustment amount on behalf of USWLD.

10.3 In the case of obvious fraud or abuse by the End User involving the dispute process, USWC reserves the right to refuse to adjust the charge(s) and to treat the End User on an individual case basis, up to and including denial.

Section 11. BANKRUPTCY

11.1 In the event an End User files bankruptcy, USWC will file proofs of claim and amended proofs of claim, on behalf of USWLD, when in USWC's discretion the filing of a proof of a claim is likely to result in the claim being paid.

11.2 USWC shall not represent USWLD in any hearings, creditors' committee meetings or other court matters regarding the filed proofs of claim.

Section 12. POLITICAL ACCOUNTS

12.1 USWC shall require security on all political accounts billed by USWC on behalf of USWLD.

12.2 When USWLD's portion of a given political account receivable is considered uncollectible, it shall be subject to final bill recourse.

12.3 USWLD shall be responsible for filing reports, as required by the FCC, regarding security on USWLD's political accounts.

12.4 USWC shall not represent USWLD in any court or agency matter.

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EXHIBIT F

PERFORMANCE BASED PRICING PLAN

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EXHIBIT F

PERFORMANCE BASED PRICING PLAN

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PERFORMANCE BASED PRICING PLAN

Section 1. General

1.1 The parties desire to control the amount of uncollectible bad debt on USWLD's End User accounts for which USWC bills and collects. Furthermore, the parties desire to implement a schedule of Message Ready bill rendering rates based on the level of USWC's performance of collection activities for USWLD End User accounts (hereinafter referred to as the "Performance Based Pricing Plan").

1.2 USWLD reserves the right to conduct an Audit pursuant to Section IX of the B&C Agreement. However, USWLD shall not file revenue claims against USWC based on USWC's Business Office Collection Performance.

1.3 The Performance Based Pricing Plan is offered to USWLD in accordance with Section VII.C.1.

1.4 USWC will establish the Performance Based Pricing Plan on the commencement of USWLD's submitting 1+ traffic to USWC under USWLD's primary CIC for January, 1998 through December, 1999.

1.5 USWLD agrees that all new services implemented under the Performance Based Pricing Plan will be mutually agreed upon for inclusion in this Plan.

1.6 The Performance Based Pricing Plan applies only to USWLD messages in a USWC shared End User bill.

Section 2. Exclusions

2.1 The Performance Based Pricing Plan will exclude the following services:

International Originated Collect Calls
900 Services
Pay-Per-Call
Specialized Services & Products

Section 3. Definitions

Business Office Collection Performance

All treatment and collection activities (including systems that support treatment and collection activities), both manual and mechanized, performed by USWC on behalf of USWLD, commencing when the pay-by date is not met and continuing through the date at which the account is referred to an outside collection agency.

Plan Billed Revenues

End User Billed Revenues used in the settlement of the Performance Based Pricing Plan and consisting of USWLD's and Message Ready accounts receivables purchased by USWC.

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Settlement Period

The time period covering Plan Billed Revenues associated with accounts receivable purchased by USWC from January 1st through December 31st annually for the term of the Agreement.

Section 4. Performance Based Pricing Plan

4.1 Scope:

4.1.1 The Performance Based Pricing Plan will consist of USWLD Billed Revenue dollars purchased by USWC. USWLD understands that under this Exhibit F, Performance Based Pricing Plan, it may be eligible for a discounted/adjusted Bill Rendering rate.

4.1.2 USWC will settle using the appropriate Bill Rendering rate when USWLD has met the billed revenue volume and performance described in Appendix 1 of this Exhibit.

4.1.3 USWLD Billed Revenue received in each calendar year will be annualized to calculate the billed revenue volume. USWLD must meet or exceed the $250,000,000 level in End User Billed Revenue.

4.1.4 The applicable bill rendering rate will apply for each month of the Plan Period and will appear on the USWLD B&C Invoice.

4.2 Responsibilities of the Parties:

4.2.1 USWLD agrees that messages submitted to USWC for billing shall not be older than ninety (90) days.

4.2.2 USWLD understands the Performance Based Pricing Plan shall apply only in those states where USWC has Full Toll Denial (FTD) or Selective Carrier Denial (SCD) capability or any other denial service offering to deny local service or access to USWLD's network for non-payment of USWLD services.

4.2.3 In the event a legislative, regulatory, judicial order or activity limits USWC's ability to collect, USWLD and USWC will jointly assess the affect of such order or activity and will modify the Performance Based Pricing Plan within thirty (30) days of completion of the assessment.

4.2.4 USWLD will not request that USWC waive a deposit on an End User account under this Performance Based Pricing Plan.

4.2.5 USWLD understands that USWC reserves the right to terminate this Exhibit upon thirty (30) day's written notice to USWLD in the event USWC no longer offers Pricing Performance Plans. However, in no event shall this Exhibit F extend beyond December 31, 1999.

4.2.6 This Performance Based Pricing Plan will be in effect only if USWLD is in compliance with the Principal Agreement and all Exhibits, Attachments, Supplements and Addenda thereto.

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4.2.7 When technically feasible, USWC will begin to reject USWLD's PIC change requests on accounts denied for non-payment of toll charges.

4.3 Formula for Calculation of Plan

4.3.1 The net bad debt (NBD) percent will be determined by dividing the Actual Realized Uncollectibles for the Associated Settlement Period by the Settlement Period Billed Revenues as described in Exhibit D, Section 3, of the Agreement, less exclusions stated in Section 2 of this Exhibit F.

4.3.2 The settlement amount will be determined by using the $0.42 bill rendering rate set forth in Appendix 1, Performance Pricing Plan Matrix, as the base rate. The calculation will be made annually as follows:

The $0.42 rendering rate is subtracted from USWLD's actual performance level. The difference is multiplied by the number of bills rendered on the USWLD B&C Invoice to yield a settlement amount.

If the settlement is a positive amount, USWC will make a credit adjustment to USLWD's B&C Invoice. If the settlement is a negative amount, USWLD will receive a debit adjustment on the B&C Invoice.

4.3.3 USWC will notify USWLD in writing in the event Billed Revenue is not met during the Settlement Period. In such event, there will be no settlement amount due USWLD and the terms and conditions of this Agreement shall not apply for the Settlement Period.

4.4 Settlement

4.4.1 The settlement calculation for the Performance Based Pricing Plan shall be separated from the PAR process as described in Exhibit D.

4.4.2 Settlements shall occur each year on September 30th, beginning in 1999 and continuing throughout the year 2000, unless terminated earlier under terms and conditions set forth in Section XVII of the Principal Agreement and set forth in Section 4.2.5 above.

4.4.3 In the event a settlement amount due either party is late, an interest rate will apply to the settlement amount in accordance with Section VII of the Agreement.

4.5 Settlement Report

4.5.1 USWC will prepare on a monthly basis a tracking report by state. The report will be published monthly throughout the plan year identifying the NBD and Billed Revenue levels to support the Pricing Plan.

4.6 Termination of Performance Plan

4.6.1 In the event USWC terminates this Exhibit F, USWC will calculate a settlement for Plan Billed Revenues through the month in which

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termination occurred. USWC will calculate a settlement as described in Section 4.5 above. Any remaining months will be settled within ninety (90) days after USWC determines the Realized Final Account Uncollectibles for such Plan Billed Revenues.

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APPENDIX 1

SCHEDULE OF BILL RENDERING RATES

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APPENDIX 1
SCHEDULE OF BILL RENDERING RATES

Based on Volume of Billed Revenue (Receivables) And Bad Debt Performance (%NBD)

Bill Rendering Rate Per Bill	Billed Revenue >/=$250M	Billed Revenue < $250M
	USWLD % NBD	USWLD % NBD
RATE	[redacted]	[redacted]
0.46	2.50 or Less	[redacted]
0.44	2.51 - 3.50	[redacted]
0.42	3.51 - 4.50	ANY
0.40	4.51 - 5.00	[redacted]
0.38	5.01 - 5.50	[redacted]
0.36	5.51 or More	[redacted]

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"Your Bill" Agreement

AGREEMENT FOR U S WEST *YOUR BILL* SERVICES

THIS AGREEMENT for the Provision of ***Your Bill*** Services (hereinafter "Agreement") is entered into this 1st day of June 19 97 between U S WEST Communications, Inc., a Colorado Corporation (hereinafter referred to as "USWC") and U S WEST Long Distance, Inc., a Colorado corporation, (hereinafter referred to as "USWLD"), acting through their authorized representatives.

1. Services

Subject to the terms of this Agreement, USWC agrees to provide and USWLD agrees to purchase ***Your Bill*** services for Remittance Processing, as each is further described herein and in exhibits hereto ("Services").

2. Term

This Agreement will be effective January 1, 1998 and will continue in effect for a period of two years thereafter unless terminated earlier under the provisions of Section 8, "Default," or upon ninety (90) days' prior written notice by USWLD to USWC.

3. Prices, Payment and Late Charges

A. USWLD will pay USWC for Services covered under this Agreement at the rates stated in Exhibits hereto and for all applicable taxes. USWC reserves the right to adjust prices within one year of the effective date of the Agreement upon thirty (30) days prior written notice. In the event that such adjusted prices are not acceptable to USWLD, USWLD may terminate this Agreement by giving USWC thirty (30) days' written notice.

B. Amounts payable under this Agreement are due and payable within thirty (30) days after the date of USWC's invoice. USWLD shall have the right for a period of one hundred, twenty (120) calendar days following the receipt of invoice to initiate a dispute by notifying USWC in writing of the event of any dispute relating to the invoice. Should the dispute not be resolved by the invoice due date, USWLD shall, notwithstanding the continuing existence of the dispute, pay the invoice amount in accordance with the terms defined in this Agreement, but USWLD shall reserve and have claim against USWC for reimbursement after the dispute is resolved. Both parties shall retain such detailed information as may reasonably be required for resolution of the disputed amount during the duration of the dispute.

C. Any amount not paid within thirty (30) days of the date of the applicable invoice shall bear a late charge equal to the lessor of:

1) The highest interest rate (in decimal value) which may be levied by law compounded daily for the number of calendar days from the payment due date to and including the date that USWLD actually makes the payment to USWC, or

2) 0.0003 per day compounded daily for the number of calendar days from the payment due date to and including the date that USWLD actually makes the payment to USWC, which would result in an annual percentage rate of 12%.

If any adjustment is due USWLD, USWC shall reflect such adjustment on an invoice including interest at the rate of 0.0003 per day compounded daily for the number of calendar days from the date of payment to the adjustment date.

Any tax or related charge, excluding income tax, which USWC will be required to pay to or collect for any government upon or with respect to Services rendered, will be billed to USWLD as a separate item and paid by USWLD unless a valid exemption certification is furnished by USWLD to USWC.

4. Indemnification

A) With respect to third party claims, each of the parties agrees to release, indemnify, defend and hold harmless the other party and each of its officers, directors, employees and agents from and against and in respect of any loss, debt, liability, damage, obligation, claim, demand, judgment or settlement of any nature or kind, known or unknown, liquidated or unliquidated including, but not limited to, costs and attorneys' fees, whether suffered, made, instituted, or asserted by any other party or person, for personal injury to or death of any person or persons, or for loss, damage to, or destruction of real or personal physical property, whether or not owned by others, resulting from the indemnifying party's performance; or for failure to perform under this Agreement, regardless of the form of action.

B) The indemnification provided herein shall be conditioned upon:

1) The indemnified party shall promptly notify the indemnifying party of any action taken against the indemnified party relating to the indemnification.

2) The indemnifying party shall have sole authority to defend any such action, including the selection of legal counsel, and the indemnified party may engage separate legal counsel only at its sole cost and expense.

3) In no event shall the indemnifying party settle or consent to any judgment pertaining to any such action without the prior written consent of the indemnified party.

5. Limitation Of Liability

USWC shall exercise commercially reasonable efforts to provide Services as described in this Agreement. USWC does not otherwise warrant or guarantee Services, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose. Either party's liability, regardless of circumstances, is limited to the amount paid by USWLD for the Services giving rise to a claim AND IN NO EVENT WILL EITHER PARTY BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF USE, LOSS OF PROFIT, OR ATTORNEY'S FEES.

6. Trademarks: Intellectual Property

Neither party may use, for any purpose, the other party's name or logo, in any form or abbreviation, nor its trade name(s), trademarks, or service marks, unless otherwise mutually agreed in writing by both parties. USWLD understands and agrees that any software employed by USWC in the provision of Services hereunder is and shall remain the valuable, proprietary and confidential property of USWC.

7. Force Majeure

Neither party shall be liable to the other for delays or failure in performance, or for loss or damage, due to fire, explosion, power blackout, earthquake, volcanic action, flood, strike, war, civil disturbance, governmental requirements, acts of God or such similar causes beyond the parties' reasonable control.

8. Default

In the event that either party defaults in the performance of any obligation under this Agreement and such default is not cured and corrected within thirty (30) days of written notice thereof (or such time as may be reasonable if so specified in the notice), then the non-defaulting party may immediately terminate this Agreement or terminate as otherwise provided in this Agreement, and pursue an action to recover damages as permitted by this Agreement.

9. Notices

Except as otherwise provided under this Agreement, all notices, demands or requests which may be given by any party to the other party shall be in writing and shall be deemed to have been duly given on the date delivered in person or three (3) days after being deposited, postage prepaid, in the United States mail and addressed as listed below or if transmitted by facsimile, upon issuance of the document receipt report at the sending location:

U S WEST Long Distance, Inc.
1801 California, Suite 2800
Denver, Colorado 80202
Attn: Kevin Phelps

U S WEST Communications, Inc.
1801 California, Room 2130
Denver, Colorado 80202
Attn: Carol Janousek

Each party may change its representative by giving written notice to the other party.

10. Assignment

Either party may assign its rights and obligations hereunder, or any portion thereof, to a parent corporation, or a subsidiary of a parent corporation, upon prior written notification to the other party. Any other assignment or attempted transfer by USWLD is prohibited.

11. Non-Waiver

A failure, on any occasion, by either party to enforce or insist upon compliance with any provision of this Agreement, shall not constitute a general waiver of its right to enforce that or any other provision of this Agreement on any other occasion.

12. Confidentiality

A. As used herein, "Confidential Information" shall mean information disclosed by one party to the other in the course of providing Services.

B. The parties agree to hold such Confidential Information in strictest confidence and shall use same solely for the purposes of this Agreement unless otherwise authorized in writing. Neither party shall disclose such Confidential Information to anyone except employees, agents, consultants or subcontractors to whom disclosure is necessary for the purposes set forth in this Agreement. The parties shall appropriately notify each such employee, agent, consultant and/or subcontractors that such disclosure is made in confidence and must be kept in confidence in accordance with this Agreement. Each party may only provide such confidential information if it secures the agent's, consultant's or subcontractor's written agreement to be bound by the terms of this Agreement.

C. In the event permission is granted by a party to copy that party's Confidential Information, the receiving party agrees that each such copy shall contain and state the same confidential or proprietary notices or legends which appear on the original. Nothing in this Agreement shall be construed as granting any right or license under any copyrights, inventions or patents now or hereafter owned or controlled by either party.

D. The obligations imposed in this Agreement shall not apply to any information that is:

1) already in the possession of the parties;
2) is or becomes publicly available through no fault of either party;
3) is received from a third party free to disclose it to a party;
4) is independently developed by either party; or
5) is communicated to a third party with express written consent of the parties.

E. Without the prior consent of the other, neither party shall disclose to any third person, excluding those identified in paragraph B above, the existence or purpose of this Agreement, the terms or conditions hereof, or the fact that discussions are taking place and that Confidential Information is being shared, except as may be required by law and then only after first notifying USWC of such required disclosure. Furthermore, neither party nor its agents shall reveal the other as the source of Confidential Information described in this Agreement without its express, written consent.

F. Neither party will disclose any subscriber account information with respect to accounts for which Services are provided hereunder, with the exception of that which is necessary to perform Services, including, but not limited to, subscriber

account information such as Customer Account Number, Bill Name and Address, and Amount Due.

13. Lawfulness

This Agreement and the parties' actions under this Agreement shall comply with all applicable federal, state, and local laws, rules, regulations, court orders, and governmental agency orders. This Agreement shall only be effective when mandatory regulatory filing requirements are met, if applicable. If a court or a governmental agency with proper jurisdiction determines that this Agreement, or a provision of this Agreement, is unlawful, this Agreement, or that provision of this Agreement shall terminate on written notice to USWLD to that effect. If a provision of this Agreement is so terminated but the parties legally, commercially, and practicably can continue this Agreement without the terminated provision, the remainder of this Agreement shall continue in effect.

14. Survival of Obligations

Each party's obligations under this Agreement which by their nature would continue beyond the termination, cancellation or expiration of this Agreement shall survive termination, cancellation or expiration of this Agreement.

15. Dispute Resolution

A. All disputes between the parties with respect to Services provided hereunder shall be escalated through normal business procedures to the officer level prior to the commencement of any arbitration proceeding.

B. Any claim, controversy or dispute between the parties shall be resolved by arbitration in accordance with the then current rules of the American Arbitration Association. The arbitration shall be conducted by a single arbitrator engaged in the practice of law. The arbitrator's decision and award shall be final and binding and may be entered in any court with jurisdiction.

16. Custom Request Service

Custom Request Service is the provision of new products, services or changes to existing products or services in response to USWLD's request and for which no standard price has been established. All Custom Requests will be reviewed by USWC to determine the feasibility of implementing the request and USWC reserves the right to deny any request. Where USWC agrees to provide the Custom Request Service, an estimate will be prepared based upon user needs document and/or specifications supplied by USWLD. Custom Request Service may be provided by amendment to this Agreement or by separate agreement, as mutually agreed by the parties.

17. Amendment

Amendments or modifications will be invalid unless made in writing and signed by both parties.

18. Third Party Beneficiaries

This Agreement shall not provide any person not a party to this Agreement with any remedy, claim, liability, reimbursement, claim of action or other right in excess of those existing without reference to this Agreement.

19. Jurisdiction

This Agreement and the obligations of the parties hereunder shall be construed and governed in accordance with the laws of the State of Colorado.

20. Complete Agreement

This Agreement, together with all attachments, constitutes the entire understanding of the parties with respect to the Services provided hereunder and supersedes all prior understandings, oral or written representation, statements, negotiations, proposals and undertakings. Neither party will be bound by any other representations.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the date first written above.

U S WEST LONG DISTANCE, INC.

Kathy Stephens
Signature

Kathy Stephens
Name

Vice President
Title

5-29-98
Date

U S WEST COMMUNICATIONS, INC.

Signature C. E. Osborn

Name C. E. Osborn

Title V.P.-Diversified Carrier Mkts

Date May 29, 1998

Approved By LB
U S West Law Department
Date: 6-1-98

EXHIBIT A
Remittance Processing Services

This Exhibit A states the terms and conditions under which USWC will provide Remittance Processing Services to USWLD. The terms and conditions of the Agreement shall apply except as modified herein. To the extent of any conflict or inconsistency between the Agreement and this Exhibit, the provisions of this Exhibit shall control.

1. Description of Services

USWC will provide personnel and resources to perform remittance processing activities as described below.

Basic Remittance Processing Services include, but are not limited to, collection of envelopes mailed by USWLD's end users to the Post Office Box assigned, extraction of envelope contents, processing contents as described below, depositing funds in USWLD's designated bank account, and preparation of reports and/or transmission of data related to payments processed.

An interim process will be implemented to handle the low volumes of payments expected in March, April and May 1998, while development work is completed to implement a mechanized process. The target date for implementation of mechanized processing is June, 1998 to accommodate the expected, significant increase in payments per month.

Performance of the specific functions included in Services assumes that USWLD provides its customers a machine readable return document and window envelope, in conformance with specifications provided by USWC.

Initiation of Services will not begin prior to the successful completion of all tests agreed to by USWC and USWLD. All such tests must be completed successfully not less than ten (10) days prior to initiation of Service or as otherwise agreed to by both parties.

The parties understand and agree that schedules established for Service elements including, but not limited to, transmission cutoff, mail collection, and same day deposits, are dependent on a number of factors beyond the control of the parties, including time zone of processing center, Post Office service criteria and USWLD restrictions, and will be determined on an individual case basis.

2. Description of Deliverables

A. General Provisions

1) Bank Deposits and Confirmation of Funds Deposited. USWLD authorizes USWC to endorse checks and other payment instruments received and to deposit such items into USWLD's designated bank account. USWC will provide two reports as part of Basic Service, a Cash Letter Report showing the amount deposited to the bank, and a Detailed Transaction Report showing account and payment details for the transactions included in the day's deposit. Daily reports will be prepared at

the end of any day that processing occurs for USWLD. End-of-month reports will be prepared and transmitted to USWLD not later than three business days following the month being reported.

2) Holidays. The following days are authorized holidays for USWC:

New Year's Day	January 1
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	First Monday in September
Thanksgiving Day	
Christmas Day	December 25

USWC will conduct business as usual on days the US Post Office and banks recognize as holidays but that are not recognized by USWC. Deposit of proceeds from processing on those days will occur on the next business day. Transmission of processed payment data will occur on the day processed.

3) Scan Line Rejects. USWLD is responsible for insuring the optical character recognition ("OCR") quality of the scan line on the return document. If the "Can't Read" rate attributable to USWLD errors exceeds 3% on any given day, as determined from USWC remittance processing system generated reports, and USWLD, after notice by USWC that the Can't Read rate is at or above 3%, fails to correct the problem within three business days, or as mutually agreed, after that notice, then processing fees as described in the price list as Scan Line Rejects will become effective.

4) Changes to Scan Lines. USWLD must provide USWC sixty (60) days notice of its intent to make any change in the composition or location of the return document scan line. If changes are made to USWLD scan line without required notice and those changes result in scan line rejects greater than 3%, the Scan Line Reject surcharge will apply immediately.

5) Foreign Checks. Checks drawn on a currency other than Canadian or United States dollars will not be deposited by USWC but will be returned to USWLD for disposition. USWC will not adjust the amount of USWLD payments for discounts to Canadian funds.

6) Imperfect/Restrictive Notation Checks. USWC's remittance processing function is highly automated. As a result, many checks and documents are never individually touched or viewed. Consequently, it is unlikely that imperfect/restricted notation checks will be detected when processed. Examples include, but are not limited to: unacceptable payee, post or stale-dated checks, unidentified drawer, altered checks and checks with restrictive notation. If a check with some fault is detected in the course of processing, USWC will follow conventional banking practices for correcting and processing such check. Imperfect/restrictive notation checks and associated documents which have been detected and cannot be processed will be sent to USWLD for disposition.

7) Client Use of Gift Certificates and Coupons. Negotiable instruments, such as gift certificates containing bank compatible MICR encoding, can be processed mechanically once the mechanized process is in place. Promotional Coupons will be processed manually. USWLD will provide thirty (30) days' advance notice to USWC when coupons are being mailed to end users.

B. **Basic Remittance Processing Services**.

Services provided by USWC include the following:

1) Collection of mail from USWLD owned post office box in accordance with Post Office mail availability and the schedule used for USWC remittances. USWC will exercise its best efforts to collect mail not less than once each business day.

2) Extracting contents of USWLD return envelopes.

3) Sorting contents by Payment Batch Types or Other Batch Types.

-Payment batch types are:
Singles- one document, one check
Multiples- any combination of more than one check and/or more than one document
Unidentified- any payment received without a return document
Cash- payments that includes coin or currency, with or without return document

-Other batch types include:
Correspondence- envelopes containing any communication written on a piece of paper other than the document or check
List Payments- multiple payments without return documents involving a printed listing of account numbers with one or more checks

4) Capturing scan line information, check MICR data and payment amount.

5) Prepare deposit of processed checks and transportation to USWLD's bank prior to cutoff time for same day deposit. Payments containing cash and currency will be processed and deposited weekly until directed otherwise by USWLD.

6) Sending USWLD or its agent a daily data file of captured account information and payments processed based on specifications agreed to between USWC and USWLD. The file send process will include mutually agreed upon procedures for acknowledging successful receipt of the file send.

7) Preparing a package of all correspondence, change of address requests, supporting documentation for unidentified payments batch, etc. and sending by overnight mail, as directed by USWLD.

8) During both the interim and mechanized processing periods, USWC will retain copies of captured payment information transmission files for a minimum of one

month, at which time data will be purged. USWC further agrees to re-transmit files upon the request of USWLD at no cost to USWLD for a period of one month following the original transmission. During the operation of the interim process, USWC will send copies of MICR data to USWLD in a separate file as part of the daily file transmission. USWC will maintain copies of the MICR information captured during interim processing for a period of six months. Once the mechanized process is in operation, USWC will send MICR data to USWLD in two separate files as part of the daily transmission. MICR information will be retained by USWC for a period of one month at which time data will be purged. USWC further agrees to re-transmit files upon the request of USWLD at no cost to USWLD for a period of one month following the original transmission. USWLD remittance documents will be kept for not more than three days or as determined locally by the processing office.

9) Processing requests from USWLD to investigate un-applied payments to determine if a keying error is involved. USWC will provide the results of the investigation to USWLD by the end of the second business day following request.

C. **Performance Standards**.

1) 100% of the checks processed prior to the transmission cutoff time will be deposited that same day. (Cash received with payments will be deposited as directed by USWLD.)
2) USWC will transmit processed payment information to USWLD by 3:00 p.m. Central Time of the day received or as mutually agreed by both parties.
3) The combination of availability of mail at the Post Office and transmission cutoff time affects the amount of time available for processing. Mail availability and the processing time available will be studied and a mutually agreeable Percent Payment Processing objectives will be established within ninety (90) days of initiation of Service.
4) Un-applied Payment investigations will be completed prior to end of the second business day following receipt by the RPS. ("Un-applied Payment" is an account that does not post to the USWLD accounts receivable record as a result of an RPS keying or processing error).
5) Daily balancing and transaction reports will be transmitted not later than 3:00 PM Central time or as mutually agreed upon by both parties.
6) End-of-month reports will be transmitted to USWLD not later than the end of the third business day following the month being reported.
7) Additional metrics may be developed and mutually agreed upon at a later time, should the need arise. Such metrics will be incorporated into the Agreement by amendment.
8) If USWLD identifies that performance standards are not being met, USWC will provide USWLD with an action plan to correct the problem. Upon request by USWLD, the Parties will make best efforts to negotiate reduced pricing for the period of time performance standards were not met. If the action plan does not bring USWC's performance up to standards within mutually agreed upon time frames, or in the event reduced pricing is not mutually agreed upon, USWLD may immediately terminate the Agreement.

D. Notification Procedures in Case of System Outage.

USWC and USWLD recognize that system failures will occur from time to time. Every effort will be made by both parties to restore service in the shortest possible time and to mitigate the effect of any outage where possible. It is the responsibility of the party discovering the outage to notify the other party of the failure immediately. Subsequent updates providing information regarding the extent of the failure, corrective action being taken and anticipated outage time shall be made in a timely manner. Once the problem has been fixed, the other party will be informed immediately and steps will be taken to restore necessary data as appropriate.

E. Interim Procedures.

During the period that final development and testing of the image based remittance processing system for non-USWC entities is being completed, USWC will provide interim payment processing service. This process will provide all functionality described in this Exhibit except that the scan line information from the return document and the MICR data from the USWLD payment will be keyed manually.

3. Charges

A. All development fees charged by USWC for development of Services will be on an individual case basis ("ICB").

B. USWLD agrees to pay the fees for Services charged by USWC as shown in Attachments A and B hereto. Attachment A is in effect during the interim process only and automatically expires and is replaced by Attachment B upon implementation of the mechanized process. Bank fees and other charges are the sole responsibility of USWLD and USWC acts in no way as an agent for the bank.

C. USWLD will be billed for the cost of providing the interim process in accordance with Attachment A, Interim Process Prices.

"Manual Keying of Singles, Multiples and Checks Only," as listed in Attachment A, involves the opening, extraction and keying of singles, multiples and checks only, as defined in Section 2.B.3 of this Exhibit. USWLD will be charged at the rates stated in Attachment A for such service.

D. Both Parties understand and agree that only those prices stated in Attachment A for the development of the interim process and for the manual keying of singles, multiples and checks are firm prices. All other prices stated in Attachment A and all prices stated in Attachment B are preliminary.

USWC will provide firm pricing for all services covered hereunder when the costs of providing services have been adequately identified. Such firm prices will be retroactive to January 1, 1998. A true-up between those charges imposed at preliminary price rates and firm pricing rates will be conducted within thirty (30) days of the date upon which firm prices are established, but in no event later than December 31, 1998.

USWC will exercise commercially reasonable efforts to provide firm pricing in conjunction with the initiation of mechanized processing of singles, multiples and checks only, but in no event later than November 30, 1998.

E. Custom Request Services are services not specifically addressed in this Exhibit. Prices used to establish Custom Request Service will be developed on an individual case basis.

Attachment A to Exhibit A

Interim Process Prices
Remittance Processing Services

Price Elements

Non-recurring Charge for Development of Interim Process (based on development hours)	$80.00/hr.
Non-recurring Charge for Development of Interim Process for forwarding MICR Data	$80.00/hr.
Non-recurring Charge for Set-up	$ 575.00
Monthly Recurring Basic Charge	$ 360.00
Hourly Rates for Processing Singles, Multiples and Checks Only , as described in Section 1	$44.00/hr.
Usage Sensitive Rate per Occurrence	
Cash Transactions	$ 5.00/ deposit
Bank Deposit and File Transmission (one per day)	
Three client fields are included in monthly recurring charge. (USWLD requested fields are Tran Type, Account Number and Amount).	No additional charge
Per field over three fields	ICB
Additional Transmission	ICB
Courier/Postage/Post Office Costs	Actual cost
Overnight Mail Received	$ .50/ item
Custom Requests(e.g. scan line changes, etc.)	ICB
Scan Line Rejects in excess of 3% (after notification)	$ .15/ item

Custom Services (Only upon request)

Additional Band Deposit and File Transmission (Three client defined fields are included)	ICB
Per field over three fields	ICB
Fax Transmission (Client requested faxes related to information previously transmitted electronically e.g., payments processed, bank deposits and system generated reports and data).	
Monthly Recurring Base Charge	$ 150.00
Transaction Charge	$ 1.25/ item
Advice of Deposit (telephone call notification)	$ 50.00/ month
Research	ICB

Attachment B to Exhibit A
Preliminary Prices
Remittance Processing Services

Price Elements

Non-recurring Charge for Systems Development and	$	5,000.00
Monthly Recurring Basic Charge	$	360.00
Usage Sensitive Charges per Occurrence		
Basic Item Charge		
Singles	$	.13/ item
Multiples	$	.22/per item
Checks Only	$	.22
List Processing	$	.25/ payment +basic item cl
Unidentified	$	.20/ item + basic item char
Correspondence	$	.20/ item
Promotional Coupons	$	.35/ coupon
Photocopy	$	1.00/ page
Cash Transactions	$	5.00/ deposit
Bank Deposit and File Transmission (one per day)		
Three fields are included in monthly recurring charge.	No additional charge	
Per field over three fields	ICB	
Additional Transmission	ICB	
Courier/Postage/Post Office Costs	Actual cost	
Overnight Mail Received	$	.50/ item
Custom Requests(e.g. scan line changes, etc.)	ICB	
Scan Line Rejects in excess of 3% (after notification)	$	.15/ item

Custom Services (Only upon request)

Additional Band Deposit and File Transmission (Three client defined fields are included)	ICB
Per field over three fields	ICB

Fax Transmission (Client requested faxes related to information previously transmitted electronically e.g., payments processed, bank deposits and system generated reports and data).

Monthly Recurring Base Charge	$ 150.00
Transaction Charge	$ 1.25/ item
Advice of Deposit (telephone call notification)	$ 50.00/ month
Research	ICB
Payment Investigations	ICB

Arizona Corporation Commission
U S WEST Communications - TKM-4
Exhibits of Teresa K. Million
March 25, 1999

Annual Compliance Training, Section 272 and Docket 96-150

code of business ethics and conduct

corporate POLICIES

Affiliate Relationships

CONTENTS

1. Introduction
2. Requirements and Interpretations
3. Reference Sources

Section 1: Introduction

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IT IS THE POLICY OF U S WEST to comply with all state and federal regulatory requirements governing the relationship and dealings between U S WEST Communications and other entities within U S WEST, including requirements related to the flow of information between entities.

Purpose

The purposes of this policy are to:

- help to ensure compliance with state and federal regulatory requirements applicable to U S WEST Communications (USWC) and its dealings with U S WEST affiliates, including the requirements for handling Customer Proprietary Network Information and the proprietary information of other telecommunications carriers;
- ensure that financial, legal and regulatory considerations are reviewed prior to entering into a business event that involves both regulated and nonregulated entities.

Scope

This policy applies to U S WEST, Inc., its business units, partnerships, or joint ventures where U S WEST has a majority ownership position or exercises management control, and to such entities' officers and employees.

Section 2: Requirements and Interpretations

top (to contents)

Because USWC is a regulated "incumbent" local exchange carrier (LEC), its relationships with its affiliates are subject to a variety of rules imposed by state and federal regulatory authorities. For the most part, these rules apply to transactions between USWC and its affiliates, but certain rules also govern the flow of information between USWC and its affiliates. In addition, the Telecommunications Act of 1996 (1996 Act) requires USWC to provide elements of its services and facilities on a "wholesale" basis and in a nondiscriminatory manner. Because of these requirements, what USWC provides its affiliates may impact what USWC is required to provide its wholesale customers.

1. Affiliate Interest Requirements:

The Federal Communications Commission's (FCC) Part 32 rules govern transactions between an incumbent LEC (USWC) and its affiliates. The rules are as follows:

Asset Transfers:

- When USWC transfers an asset to an affiliate, USWC must book the net book value of the asset or its fair market value, whichever is higher.
- When an affiliate transfers an asset to USWC, USWC must book the net book value of the asset or its fair market value, whichever is lower.

Provision of Products and Services:

- When USWC provides products or services to an affiliate, the transaction must be booked by USWC as follows:
  - A tariff rate must be used to the extent that one exists.
  - Absent a tariff rate, Prevailing Company Price (PCP) is established if sales by product or service are greater than 50% to external third parties. The 50% rule does not apply to 272 affiliates there is a rebuttable presumption that non-discrimination requirements produce rates that represent PCP.
  - Services that are neither Tariffed nor PCP must be valued at fully distributed cost (FDC) or fair market value (FMV) whichever is higher.
- When an affiliate provides products or services to USWC, the transaction must be booked by USWC as follows:
  - A Tariff rate must be used to the extent that one exists.
  - Absent a tariff rate, Prevailing Company Price (PCP) is established if sales by product or service are greater than 50% to external third parties. The 50% rule does not apply to 272 affiliates - there is a rebuttable presumption that non-discrimination requirements produce rates that represent PCP.
  - Services that are neither Tariffed nor PCP must be valued at fully distributed cost (FDC) or fair market value (FMV) whichever is lower. Fair market value rules do not apply to those U S WEST entities who solely provide services to other U S WEST entities, e.g., U S WEST, Inc.

The FCC has also adopted rules governing the allocation of costs between regulated and unregulated services; these rules can affect transactions between USWC and its affiliates.

A number of states have adopted rules similar to the FCC's. In addition, several states have adopted additional affiliate interest transaction rules. These rules may create record keeping obligations and, in some instances, require state regulatory approval.

Questions regarding the FCC's or state affiliate transaction accounting and reporting requirements, or their cost-allocation rules, should be directed to the Technical Accounting web site, or to the Director - FCC Regulatory Accounting.

2. Technology Compensation:

U S WEST entities funding research and development of technology (whether within US WEST or not) shall receive fair compensation when a) U S WEST entities that did not fund the technology use it; or b) a non-funding U S WEST entity shares the technology with a non-U S WEST entity; or c) an entity's benefit is measurably disproportionate to its portion of the funding.

"Technology" means technical information such as software, inventions, technical practices, functional specifications as well as non-technical information such as market studies, market and business plans, market models and non-technical practices.

When technology is shared between the regulated and non-regulated portions of U S WEST, the funding and receiving entities conduct "arms length" negotiations to determine fair compensation for the shared technology. The entities may utilize numerous tools to assist in establishing fair compensation, including industry benchmarking, market analysis, cost studies, replacement or reproduction costs, etc. If the two entities cannot reach agreement on fair compensation, the Executive Director - Financial Accounting will facilitate arms length negotiations to reach an agreement.

After an agreement has been reached, the technology being shared, the compensation and a statement of rationale for the negotiated compensation are to be documented in a Fair Compensation Memorandum of Agreement. The memorandum must be signed by the negotiating subject matter experts and approved by their respective approval authorities.

U S WEST employees faced with a situation that raises fair compensation considerations should contact their business unit compliance manager or the Executive Director-Financial Accounting.

3. Affiliate Changes or Restructuring:

The FCC and state regulatory commissions also require reporting of information relating to affiliate changes or restructuring, typically before such changes are effected. Contemplated business events that may involve both regulated and nonregulated entities affiliated with U S WEST must be reviewed with the Executive Director-Financial Accounting who will obtain necessary Public Policy and Law Department input before a corporate decision is made.

4. Rules Applicable to Specific Entities:

Additional rules govern the relationship between USWC and specific affiliates.

- U S WEST Long Distance (USWLD). Under the 1996 Act USWC may provide interLATA services within its region only after obtaining FCC authorization and only through a "separate affiliate." Specifically:
  - USWLD must "operate independently" from USWC; the FCC has interpreted this to mean that USWC and USWLD may not jointly own any switching or transmission facilities, or the buildings in which such facilities reside, and neither entity may install, operate, or maintain switching or transmission facilities belonging to the other.
  - An officer, director, or employee of USWC may not also be an officer, director, or employee of USWLD.
  - USWLD may not obtain credit under any arrangement that would give a creditor recourse to USWC's assets in the event of default.
  - USWC must conduct all transactions with USWLD on an "arm's length" basis, and it must post a description of each such transaction on the Internet.
  - USWC may not discriminate in favor of USWLD in the provision (or procurement) of goods, services, facilities and information. When USWC provides any goods, services, facilities, or information to USWLD, it may be required to provide them to another entity on the same terms.

These requirements take effect when USWLD begins providing interLATA service in an in- region state, though USWC must show its compliance with the separation

requirements as a part of its application for interLATA authorization. Once the requirements take effect, they may apply to prior events. For example, the FCC has determined that USWC's transactions with a separate affiliate that take place before it becomes subject to the separation requirements must be posted on the Internet at the time the requirements take effect. The separate affiliate requirement expires three years from the date of authorization. Because interLATA authorization comes state by state, the separate affiliate requirement will expire at different times in USWC's various states.

- U S WEST Wireless. The FCC has adopted rules requiring USWC to provide commercial mobile radio (wireless) services only through a corporate affiliate, which is subject to certain separation requirements. That affiliate:
  - must maintain separate books of account;
  - may not jointly own transmission or switching facilities with its affiliated LEC, and
  - must acquire services from the affiliated LEC on a compensatory, arm's length basis pursuant to the affiliate transaction rules.

5. Flow of Information Among Affiliates:

Except as limited by its contracts with customers and suppliers, USWC is generally free to use information in its possession for its own purposes and to share that information with its affiliates.

The 1996 Act, however, limits the ability of all telecommunications carriers (including USWC, U S WEST Long Distance, and U S WEST Wireless) to use certain types of information in their possession, including proprietary carrier information, customer proprietary network information (CPNI), as well as customer information generally. The 1996 Act also imposes a nondiscrimination requirement on the flow of information between USWC and U S WEST Long Distance.

- Customer information. The 1996 Act generally obliges telecommunications carriers to protect the confidentiality of proprietary information of, or relating to, customers. Included in the class of customers to which this general confidentiality obligation runs are carriers (including resellers), end users (including enhanced service providers) and equipment manufacturers.
- Carrier information. The 1996 Act also requires a telecommunications carrier to protect the confidentiality of proprietary information it receives or obtains from a carrier. A carrier may not use such information "for its own marketing efforts". Determining whether particular information comes under this requirement will frequently involve the consideration of difficult legal issues.
- Customer Proprietary Network Information (CPNI). The 1996 Act restricts the uses telecommunications carriers may make of CPNI, which is defined generally as information relating to a customers' telecommunications services and their usage of those services including call detail.
  - The 1996 Act and FCC rules pursuant to that Act permit the sharing and use of CPNI between or among affiliates where the customer subscribes to discrete services offered by the sharing affiliates. For example, where a customer subscribes to both local service and Commercial Mobile Radio Services (CMRS), USWC is free to use the combined CPNI from these two offerings to fashion offers for other local or CMRS services.
  - Except with express customer approval, a telecommunications carrier may not

use CPNI among its internal affiliates where the customer subscribes to only one type of service except for purposes of marketing variations of that service. For example, if a customer subscribes only to the local service of the carrier (offered by any one of its affiliates), the carrier is not permitted to use local service CPNI to target that same customer for a CMRS offering or for an enhanced service. It may, however, use the local service CPNI to offer the customer new or modified local service offerings.

- At the written request of a customer, a telecommunications carrier must provide CPNI relating to that customer to any person the customer designates. Carriers with Section 251 obligations (incumbent local exchange carriers) might also need to provide CPNI to other carriers based on oral approvals from the end user.

- A telecommunications carrier may utilize "aggregate" CPNI for any purpose, but if a LEC aggregates information regarding one category of telecommunications service, i.e., local services, to be used in conjunction with a different telecommunications service, i.e., CMRS or non-telecommunications service (VMS), it must provide that information on nondiscriminatory terms to other carriers who request it. "Aggregate" CPNI is collective CPNI relating to a group of customers or services, from which individual customer identities and characteristics have been removed.

  Determining the application of these rules involves difficult legal judgments. No employee should attempt to apply them without first contacting their business or market unit compliance person or the corporate CPNI Coordinator. These persons will assist in determining the need for specific legal advice.

- Sharing information with USWLD. When USWC shares any information with USWLD, other than information directly related to joint marketing activities between USWC and USWLD, it may thereby incur an obligation to share that information with others on the same terms and conditions. Thus, prior to providing information to USWLD, USWC should consider the possible risks associated with that action, and weigh those risks against the need of USWLD to have the information.

The above interpretations are illustrative and not intended to be all-inclusive.

Section 3: Reference Sources

top (to contents)

For related policy information, see the Federal Communications Commission and State Regulatory Commission Corporate Policy.

If you have any questions on Section 1, Affiliate Interest Requirements, contact the Director-FCC Regulatory Accounting or the Technical Accounting Web site. If you have questions on Section 5, Flow of Information Among Affiliates, contact your traditional Compliance Manager, or visit the Compliance Web site, click on Compliance Plans, then click on CPNI.

Approved by the Compliance Committee · 8/7/98 ·
Latest Revision · 8/7/98 ·
Affiliate Relationships
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BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238 AFFIDAVIT OF TERESA K. MILLION**
STATE OF COLORADO	)	
	:	**SS**
COUNTY OF DENVER	)	

Teresa K. Million, of lawful age being first duly sworn, deposes and states:

1. My name is Teresa K. Million. I am Manager – FCC Regulatory Accounting of U S WEST Communications in Denver, Colorado.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Teresa K. Million
Teresa K. Million

SUBSCRIBED AND SWORN to before me this 15th day of March, 1999.

Theresa G. Gray
Notary Public

My Commission Expires:
My Commission Expires Dec. 31, 2001

AFFIDAVIT OF WILLIAMS

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

MICHAEL G. WILLIAMS

U S WEST COMMUNICATIONS

MARCH 25, 1999

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IDENTIFICATION AND QUALIFICATIONS OF AFFIANT

My name is Michael G. Williams. I am employed by U S WEST as Director, Wholesale Markets – Interconnection. My business address is 250 Bell Plaza, Room 1614-C, Salt Lake City, Utah.

I have worked for U S WEST since 1981 in various management positions, including engineering, technical sales, regulatory, new technologies, international cellular joint venture leadership, and wholesale interconnection operations. I have held my current position since June 1997. I hold an MBA degree from the University of Utah, 1985, and a bachelors degree in electrical engineering from Brigham Young University, 1976. As a Director of Wholesale Interconnection, my responsibilities include developing and refining U S WEST's positions and advocacy on service performance toward compliance with the Act and negotiating with CLECs and other parties on service performance measurements and rules.

PURPOSE OF AFFIDAVIT

My affidavit presents service performance measurements in support of U S WEST's application under Section 271 of the Telecommunications Act of 1996 (the Act). My purpose is to show how the measurement data available for U S WEST's Service Performance Indicators confirm that U S WEST is satisfying specified checklist requirements, that the local exchange market in Arizona is open to competition, and that it will remain open.

I explain in this affidavit the concepts underlying service performance measuring, what service performance indicators U S WEST has implemented, and why those

1 indicators are appropriate for Section 271 purposes. Finally, I report the results
2 available for these service performance indicators.

3 **EXECUTIVE SUMMARY**

4 U S WEST has opened its local exchange markets in Arizona to competition and
5 has begun offering a wide array of interconnection, network elements, and resale
6 services to CLECs. The Act requires that U S WEST provide nondiscriminatory service
7 quality to CLECs in a manner that provides an efficient competitor a meaningful
8 opportunity to compete. In that context, service performance indicators are useful for
9 quantifying key aspects of service performance to help confirm whether U S WEST is
10 indeed satisfying the Act – specifically, the Section 271 Checklist.

11 U S WEST has developed and monthly is reporting thousands of data points
12 defined by numerous service performance indicators designed to address service
13 quality associated with specified Section 271 Checklist items. These performance
14 indicators address key dimensions of service, primarily involving installation and repair
15 and focusing on timeliness and accuracy.

16 In addition to addressing specific aspects of the Act, U S WEST's service
17 performance indicators also address all applicable categories of performance
18 measurements suggested by the FCC in recent orders in Section 271 applications in
19 other regions.

20 The performance results reported in this affidavit and in Exhibit MGW-2
21 demonstrate that:

22 • U S WEST is providing nondiscriminatory interconnection, collocation, access
23 to network elements on an unbundled basis, emergency services, interim

number portability, and resale services, in a manner that does provide efficient competitors more than ample opportunity to compete. Indeed, the volumes reflected in the various measurements highlight the significance of CLEC activity as they compete in the local exchange market in Arizona.

- The capability exists, through ongoing reporting of these measurements, in accordance with U S WEST's SGAT, to ensure that the local exchange market in Arizona remains open for competition.

I. SERVICE PERFORMANCE INDICATORS

A. Service performance indicators are a way to quantify and compare service quality.

Service performance indicators are pre-defined, numerical tools for quantifying specific aspects or dimensions of service quality. In the context of the Act, performance indicators are one of several tools available for evaluating (a) whether the local exchange market is open, (b) whether it will remain open, and (c) whether the Section 271 checklist is satisfied.

Performance indicators help determine whether U S WEST is providing services in a nondiscriminatory manner or in a manner that permits an efficient competitor a meaningful opportunity to compete.[1] For purposes of U S WEST's application in this case, service performance indicators focus on Section 271 Checklist items that lend themselves to evaluation by measurement methods.

[1] FCC's NPRM, April 1998, paragraph 8, last sentence.

B. U S WEST's Performance Indicators provide sufficient information to confirm that it is satisfying provisions of the Act and related FCC orders.

In developing its service performance indicators, U S WEST has carefully considered the Act and prior FCC Orders, including the tentative conclusions the FCC reached in its April 1998 Notice of Proposed Rulemaking on performance measurements ("FCC NPRM"). While the Act does not specifically mention performance measurements, its provisions primarily involve demonstrating whether services are being provided in a nondiscriminatory manner. Responsive to this, the service performance indicators U S WEST offers in its proposed SGAT represent a broad array of performance results that permit service quality comparisons for evaluating whether U S WEST is providing nondiscriminatory service and is satisfying the specified Section 271 checklist items.

Exhibit MGW-3 lists the performance measures suggested by the FCC in the above-referenced NPRM. As shown therein, U S WEST's performance indicators responsively address all applicable performance areas suggested by the FCC.

While the FCC also mentions performance measurements in orders applying to specific applications by other incumbent LECs (ILECs) under Section 271 prior to issuing its NPRM, the latter represents a culmination of the FCC's experiences and perspectives to that point. Further, the only order dealing with a Section 271 application issued since the April 1998 NPRM was in the BellSouth Louisiana case, which was consistent with the NPRM on matters relating to performance measurements. Hence, Exhibit MGW-3 represents a comparison of U S WEST's performance indicators with the FCC's published perspectives on the subject.

C. U S WEST has developed a large number of performance indicators to address service quality associated with specified checklist items.

U S WEST has identified and developed 45 different indicators of service quality[2] which, when applied to the specified checklist items, yield 259 different monthly measurements of service performance. When multiplied by the entities for which these measurements are reported (i.e., individual CLECs, CLECs in aggregate, and U S WEST retail) and by the supporting numerical details provided for each measurement, U S WEST is reporting well over 15,000 performance-related data points every month, in Arizona alone. By any standard, this measurement base for confirming that U S WEST is satisfying the Section 271 checklist is enormous, and even daunting.

To make this possible, U S WEST has developed and implemented new processes in support of wholesale interconnection services for gathering, compiling, validating, and disseminating performance data, as well as for responding to results as needed to correct errors and to coordinate service improvement efforts. Systems supporting these processes include seventeen computer systems supplemented by numerous manual processes to supply the source data on service performance and for gathering and compiling the data, including the computations needed to calculate the values of the various performance indicators. In addition, systems are in place for storing data and, ultimately, for publishing the performance results.

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[2] U S WEST's service performance indicators are listed by checklist category in Section 20.2 of the SGAT filed by U S WEST on February 5, 1999. These performance indicators are defined in more detail in Exhibit B of that document. In that exhibit, the performance indicators are first divided into the two broad categories of "core" and "diagnostic" indicators. Then both of these categories are further divided, as applicable, into the functional categories of Gateway Availability, Pre-order/Order, Ordering and Provisioning, Maintenance and Repair, Billing, Emergency Services, Directory Assistance, Operator Services, Network Interconnection, and Collocation.

C1 Core Indicators of Service Performance

U S WEST's performance indicators designated as "core" indicators are those that most directly focus on nondiscrimination and on the most relevant aspects of service quality. Core indicators are directly related to checklist items; measure factors that affect customers; reflect the results of process outcomes (as contrasted with sub-process steps); and measure the aspects of service that are not normally the subject of another indicator.

As an example of a core indicator, CLECs and customers reasonably expect U S WEST to install services when it says it will. The degree to which installation commitments are fulfilled is therefore considered an indicator of service quality that goes to the center – or "core" – of what it means to provide quality service. As another example, quick repair of service problems is important to CLECs and customers. Accordingly, the time it takes to repair service troubles is another performance indicator that goes to the core of quality service.

In fact, most service quality issues have installation and repair at their core. Typically, indicators addressing installation and repair answer the following "core" service-related questions:

- Installations: How long did it take to install the service? Was it installed on time? Correctly?
- Repairs: How long did it take to repair the service? Was it repaired on time? Correctly?

Exhibit MGW-1 of this affidavit highlights the performance indicators that focus on installation and repair. As shown, these indicators address timeliness, commitments

met, and accuracy of the installation or repair. The left column of Exhibit MGW-1 lists installation and repair performance measures, while the top row lists the specified checklist items. The body of the exhibit shows specifically which performance indicators apply to each checklist item.

In addition to the indicators shown in Exhibit MGW-1, U S WEST has developed other core indicators that focus on factors in addition to installation and repair, as described later in this affidavit. Most of these additional core indicators also focus on timeliness and meeting commitments.

C2 Diagnostic Indicators of Service Performance

U S WEST has also developed a group of performance indicators called "diagnostic" indicators. These produce measurements that (a) provide another perspective on quality dimensions that already are addressed more directly by core indicators or (b) do not as directly address the question of nondiscrimination. As the category name implies, these indicators define measurements that could help evaluate potential issues that might be raised by results reported for the core performance indicators.

An example of a diagnostic indicator is in the area of delayed orders. U S WEST reports results for a core performance indicator called "Delayed days," which measures the average number of days that late orders are completed after the due date. In cases where the average delayed days appears to be a problem, it may be helpful to know what percentage of delayed orders are completed beyond certain time frames. Such additional information is "diagnostic" in nature, because it may help evaluate the results reported under the core indicator. In this example, U S WEST reports two diagnostic

performance indicators that also address delayed days. These are (1) "Delayed orders more than 15 days past commitment" and (2) "Delayed orders more than 90 days past commitment," each as a percentage of all delayed orders. Using these two additional measurements, one can "diagnose" the nature of the delays. Specifically, for any given number of average delayed days, these two measurements indicate whether the average is made up of orders that are within 15 days late, between 15 and 90 days, or beyond ninety days. Clearly, any given average number of delayed days with low percentages more than 15 or 90 days would be considered better than the same average with higher percentages more than 15 or 90 days late.

D. U S WEST's Service Performance Indicators address checklist items that lend themselves to evaluation by measurement methods.

D1 Checklist Items Addressed by U S WEST's Service Performance Indicators

Checklist items that are suited to evaluation by measurement methods, which are addressed by U S WEST's Service Performance Indicators, include:

- Checklist Item 1 – Interconnection (including collocation and network performance).
- Checklist Item 2 – Access to network elements (including gateway availability, pre-order transactions, billing, and repair/provisioning centers).
- Checklist Item 4 – Unbundled local loop transmission.
- Checklist Item 5 – Unbundled local transport.
- Checklist Item 6 – Unbundled local switching.

- Checklist Item 7 – Access to 911/E911, directory assistance, and operator services.
- Checklist Item 11 – Interim number portability.
- Checklist Item 14 – Resale services.

D2 Evaluation Methodology for Performance Results

Evaluation methods are effective only if they take into account the large volume of many thousands of performance results monthly. Otherwise, the task of analyzing the results will be unduly daunting to commissions and carriers alike. All parties have only limited resources to devote toward reviewing such large volumes of data. Therefore, in this environment, it is important to focus on not only those issues that are possibly problematic, but also those that are more likely material, rather than insignificant. U S WEST employs a scoring process that provides a way to accomplish this.

Specifically, in this affidavit, I apply this methodology to screen performance indicators to "score" whether the performance result in a given month satisfies the checklist. Under this approach, a performance result is considered to confirm that U S WEST satisfies the checklist item if:

- It indicates that service performance to CLECs is <u>nondiscriminatory</u>; <u>or</u>
- Observed differences indicating <u>possible disadvantage</u> to CLECs are isolated (i.e., occurring in no more than two consecutive months); <u>or</u>
- Observed differences in service performance come from quantities of events that are <u>too few</u> to yield meaningful and materially-significant conclusions.

To explain the last point further, critical values obtained from statistical testing, such as the permutation statistical test contained in U S WEST's proposed SGAT,[3] represent the minimum difference in service performance that is considered statistically-significant, given the actual data measured. Even though the permutation test permits comparing smaller sample sizes,[4] those with fewer than about thirty (30) observations are exposed to the following problems:

- As sample size decreases, the influence of imperfect data[5] on the accuracy of statistical conclusions grows;
- With smaller and smaller sample sizes, the critical values become larger and larger, so that they may become virtually meaningless; and
- Even if the observed difference is greater than an inflated critical value associated with a small sample size, the smaller the sample size, the lower the materiality of the difference in results.

II. U S WEST'S SERVICE PERFORMANCE RESULTS

The actual numerical results measured by U S WEST's Service Performance Indicators are provided in Exhibit MGW-2 of this affidavit. This exhibit is organized according to checklist items and generally contains data for the period from July 1998 through January 1999.

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[3] SGAT, Section 20.7.

[4] That is, the permutation test more accurately evaluates smaller sample sizes than the standard "Z-test", which requires minimum samples of 50 to 100, or perhaps more, depending on how much the distribution of data points deviates from a "normal" distribution.

[5] For example, errors in source data.

1 In the remainder of this section, I discuss performance indicators and results in
2 the context of each checklist item they evaluate. In each case, I describe U S WEST's
3 performance indicators for each item, and then present performance results which
4 demonstrate that U S WEST is satisfying the checklist item.

5 **A. Checklist Item 1 – Interconnection**

6 The Act calls for U S WEST to provide interconnection "that is at least equal in
7 quality to that provided by the local exchange carrier to itself or to any subsidiary,
8 affiliate, or any other party to which the carrier provides interconnection."[6] The FCC
9 defines interconnection as, "the linking of two networks for the mutual exchange of
10 traffic. This term does not include the transport and termination of traffic."[7]

11 In its April 1998 Notice of Proposed Rulemaking, the FCC also notes that
12 "competing carriers' traffic can be blocked at two critical points: (1) interconnection trunk
13 groups (e.g., those trunk groups connecting the incumbent LEC's end offices, access
14 tandems, or local tandems with a competing carrier's network); or (2) common trunk
15 groups located within the incumbent LEC's network behind the point of interconnection
16 (e.g., trunks connecting the incumbent's tandem switch with other points in the
17 incumbent LEC's network)." [8]

18 U S WEST provides eighteen individual performance measures for
19 interconnection trunking. As shown in Table 1 below, in accordance with Sections

---

[6] Section 251(c)(2)(C), as referenced in Section 271(c)(2)(B)(i).

[7] 47 C.F.R., § 51.5, Terms and Definitions.

[8] Notice of Proposed Rulemaking, CC Docket 98-56, April 17, 1998, ¶ 97.

20.2.1 and 20.2.2 of the SGAT, U S WEST provides twelve core and six diagnostic performance indicators that directly address interconnection:[9]

Table 1

U S WEST Performance Indicators for Checklist Item 1, Interconnection

	Indicator Number	***Checklist Item 1 Performance Indicator***
		Trunk Blockage Indicators
1	NI-1	Trunk Blocking – Interconnection Trunks
2	NI-2	Trunk Blocking – Common Trunks
3	DNI-2	Local Interconnection Final Trunk Group Utilization (average)
		Installation Indicators
4	OP-3	Installation Commitments Met
5	OP-4	Installation Interval (Interconnection Trunks)
6	OP-5	Installation Trouble Reports (within 30 days of new install.)
7	OP-6	Delayed Days
8	DNI-1	Provisioning Interval (U S WEST Interoffice Trunks) (under development for June 1999)
		Repair Indicators
9	MR-5	Out of Service Cleared within four hours
10	MR-6	Mean Time to Restore
11	MR-7	Repair Repeated Report Rate
12	MR-8	Trouble Rate (under development for June 1999)
		Collocation Indicators
13	CP-1	Collocation Installation Commitments Met
14	CP-2	Collocation Installation Interval
15	DCP-1	CLEC or CLEC's Customer-Caused Collocation Misses
16	DCP-2	Collocation Feasibility Study Interval
17	DCP-3	Collocation Feasibility Study Commitments Met
18	DCP-4	Collocation Quote Interval

U S WEST's performance indicators for interconnection are in the following categories:

- Trunk Blockage;

[9] Performance indicators are described in detail in Appendix B of the SGAT.

- Trunk Installation;
- Trunk Repair; and
- Collocation.

In the following sections, I will discuss each of the interconnection performance measures provided in each of the above categories.

A1 Trunk Blockage Performance Indicators

U S WEST provides several performance indicators which demonstrate that the quality provided to CLECs for interconnection trunks is at least equal in quality to the quality of trunking provided within the U S WEST network. Those measures include trunk blockage on interconnection final[10] trunks, trunk blockage on common final trunks within the U S WEST network, and final trunk group utilization on interconnection trunk groups.

As described in Mr. Weidenbach's affidavit, CLECs interconnect with U S WEST's network in a variety of ways by connecting their end offices or switches either to U S WEST's tandem offices[11] or to U S WEST's end offices.[12] Accordingly, U S WEST's blockage measurements focus on both of these types of connections.

Figure 1 below illustrates these connections (without the technical details, which are explained in Mr. Weidenbach's affidavit). In Figure 1, the line labeled with ① represents the connections of CLEC switches directly to U S WEST end offices. The

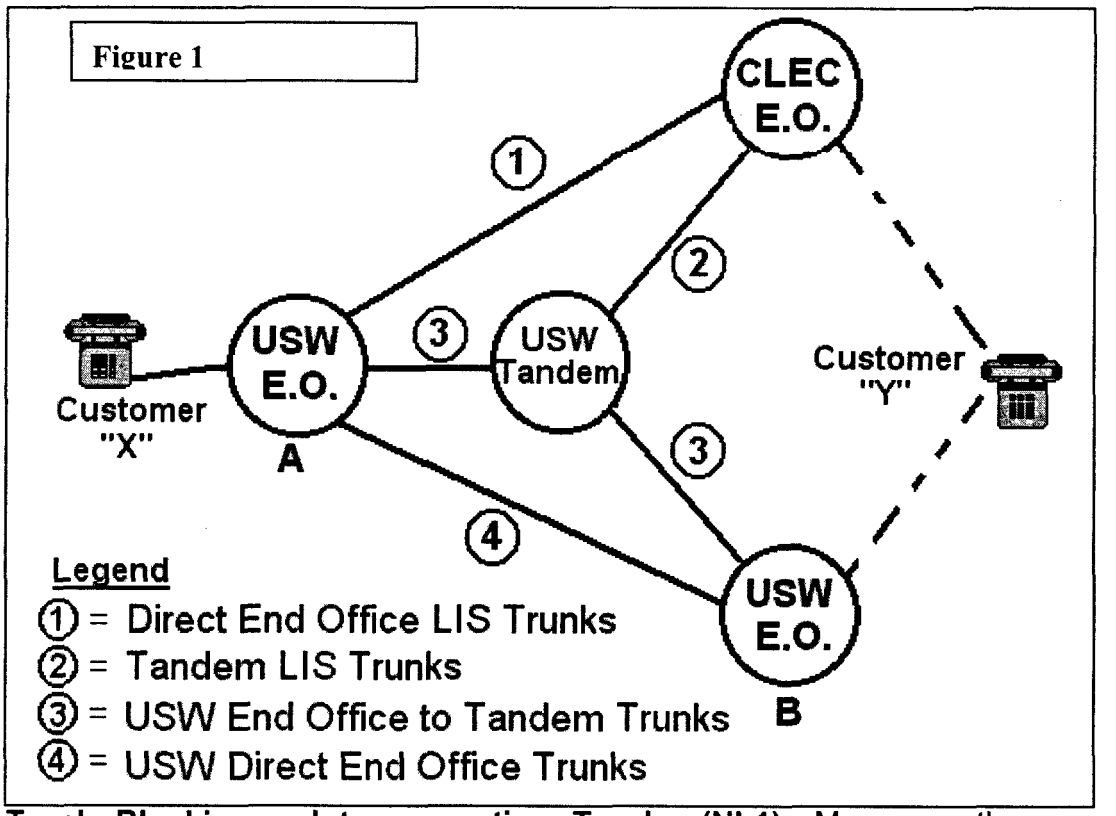
[10] Final trunks are those that do not overflow calls to another trunk group when totally busy.

[11] Tandem offices support a number of end offices, and are designed to carry overflow traffic during periods in which direct end office to end office trunks are busy.

1 line labeled with ② represents connections of CLEC switches to U S WEST tandem
2 offices. Correspondingly, lines labeled with ③ and ④ represent connections of
3 U S WEST end offices to tandem offices and to other end offices, respectively.
4 In this manner, Figure 1 illustrates a comparison of how CLEC end offices
5 ("CLEC E.O.") and U S WEST end offices access tandem offices and other end offices.

---

[12] End offices serve customers. Every call begins with the end office serving the calling party and goes to its destination through the end office serving the called party.



Trunk Blocking – Interconnection Trunks (NI-1): Measures the average percentage of trunks blocking in interconnection final trunks, reported by interconnection trunks to U S WEST tandem offices[13] (NI-1A) and interconnection trunks to U S WEST end offices (NI-1B).[14] This measure excludes toll trunks, non-final trunks, and other trunks that are not connected to the public switched network. The results for the months of December 1998 through January 1999 are:

	December	January
• Interconnection Blocking (to tandems)	0.62%	0.13%
• Interconnection Blocking (to end offices)	0.10%	0.23%

[13] Represented in Figure 1 by the line labeled with ②.

[14] Represented in Figure 1 by the line labeled with ①.

1 These results demonstrate that CLECs experienced a very low level of trunk
2 blockage on their interconnection trunks to U S WEST tandem switches (NI-1A) and an
3 even lower level of blockage on their interconnection trunks to U S WEST end offices
4 (NI-1B).

5 **Trunk Blocking – Common Trunks (NI-2):** Measures the percentage of trunks
6 blocking in local interoffice final trunks within the U S WEST interoffice network. This
7 measure is disaggregated into two sub-measures: (1) final trunks connecting U S WEST
8 end offices to U S WEST tandem offices (NI-2A)[15] and, (2) final trunks connecting
9 U S WEST end offices to other U S WEST end offices (NI-2B).[16] These measures
10 exclude toll trunks, non-final trunks, and other trunks that are not connected to the
11 public switched network. The results for the months of December 1998 through
12 January 1999 are:

	December	January
• Common Trunk Blocking (to tandems)	2.72%	7.51%
• Trunk Blocking (to end offices)	0.47%	1.39%

13
14
15

16 The above results are the blockage levels experienced on trunks connecting
17 U S WEST end offices to tandem offices (NI-2A) and through direct trunks to other
18 U S WEST end offices (NI-2B). By comparing these blockage levels to the blockage
19 levels on interconnection trunks, it is clear that U S WEST has provided CLECs with a
20 lower level of blockage on interconnection trunks connecting their end offices to tandem
21 and end offices. Specifically:

---

[15] Represented in Figure 1 by lines labeled with ③.

[16] Represented in Figure 1 by the line labeled with ④.

- In December 1998, on average, CLECs experienced a blockage level of 0.62% on interconnection trunks to U S WEST tandem offices, while U S WEST end offices experienced blockage of 2.72% to reach U S WEST tandems.
- In the same month, on average, CLEC switches that were directly connected to a U S WEST end office experienced blockage of only 0.10%, while U S WEST end offices experienced blockage of 0.47% on final trunk groups to other U S WEST end offices.

Accordingly, trunk blockage information confirms a finding that U S WEST is providing interconnection that is "at least equal" in quality, and in this case, better in quality, than the interoffice trunking it is providing to itself.

Local Interconnection Final Trunk Group Utilization (DNI-2): This diagnostic indicator measures the interconnection trunks that are required as a percentage of total interconnection trunks installed. Trunks required is determined by identifying the number of trunks needed to handle the actual traffic in accordance with blocking standards specified in the SGAT. This measure is disaggregated into the same two sub-measures as for blockage: (1) final trunks connecting CLECs' end offices to U S WEST tandem offices (DNI-2A) and, (2) final trunks connecting CLECs' end offices to U S WEST end offices (DNI-2B).

A diagnostic indicator such as this is most useful in evaluating possible problems identified through results reported for core indicators. In this case, the core indicators of trunk blocking identify no problems. However, trunk group utilization may help better place in context the results reported later in my affidavit for the core indicators for installation of local interconnection trunks.

1 The results for interconnection trunk utilization for the months of December 1998
2 and January 1999 are:

	December	January
• Interconnection Utilization (to tandems)	45%	54%
• Interconnection Utilization (to end offices)	19%	19%

6 These results clearly demonstrate that U S WEST has provisioned sufficient
7 interconnection trunks to CLECs. For example, in January, only 54% of the
8 interconnection trunks between CLEC switches and U S WEST tandem switches were
9 utilized. More significantly, in January, significantly, only 19% of the interconnection
10 trunks between CLEC switches and U S WEST end office switches were utilized.

11 Further, these results help place into context the installation results reported
12 below for local interconnection. Specifically, these low CLEC utilization levels indicate
13 that CLECs are not under pressure to install new interconnection trunks in local
14 interconnections they have established with U S WEST.

15 **A2 Interconnection Trunk Installation Performance Indicators**

16 U S WEST provides several performance indicators that are designed to
17 demonstrate that the installation of interconnection trunks for CLECs is performed in a
18 non-discriminatory manner. Those measures include installation commitments met,
19 installation intervals, installation trouble reports, and delayed days, as well as the
20 average provisioning interval for interoffice trunks installed by U S WEST for its own
21 use.

22 **Installation Commitments Met (OP-3):** Measures the percentage of
23 interconnection trunk orders for which the committed due date is met. The results for
24 commitments met for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Interconnection Installation Commitments Met	71.4%	70.0%	85.0%

These results demonstrate that, in recent months, U S WEST has met due date commitments for installing interconnection trunks in Arizona generally from 80 to 90 percent of the time. There should be further considered in the context of installation intervals, reported next.

Installation Interval (OP-4): Measures the average interval (in business days) between the application date and the completion date for local interconnection service. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Installation Interval (days)	14.3	42.6	19.5

These results demonstrate that U S WEST has been recently completing interconnection trunk orders in about 14 to 40 days, on average. With installation intervals in this range, and in the context of ongoing reporting of this indicator and joint forecasting and planning, (1) CLECs have sufficient information to successfully plan and implement interconnection projects and timeframes with reasonable levels of confidence, and (2) installation intervals are reasonable and predictable.

Installation Trouble Reports (OP-5): Measures trouble reports received within 30 calendar days of a completed service installation, as a percentage of the total related new installation orders. The results for this performance indicator for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Installation Trouble Reports	5.7%	29.6%	17.5%

These results must be considered in the unique context of interconnection trunks, in which the number of trunk circuits per order installed often is in the hundreds. (In comparison, orders for other services for which this indicator is reported may involve only a few lines or services.) The importance of this characteristic of interconnection orders, in the context of this performance measure, is that new service troubles are reported per trunk circuit. Thus, the installation trouble measurement may appear to be relatively high. However, considering that trouble reports come on the basis of hundreds of trunk circuits, the reality may be that the new service trouble is not unusual. In this case, further investigation reveals that there were 5,273 trunk circuits installed in November and December 1998 which represent the base of new installations from which new service troubles were reported. For December 1998, in contrast, the performance result of 29.6% reported for December 1998 was calculated as a base of only 27 trunk orders (per Exhibit MGW-2). Had the number of trunk circuits been used instead, the percentage of new service troubles would be miniscule (less than 2/10%). Hence, with these facts from further investigation, new service trouble levels are very reasonable.

Delayed Days (OP-6): Measures the average number of days that service is delayed beyond the original due date for reasons attributed to U S WEST. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Average Delayed Days	10.8	9.3	11.0

Clearly, these results demonstrate that, as CLECs request interconnection, delayed orders are, on average, less than 11 days late.

Provisioning Interval – U S WEST Interoffice Trunks (DNI-1): This diagnostic indicator measures the interval between the completion of a U S WEST internal provisioning request for trunk augmentation or installation and the completion of the installation. The result will be reported as an average based on the number of days required to complete the request for service. Results for this indicator will be available in July 1999.

Normally, such a diagnostic indicator would be employed only to help address possible problems identified in results reported for core indicators. In this case, with interconnection trunk blocking at very low levels and installation intervals and commitments met in reasonable ranges, this indicator is not needed. Nevertheless, U S WEST is developing it for application in future situations in which in may be useful.

A3 Interconnection Repair Performance Indicators

U S WEST provides several performance indicators that are designed to determine whether U S WEST performs the repair of interconnection trunks for CLECs in a non-discriminatory manner. Those measures include troubles cleared within four hours, mean time to restore, repair repeated report rate, and trouble rate.

Out of Service Cleared within 4 hours (MR-5): Measures the percentage of trouble reports involving interconnection trunks that are cleared within four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. The results for the November 1998 to January 1999 timeframe are:

	Nov-98	Dec-98	Jan-99
• Out of Service Cleared within 4 hours	84.6%	57.1%	78.8%

These results demonstrate that U S WEST has been responsive to CLEC trouble reports on interconnection trunking, as the majority of such trouble reports were cleared in less than four hours during the November 1998 to January 1999 timeframe. Even in December, where over 50 percent of troubles were cleared within four hours, the mean time to restore (as shown next) was still about four hours.

Mean Time to Restore (MR-6): Measures the average time to resolve requests for repair. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Mean Time to Restore (hours:minutes)	5:35	4:05	3:15

These results demonstrate that U S WEST is doing an excellent job in completing timely restoration of interconnection trunks for which out of service conditions have been reported. This is borne out by trunk blocking results which, being very low, do not indicate any problems with repair.

Repair Repeat Report Rate (MR-7): Measures the percentage of repair reports that are repeated within 30 days. The purpose is to give an indication of the accuracy of repair activity by showing what percentage of the time repairs experience additional troubles within a month. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Repair Repeat Report Rate	0.0%	21.4%	30.3%

1 These results show that repeat repairs have fluctuated in recent months. In any
2 event, in the context of the very low interconnection blocking presented earlier, it is
3 evident that repair issues are not having an adverse impact on interconnection quality.
4 **Trouble Rate (MR-8):** Measures the rate of trouble reports as a percentage of
5 total trunks in service. This performance indicator is listed as a core indicator, because
6 it provides an additional perspective for looking at repair performance by relating it to
7 the total installed base of the service. However, it is secondary in comparison to other
8 core repair indicators, because this indicator redundantly measures the same repair
9 activity as the other indicators.
10 Because the other repair indicators are reporting no potential problems, the
11 trouble rate performance indicator is not needed in this case. Nevertheless, this
12 indicator is under development, and first results will be gathered for the month of April
13 1999 and reported in June 1999.

14 **A4 Collocation Performance Indicators**

15 U S WEST provides several performance indicators that are designed to
16 demonstrate that collocation is provided to CLECs in a reasonable and non-
17 discriminatory manner. There are three steps in providing collocation to a CLEC. First,
18 in response to a CLEC's request, U S WEST performs a feasibility study addressing the
19 request. Upon completion of the feasibility study, U S WEST provides the CLEC with a
20 quotation of the charges associated with the specific collocation requested. Finally,
21 upon receipt of an order and a deposit from the CLEC, U S WEST performs the
22 necessary collocation installation.

Accordingly, U S WEST reports measurements of the average collocation feasibility study interval, the average collocation quote interval, and the collocation installation interval. In addition to these measures, U S WEST also provides measurements of collocation installation commitments met, CLEC-caused collocation misses, and collocation feasibility study commitments met.

Collocation Installation Commitments Met (CP-1): Measures the percentage of collocation orders for which the assigned due date is met. The purpose of this measurement is to indicate the degree to which U S WEST completes collocation arrangements when it says it will. This indicator counts CLEC-caused missed due dates as a commitment met for U S WEST. In cases where both CLEC and U S WEST delays caused a miss, the commitment is counted as not met. The results for the months of November 1998 through January 1999 are (total number/percent met):

	Nov-98	Dec-98	Jan-99
• Physical Collocations / Commitments Met	1 / 0%	2 / 50%	no activity
• Virtual Collocation / Commitments Met	6 / 0%	3 / 0%	no activity

These results indicate U S WEST was having difficulty in recent months in completing collocation arrangements by the assigned due date. Overall, in the period of July 1998 through January 1998, as shown in Exhibit MGW-2, U S WEST completed 6 new collocation arrangements and met the due dates on three of them, for an overall commitments met percentage of 50 percent for the period reported. Reports I am receiving from the field indicate that performance is improving and will appear in upcoming reports.

Collocation Installation Interval (CP-2): Measures the interval between the receipt of a deposit from the CLEC and the completion of the collocation installation in

business days. The result is reported in average days. The calculation of intervals for this measurement excludes CLEC-caused delays. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Physical Collocation Installation Interval (days)	144	149	no activity
• Virtual Collocation Installation Interval (days)	131	168	no activity

These results demonstrate that U S WEST is providing collocation arrangements to CLECs, and that CLECs have been able to obtain collocation arrangements from U S WEST in 130 to 170 days in recent months, on average. The fact that this information will continue to be reported, in accordance with the SGAT, demonstrates that CLECs will be able to plan with reasonable predictability their collocation arrangements with U S WEST, based on current collocation performance information.

CLEC-caused Collocation Misses (DCP-1): This diagnostic indicator measures the percentage of CLEC-caused installation commitment misses. Due date misses caused by both U S WEST and the CLEC are not counted in this indicator. The results are provided separately for physical collocation (DCP-1A) and virtual collocation (DCP-1B). For the months of November 1998 through January 1999, the results are:

	Nov-98	Dec-98	Jan-99
• CLEC-caused Physical Collocation Misses	0%	0%	no activity
• CLEC-caused Virtual Collocation Misses	17%	0%	no activity

As diagnostic information, these results show no CLEC-caused impacts on the other results reported for collocation installations. Due to the complex nature of collocations and the higher degree of joint responsibility between CLEC and U S WEST, situations in which both U S WEST and the CLEC bear responsibility for a due date miss are not uncommon and are not reflected in these results.

Average Collocation Feasibility Study Interval (DCP-2): This diagnostic indicator measures the average time to provide a CLEC with a requested collocation feasibility study. Results are reported separately for physical and virtual collocation. The results, in days, for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Physical Collocation Feasibility Study Interval	21	33	57 days
• Virtual Collocation Feasibility Study Interval	no activity	62	no activity

These results demonstrate that U S WEST is completing feasibility studies for collocation requests in recent months in 20 to 60 days.

Collocation Feasibility Study Commitments Met (DCP-3): This diagnostic indicator measures the percentage of central office collocation studies for feasibility of installation that are completed within the allotted time frame. Results are reported separately for physical and virtual collocation. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Physical Feasibility Study Commitments Met	89%	54.5%	55%
• Virtual Feasibility Study Commitments Met	no activity	0%[17]	no activity

These results should be considered along with the feasibility study intervals reported above, which indicate that CLECs have been receiving feasibility studies in 20 to 60 days, on average, based on the 32 studies[18] done in the most recent three months reported. This information, which will be reported monthly in accordance with the

[17] One feasibility study completed in December 1998.

[18] Please see Exhibit MGW-2, Checklist Item 1 – Collocation, for November 1998 through January 1999, performance indicators DCP-3A and -3B.

SGAT, provides CLECs the capability to plan and implement collocations in known timeframes, based on U S WEST's recent actual performance.

Average Collocation Quote Interval (DCP-4): This diagnostic indicator measures the average interval to respond to central office collocation studies with quote commitments. Results are reported separately for physical and virtual collocation. The results, reported in days, for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Physical Collocation Quote Interval	21	25	26 days
• Virtual Collocation Quote Interval	no activity	62	no activity

These results demonstrate that U S WEST has responded to requests for quotes for physical collocations in less than thirty days, based on the 24 quotes[19] given in the most recent three months reported.

A5 Conclusions for Checklist Item 1 – Interconnection

The foregoing performance results for interconnection trunk blocking, interconnection installation and repair, network performance, and collocation will support the Commission in finding that:

- U S WEST has opened its local exchange markets to the most fundamental level of competition, namely, facility-based competition, by offering interconnection that is at least equal in quality to that which it provides to itself. Average blocking levels on interconnection trunks are always well below one

[19] *Ibid.*, performance indicators DCP-4A and -4B.

1 percent. The majority of repairs of local interconnection trunks are completed
2 within four hours, with the mean time to repair within five hours.

3 • U S WEST is installing local interconnection services in a manner that permits
4 an efficient competitor a meaningful opportunity to compete, by consistently
5 completing such installations in 14 to 43 days.

6 • U S WEST is providing collocation arrangements in reasonable and consistent
7 timeframes that permit efficient competitors a meaningful opportunity to
8 compete.

9 • U S WEST's ongoing reporting of interconnection-related service performance
10 results in accordance with its SGAT will help insure that U S WEST continues
11 to satisfy Checklist Item 1, and that the marketplace will remain open to
12 facilities-based competitors.

13 **B. Checklist Item 2 – Access to Network Elements**

14 In terms of service dimensions that performance indicators address, the Act calls
15 for U S WEST to provide "nondiscriminatory access to network elements on an
16 unbundled basis."[20] In contrast with the standard of "equal in quality to that provided by
17 the local exchange carrier to itself," which the Act applies to interconnection, the
18 nondiscrimination standard for purpose of performance measurements focuses on
19 equal quality only as between and among CLECs to whom U S WEST provides access
20 to network elements on an unbundled basis. Moreover, while U S WEST obviously
21 utilizes network elements, it creates and uses them as "bundled" components of an

[20] Section 251(c)(3), as referenced in Section 271(c)(2)(B)(ii).

integrated local exchange network. Therefore, U S WEST does not access or use network elements for "itself" in the unbundled manner in which the Act calls for U S WEST to provide network elements to CLECs.

U S WEST provides ten core performance indicators and four diagnostic indicators that directly address access to network elements, as shown in Sections 20.2.1 and 20.2.2 of the SGAT. These are shown in Table 2 below.

Table 2

U S WEST Performance Indicators for Checklist Item 2

Access to Network Elements

	Indicator Number	***Checklist Item 2 Performance Indicator***
1	GA-1	Gateway Availability – via Human-to-Computer Interface
2	GA-2	Gateway Availability – via Computer-to-Computer Interface
3	PO-1	Pre-Order Response Time – Human to Computer (for eight specified transaction types)[21]
4	PO-2	Pre-Order Response Time – Computer to Computer
5	OP-1	Speed of Answer – Calls to Provisioning Center
6	OP-2	Calls answered within 20 seconds – Provisioning Center
7	MR-1	Speed of Answer – Calls to Repair Center
8	MR-2	Calls answered within 20 seconds – Repair Center
9	BI-1	Mean Time to Provide U S WEST-recorded Usage Records
10	BI-2	Mean Time to Deliver Invoices
11	DPO-1	Electronic Flow-through of LSRs to Service Order Processor – DOP-1A = without human intervention (percent) – DOP-1B = without manual retyping (percent)
12	DPO-2	LSR Rejection Notice Interval
13	DPO-3	LSRs Rejected (percent)
14	DPO-4	FOC Interval

[21] The ninth transaction type suggested by the FCC that is not addressed by U S WEST's performance indicator is under Checklist Item 2 "Rejected Query Notices." U S WEST addresses reject notices separately under Checklist Item 2, via DPO-2 and DPO-3.

The above Checklist Item 2 indicators generally address access to U S WEST's operational support systems. Measurements for specific unbundled network elements are discussed in later sections of my affidavit, where I address Checklist Items 4, 5, and 6.

U S WEST provides performance measures demonstrating the performance of various means of accessing U S WEST's operational support systems, including:

- Gateway availability and response time;
- Speed of Answer – Interconnect Provisioning Center and Repair Service Center;
- Billing;
- Flow through of LSRs.

B1 Gateway Availability and Response Times

Gateway Availability – via Human-to-Computer Interface (GA-1): Measures the availability of the IMA (Interconnect Mediated Access) interface, reports the percentage of scheduled time the IMA Interface is available for viewing and/or input. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Gateway Availability (Human-Computer)	99.8%	100.0%	100.0%

These results demonstrate that the human-to-computer gateway interface has been available virtually 100% of the scheduled time.

Gateway Availability – via Computer-to-Computer Interface (GA-2): Measures the availability of EDI (Electronic Data Interchange) interface, reports the percentage of scheduled time the EDI Interface is available for view and/or input. No

CLECs are currently using the EDI interface. As specified in the SGAT, results for this indicator will be reported beginning three months following the month in which combined CLEC activity exceeds 1,000 local service requests submitted through the EDI interface.

Pre-Order/Order Response Times via Human-to-Computer Interface (PO-1): Measures the time interval between query and response for specified pre-order/order transactions through IMA. Results are reported separately for the following transaction types:

- Appointment Scheduling (Due Date Reservation, where appointment is required);
- Feature Function and Service Availability Information;
- Facility Availability;
- Street Address Validation;
- Customer Service Records;
- Telephone Number.

It should be noted that, while U S WEST is reporting results for this indicator, it is also in the process of refining the indicator to permit more of an "apples to apples" comparison. Presently, the transaction response times reported by this indicator are defined in ways that represent what a CLEC experiences through the electronic gateway, but the retail results reported are not always comparable. For example, the measurement for the Telephone Number transaction reflects the fact that CLECs obtain nine telephone numbers to offer customers. In contrast, the retail measurement consists of the time to provide only one telephone number to a U S WEST service representative. Mr. Buhler describes in more detail in his affidavit how U S WEST is

providing access to operational support systems to CLECs, including a discussion of what the Act calls for and how U S WEST is satisfying its responsibilities. Accordingly, the results for this indicator, while informative and useful, should be considered in light of these limitations.

The results for the Pre-order/Order Response Time indicator are provided below in the format x.x / y.y, where x.x is the average CLEC result in seconds, and y.y is the average U S WEST result in seconds. For the months of December 1998 through January 1999, the response time results are:

Transaction Type	December	January
Appointment Scheduling	33.2 / 1.9	32.2 / 2.2
Feature/Service Availability	13.4 / na	15.2 / na
Facility Availability	19.5 / na	22.1 / na
Street Address Validation	10.4 / 3.5	7.9 / 4.2
Customer Service Record	10.6 / 1.1	9.4 / 1.4
Telephone Number	23.1 / 1.2	20.9 / 1.2

As these results bear out, most transactions are in the range of about ten to twenty seconds each, with none more than 35 seconds, on average. Clearly, an efficient CLEC can organize its pre-ordering and ordering customer interactions so that these transactions smoothly support its service representative in communicating with the customer. For example, when a service representative, in discussing a possible order, reaches the point where the customer indicates a desire to place the order, the representative can initiate the transaction to obtain the telephone number while obtaining billing information from the customer.

Pre-Order/Order Response Times via Computer-to-Computer Interface (PO-2) Measures the time interval between query and response for specified pre-order/order

transactions through EDI. Results are reported separately for the following transaction types:

- Appointment Scheduling (Due Date Reservation, where appointment is required);
- Feature Function and Service Availability Information;
- Facility Availability;
- Street Address Validation;
- Customer Service Records;
- Telephone Number.

No CLECs are currently using the EDI interface. Results for this indicator will be reported beginning three months following the month in which combined CLEC activity exceeds 1,000 local service requests submitted through the interface.

B2 Access to Interconnect Provisioning Centers and Repair Centers

Speed of Answer - Interconnect Provisioning Center (OP-1): Measures the average time following the first ring to answer calls in the Interconnection Provisioning Center,[22] which handles Wholesale calls only. Results are provided at a U S WEST level of reporting; neither CLEC-specific nor state-specific results are available. The results, in seconds, for the above indicator for the months of November 1998 through January 1999 are:

[22] "Provisioning" refers to installation of services. The term specifically applies to arranging the necessary network and technician resources to activate a service for a customer using the integrated network already constructed to support such services.

	Nov-98	Dec-98	Jan-99
• Speed of Answer/Interconnect Provisioning Ctr.	18.0	14.0	17.0 sec.
• Speed of Answer/U S WEST Retail Center	27.8	23.9	43.2 sec.

These results demonstrate that CLECs have superior access to the Interconnect Provisioning Center when compared to calls to U S WEST Retail provisioning centers.

Calls Answered within Twenty Seconds - Interconnect Provisioning Center (OP-2): Measures the percentage of Interconnection Provisioning Center calls that are answered within twenty seconds of the first ring. (Interconnect Provisioning Centers handle Wholesale calls only.) Results are provided at a U S WEST level of reporting; neither CLEC-specific nor state-specific results are available.

The results for the above indicator for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Calls in 20 sec./Interconnect Provisioning Ctr.	87.6%	88.6%	86.6%
• Calls in 20 sec./U S WEST Retail Center	74.1%	77.6%	62.4%

Again, these results demonstrate that CLECs have superior access to the Interconnect Provisioning Center when compared to calls to U S WEST Retail provisioning centers.

Speed of Answer – Interconnect Repair Center (MR-1): Measures the average time following the first ring to answer calls in the Interconnection Repair Center. Results are provided at a U S WEST level of reporting; neither CLEC-specific nor state-specific results are available. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Speed of Answer/Interconnect Repair Center	13.0	11.0	11.0 seconds
• Speed of Answer/U S WEST Retail Repair Ctr.	39.4	33.7	30.7 seconds

As with provisioning centers, these results demonstrate that CLECs have superior access to the Interconnect Repair Center when compared to calls to U S WEST repair centers.

Calls Answered with 20 seconds – Interconnect Repair Center (MR-2): Measures the percentage of Interconnection Repair Center calls answered within twenty seconds of the first ring. Results are provided at a U S WEST level of reporting; neither CLEC-specific nor state-specific results are available. The results for the above indicator for November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Calls in 20 sec./ Interconnect Repair Center	94.1%	96.4%	96.3%
• Calls in 20 sec./U S WEST Retail Repair Ctr.	70.1%	71.5%	78.8%

Again, these results demonstrate that CLECs have superior access to the Interconnect Repair Center when compared to calls to U S WEST repair centers.

B3 Billing Performance Indicators

Just as the Act does not specifically mention performance measurements, it also does not mention specific requirements for billing. The FCC in its April 1998 NPRM on performance measurements suggests measuring "Average Time to Provide Usage Records" and "Average Time to Deliver Invoices."[23]

[23] FCC's NPRM on Performance Measurements, CC Docket 98-56, April 1998, Appendix A, p. A12.

1 U S WEST is preparing to provide these same two performance indicators for
2 billing, namely, "Mean Time to Provide U S WEST-recorded Usage Records" and "Mean
3 Time to Deliver Invoices."

4 **Mean Time to Provide U S WEST Recorded Usage Records (BI-1):** This
5 measures the timing of U S WEST delivery of billing records to CLECs. This indicator is
6 under development, and will be available by June 1999.

7 **Mean Time to Deliver Invoices (BI-2):** This measures the number of days
8 between the bill date and bill delivery. This indicator is under development, and will be
9 available by June 1999.

10 **B4 Flow-Through of Local Service Requests**

11 The Act does not specifically mention requirements for flow-through of local
12 services requests (LSRs). Nevertheless, the FCC in its April 1998 NPRM on
13 performance measurements suggests a number of performance indicators addressing
14 various aspects of LSR flow-through, characterizing them as "Order Status
15 Measurements" and "Order Quality Measurements."[24] These include: Average Reject
16 Notice Interval, Average FOC Notice Interval, Average Jeopardy Notice Interval,
17 Percentage of Orders Given Jeopardy Notices, Average Completion Notice Interval,
18 Percentage of Order Flow Through, Percentage of Rejected Orders, and Average
19 Submissions Per Order.

20 U S WEST provides for all but two of the FCC's suggested measurement
21 categories -- jeopardy notices and completion notices. Regarding jeopardy notices,

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[24] *Ibid.*, Appendix A, pp. A4 and A8.

U S WEST provides jeopardy notices in accordance with specific terms of interconnection agreements with CLECs. Because such notifications to a CLEC are appropriately and fundamentally different than any notification U S WEST might provide to residence or business end-users, there is no appropriate nondiscrimination issue to address by any measurement of jeopardy notices. With respect to completion notices, U S WEST provides a completion notification process that is inherently nondiscriminatory. Specifically, U S WEST processes completion information for CLEC orders in the same overnight batch process that it uses for its retail orders.

For one other FCC-suggested measurement, Average Submissions per Order, U S WEST provides information sufficient to determine such a measurement but does not separately calculate and report the measurement. Specifically, information U S WEST provides for firm order confirmations (FOCs) and LSR rejection notices permits one to calculate average submissions per order.

Otherwise, U S WEST provides the following measurements addressing flow-through of LSRs, which cover the remainder of the FCC's suggestions in this area:

- Electronic Flow-through of LSRs to the Service Order Processor (percent);
- LSR Rejection Notice Interval (average);
- LSRs Rejected (percent); and
- FOC Interval (average).

U S WEST characterizes these measurements as diagnostic performance indicators, because they do not address core aspects of service. For example, regardless of what degree of flow-through, LSR rejections, or FOC timeliness exists, if other core indicators demonstrate that the overall service provisioning and repair

1 process outcomes are reasonable and nondiscriminatory, the relevant checklist items
2 are satisfied.

3 **Electronic Flow-through of LSRs to the Service Order Processor (DPO-1):**
4 This diagnostic indicator measures the percentage of all electronic LSRs that flow to the
5 Service Order Processor (SOP) without rejection or error. Results will be reported
6 according to: (1) Orders that flow through without human intervention (DPO-1A) and, (2)
7 Orders that flow though without manual retyping (DPO-1B). As flow through is a
8 function of how LSRs are submitted, the flow-through performance results are reported
9 according to the type of pre-order/order gateway the CLEC used to submit the LSRs
10 (i.e., IMA, Exact,[25] and EDI, as applicable).

11 With respect to orders that flow through without human intervention, the result is
12 presently "zero" percent, because this type of flow-through is not possible at this time.

13 With respect to orders that flow through without manual retyping, this indicator is
14 under development, and will be available for reporting by June 1999.

15 **LSR Rejection Notice Interval (DPO-2):** This diagnostic indicator measures the
16 interval (in business days) between the receipt of an electronic Local Service Request
17 (LSR) and the rejection of the LSR for standard categories of errors/reasons. Standard
18 reasons for rejection include: missing/incomplete information; duplicate LSR; no valid
19 contract; no valid end user verification; and miscellaneous CLEC data provisioning
20 process errors. Included in the interval is time required for efforts by U S WEST to work
21 with the CLEC to avoid the necessity of rejecting the LSR. Accordingly, in this case,

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[25] "Exact" is a system supporting ordering for designed services (e.g., DS0, DS1, and DS3). This system is used by both CLECs and by U S WEST retail business customers. Accordingly, U S WEST also reports a "U S WEST Retail" number for flow-through-related results through Exact.

shorter is not always "better." As rejection notices are given in response to LSRs submitted, the performance results are reported according to the type of pre-order/order gateway the CLEC used to submit the LSR (i.e., IMA, Exact, and EDI, as applicable).

Results for this indicator for the months of November 1998 through January 1999, expressed in days, are as follows:

	Nov-98	Dec-98	Jan-99
• LSR Rejection Notice Interval (via IMA)	.5	0.3	0.2 days
• LSR Rejection Notice Interval (via Exact)	5.0	5.2	3.3 days
• U S WEST Retail Reject. Interval (via Exact)	8.4	4.2	4.5 days

These results demonstrate that U S WEST is providing rejection notices for LSRs with errors in a timely manner – less than a half-day via IMA – and more timely for CLECs than for retail customers using Exact.

Regarding the longer intervals via Exact in comparison to IMA, Exact processes LSRs for designed services, which are far more complicated than the non-designed LSRs processed by IMA. Further, to the benefit of both CLECs and U S WEST, there is more collaboration between the CLEC and U S WEST representatives on designed services in the pre-order and order stages of providing designed services. Hence, it is expected that LSRs processed via Exact will have longer notification intervals, whether reject notices or FOCs. Moreover, in terms of the positive benefits of pre-order/order collaboration, including U S WEST's efforts to work with CLECs in the process of handling LSRs to help avoid the need to reject an LSR, a longer interval is not necessarily an adverse indication.

LSRs Rejected (DPO-3): This diagnostic indicator measures the percentage of electronic LSRs rejected (returned to the CLEC) for standard categories of errors/reasons. Reasons for rejection include: missing/incomplete information; duplicate ASR/LSR; no valid contract; no valid end user verification; and miscellaneous CLEC data provisioning process errors. As for LSR rejection intervals, the performance results are reported according to the type of pre-order/order gateway the CLEC used to submit the LSR (i.e., IMA, Exact, and EDI, as applicable).

Results for this indicator for November 1998 through January 1999 are as follows:

	Nov-98	Dec-98	Jan-99
• LSRs Rejected (via IMA)	13.4%	10.7%	10.4%
• LSRs Rejected (via Exact)	22.1%	22.1%	14.1%
• U S WEST Retail Orders Rejected (via Exact)	23.4%	14.4%	17.9%

These results demonstrate that the number of rejected orders generally hovers in the vicinity of ten to twenty percent in recent months. As expected, in processing LSRs for more complex designed services, a higher percentage is experienced with Exact than with IMA. Overall, given that reasons for order rejection can vary widely, even with the standard categories, the above percentages are well within reasonable ranges, and are consistent with a conclusion that CLECs are being treated in a nondiscriminatory manner.

Firm Order Confirmation (FOC) Interval (DPO-4): This diagnostic indicator measures the average time for U S WEST to provide a Firm Order Confirmation (FOC) in response to a customer LSR received from the CLEC. The interval measured is the

period between U S WEST's receipt of the LSR and U S WEST's response with a FOC. Because FOCs are issued in response to LSRs submitted, the performance results are reported according to the type of pre-order/order gateway the CLEC used to submit the LSR (i.e., IMA, Exact, and EDI, as applicable).[26]

Results for this indicator for the months of November 1998 through January 1999, reported in days, are as follows:

	Nov-98	Dec-98	Jan-99	
• FOC Interval (via IMA and Fax)	0.4	0.3	0.2	days
• FOC Interval (via Exact)	5.1	5.2	4.5	days
• U S WEST Retail FOC Interval (via Exact)	3.5	3.5	3.5	days

These results demonstrate that, in recent months, U S WEST is providing FOCs to CLECs in reasonable timeframes. As with other flow-through-related measurements, these results also reflect the fact that LSRs processed through Exact are more complex, dealing with designed services, and thus have longer intervals than non-designed LSRs processed through IMA. Moreover, where there is a retail comparison, as with Exact, the results compare favorably, indicating that CLECs are being treated in a nondiscriminatory manner.

B5 Conclusions for Checklist Item 2 – Access to Network Elements

The foregoing performance results for gateway availability, access to provisioning and repair centers, billing, and flow-through of local services requests will support the Commission in finding that:

[26] Separate reporting of FOC intervals for LSRs submitted by facsimile is under development. Presently, the LSRs submitted by fax are included in the results reported for IMA.

- U S WEST is providing nondiscriminatory access to network elements, satisfying Checklist Item 2;
- U S WEST is providing access to provisioning and repair centers in a timely and nondiscriminatory manner to CLECs;
- In satisfying this checklist item, U S WEST has established a human-to-computer gateway, known as "IMA," which is successfully processing CLECs' local service requests in a timely and nondiscriminatory manner;
- Response times for specified pre-order and order transactions are sufficient to give an efficient competitor a reasonable opportunity to compete;
- From a diagnostic standpoint, nothing in the processing of local service requests, in terms of flow-through, order rejections, or firm order confirmations are preventing CLECs from successfully competing.

C. Checklist Item 4 – Unbundled Local Loop Transmission

The Act calls for U S WEST to provide "local loop transmission from the central office to the customer's premises, unbundled from local switching or other services."[27] In addition to this specific network element, the Act generally calls for providing "nondiscriminatory access to network elements on an unbundled basis . . . ."[28]

In light of the fact that U S WEST does not use for itself or provide to its retail customers network elements on an unbundled basis (as discussed under Checklist Item 2, section B.1., above), this nondiscrimination standard refers to providing equal quality

[27] Section 271(c)(2)(B)(iv).

[28] Section 251(c)(3).

as between and among CLECs to whom U S WEST does provide access to network elements on an unbundled basis.

As shown in Table 3 below, U S WEST provides eleven core and five diagnostic performance indicators that directly address local loop transmission, unbundled from local switching or other services, as shown in Sections 20.2.1 and 20.2.2 of U S WEST's SGAT:

Table 3

U S WEST Performance Indicators for Checklist Item 4, Unbundled Loops

	Indicator Number	***Checklist Item 4 Performance Indicator***
1	OP-3	Installation Commitments Met
2	OP-4	Installation Interval
3	OP-5	Installation Trouble Reports (within 30 days of new install.)
4	OP-6	Delayed Days
5	OP-7	Coordinated Cutover Interval – Unbundled Loop
6	OP-9	Coordinated Cutover Interval – Unbundled Loop with INP
7	MR-3	Out of Service Cleared in 24 Hours
8	MR-5	Out of Service Cleared within 4 hours
9	MR-6	Mean Time to Restore
10	MR-7	Repair Repeated Report Rate
11	MR-8	Trouble Rate
12	DOP-1	CLEC or CLEC's Customer-Caused Installation Misses
13	DOP-2	Delayed Orders Completed more than 15 days past the commitment date
14	DOP-3	Delayed Orders Completed more than 90 days past the commitment date
15	DOP-4	CLEC or CLEC's Customer-Caused Coordinated Cutover Misses
16	DMR-1	CLEC or CLEC's Customer-Caused Trouble Reports

C1 Installation of Unbundled Loops

Installation Commitments Met (OP-3): Measures the percentage of orders for unbundled loops for which the committed due date is met. A separate measure will be

provided for analog and digital unbundled loops. The results for installation commitments met for analog unbundled loops for the period November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Installation Commitments Met	91%	62%	88%

These results demonstrate that U S WEST has been providing access to analog loops on an unbundled basis in Arizona and, with the isolated exception of December, generally has met commitments about 90 percent of the time.

Because there were no digital unbundled loops provided to CLECs in Arizona during this period, there are no results for installation commitments met for digital unbundled loops.

Installation Interval (OP-4): Measures the average interval (in business days) between the application date and the completion date for service. A separate measure will be provided for analog and digital unbundled loops. The results for installation interval for analog unbundled loops for the period November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Installation Interval (average days)	7.1	9.9	13.0 days

These results demonstrate that, in addition to meeting commitments 90 percent of the time, U S WEST is providing unbundled analog loops in seven to thirteen days in recent months and, as shown in Exhibit MGW-2, Checklist Item 4, in shorter intervals in some earlier months.

Because there were no digital unbundled loops provided to CLECs in Arizona during this period, there are no results for installation intervals for digital unbundled loops.

Installation Trouble Reports (OP-5): Measures Maintenance/Repair requests received within thirty (30) calendar days of a completed service provisioning order as a percentage of the related new installation total orders. The results for the above indicator for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	Nov-98	Dec-98	Jan-99
• Installation Trouble Reports	0.6%	0.0%	4.4%

These results demonstrate that U S WEST has been installing unbundled analog loops accurately, based on the fact that trouble reports within thirty days of those installations were less than one percent in recent months.

Because there were no digital unbundled loops provided to CLECs in Arizona during this period, there are no results for installation trouble reports for digital unbundled loops.

Delayed Days (OP-6): Measures the average number of days service is delayed beyond the original due date for reasons attributed to U S WEST. Results for this indicator for the months of November through January 1998 are as follows:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Delayed Days (average)	15.4	6.5	5.3 days

These results demonstrate that, in the context of about 90 percent commitments met, orders that are not met, as represented by delayed days, are averaging only five to seven days beyond the due date in the two most recent months reported.

Coordinated Cutover Interval – Unbundled Loop (OP-7): Measures the average time to complete the cutover of an unbundled loop. Separate results will be provided for loop cutovers coordinated with Interim Number Portability (OP-7A) and loop cutovers not associated with Interim Number Portability (OP-7B). This measure is under development.

Coordinated Cutover Combined Interval – Unbundled Loop and INP Combined (OP-9): Measures the Average time (beginning to end) to complete a coordinated cutover of an unbundled loop combined with interim number portability. This measure is under development.

In the absence of actual results for this particular performance indicator, it should be noted that U S WEST has a coordination center which insures that, as soon as an unbundled loop is ready for cutover, the INP cutover process is triggered. The INP cutover time is measured, with and without coordinated unbundled loops, by performance indicator number OP-8.

C2 Repair of Unbundled Loops

Out of Service Cleared within 24 Hours (MR-3): Measures the percentage of trouble reports for unbundled loops that are cleared within twenty-four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. Separate measures are provided for analog and digital loops.

The results for the above indicator for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	Nov-98	Dec-98	Jan-99
• Out of Service Cleared within 24 Hours	90.0%	91.7%	100.0%

These results demonstrate that U S WEST has been responsive in responding to trouble reports on unbundled loops provided to CLECs by repairing out of service conditions within 24 hours better than 90 percent of the time in recent months.

Out of Service Cleared within 4 hours (MR-5): Measures the percentage of trouble reports for unbundled loops that are cleared within four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Out of Service Cleared in 4 Hours	50%	50%	78%

These results demonstrate, while better than 90 percent of out of service conditions are repaired within 24 hours, more than half of those (and in January, more than three-quarters) are repaired within only four hours.

Mean Time to Restore (MR-6): Measures the average time to resolve requests for repair, including both out of service and service-affecting conditions. Excluded are CLEC-caused or CLEC's customer-caused troubles. For the non-CLEC-caused and non-customer-caused troubles that this indicator addresses, any delays in repair that are either U S WEST or CLEC-caused (such as no access, no available work force, etc.) are included. The results for the above indicator for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Mean Time to Restore (hours:minutes)	6:34	14:11	4:14

These results demonstrate that, in the context of more than 90 percent of out of service situations being cleared within 24 hours and more than half of those cleared within four hours, the overall average time to clear all troubles generally is less than about fourteen hours. In fact, looking at all seven months reported, per Exhibit MGW-2, only two months were greater than about nine hours, and in the most recent month, January, the average time to resolve trouble reports was only four hours and fourteen minutes.

Repair Repeat Report Rate (MR-7): Measures the percentage of repair reports that are repeated within 30 days. Includes U S WEST network or system caused reports. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Repair Repeat Report Rate	0.0%	0.0%	17.0%

These results demonstrate that, in recent months, U S WEST has generally been resolving repair reports accurately, based on the number of repeated repair reports received within thirty days of a given repair report.

Trouble Rate (MR-8): Measures CLEC-specific trouble report rate of occurrences per 100 trunks in service. Measures U S WEST network or system causes, excludes reports due to CLEC action or CLEC equipment failures. First results for this indicator will be gathered for the month of April 1999, and will be reported in June 1999.

C3 Diagnostic Results for Unbundled Loops

CLEC or CLEC's Customer-caused Installation Misses (DOP-1): This diagnostic indicator measures the percentage of installation due dates missed for CLECs' or CLECs' customers' reasons. Orders issued with a due date are included. CLEC and aggregate CLEC state specific results are available. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• CLEC-Caused Installation Misses	11.1%	0.0%	0.0%

These results indicate that CLEC-related issues caused misses of due dates only in one recent month.

Percent Delayed Orders Completed more than 15 days past the commitment date (DOP-2): This diagnostic indicator measures the percentage of orders for which service is delayed more than fifteen days beyond the original due date for reasons attributed to U S WEST. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Delayed Orders more than 15 days late	75.0%	0.0%	0.0%

These results demonstrate that, while six of eight late orders for unbundled loops in November were delayed more than fifteen days, U S WEST had no orders for unbundled loops delayed more than fifteen days in the most recent two months reported.

Percent Delayed Orders Completed more than 90 days past the commitment date (DOP-3): This diagnostic indicator measures the percentage of orders for which service is delayed more than ninety days beyond the original due date

for reasons attributed to U S WEST. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• Delayed Orders more than 90 days late	0.0%	0.0%	0.0%

These results demonstrate that U S WEST had no orders for unbundled loops delayed beyond ninety days in recent months and, in fact, none in any of the seven months reported in Exhibit MGW-2.

CLEC or CLEC's Customer-caused Coordinated Cutover Misses (DOP-4): This diagnostic indicator measures the percentage of installation commitments missed for CLEC or CLEC's customer's reasons. This indicator is under development.

CLEC or CLEC's Customer-caused Trouble Reports (DMR-1): This diagnostic indicator measures the percentage of all trouble reports that occur due to CLEC or CLEC end-user customer action. The results for the months of November 1998 through January 1999 are:

Unbundled Analog Loops	*Nov-98*	*Dec-98*	*Jan-99*
• CLEC-Caused Trouble Reports	20.0%	8.3%	22.2%

These results demonstrate that CLECs or CLECs' customers were responsible for about one out of five trouble reports in recent months.

C4 Conclusions for Checklist Item 4 – Access to Unbundled Loops

The foregoing performance results for installation and repair of unbundled loops, including diagnostic results, will support the Commission in finding that:

- U S WEST is providing CLECs access to local loop transmission in Arizona on an unbundled basis in a nondiscriminatory manner;

1 • U S WEST's actual performance in providing unbundled loops is sufficient to
2 permit an efficient competitor a meaningful opportunity to compete, because
3 installation commitments met and intervals are within reasonable ranges and
4 repairs are completed in a timely manner, with more than ninety percent being
5 completed within 24 hours.

1 **D. Checklist Items 5 and 6 – Unbundled Transport and Switching**

2 The Act calls for U S WEST to provide "local transport from the trunk side of a
3 wireline local exchange carrier switch unbundled from switching or other services"[29] and
4 "local switching unbundled from transport, local loop transmission, or other services."[30]
5 In addition to these specific network elements, the Act generally calls for providing
6 "nondiscriminatory access to network elements on an unbundled basis . . . ."[31]

7 In light of the fact that U S WEST does not use for itself or provide to its retail
8 customers network elements on an unbundled basis (as discussed under Checklist Item
9 2, section B.1, above), this nondiscrimination standard for purposes of performance
10 measurements refers to providing equal quality as between and among CLECs to whom
11 U S WEST provides access to network elements on an unbundled basis.

12 As shown in Table 4 below, U S WEST provides eight core and five diagnostic
13 performance indicators that directly address unbundled switching and transport, as
14 shown in Sections 20.2.1 and 20.2.2 of U S WEST's proposed SGAT:

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[29] Section 271(c)(2)(B)(v).

[30] Section 271(c)(2)(B)(vi).

[31] Section 251(c)(3).

Table 4

U S WEST Performance Indicators for Checklist Items 5 and 6

Unbundled Transport and Switching

	Indicator Number	***Checklist Items 5 and 6 Performance Indicator***
1	OP-3	Installation Commitments Met
2	OP-4	Installation Interval
3	OP-5	Installation Trouble Reports (within 30 days of new install.)
4	OP-6	Delayed Days
5	MR-5	Out of Service Cleared within four hours
6	MR-6	Mean Time to Restore
7	MR-7	Repair Repeated Report Rate
8	MR-8	Trouble Rate
9	DOP-1	CLEC or CLEC's Customer-Caused Installation Misses
10	DOP-2	Delayed Orders Completed more than 15 days past the commitment date
11	DOP-3	Delayed Orders Completed more than 90 days past the commitment date
12	DOP-4	CLEC or CLEC's Customer-Caused Coordinated Cutover Misses
13	DMR-1	CLEC or CLEC's Customer-Caused Trouble Reports

Because U S WEST has not provided unbundled switching or transport to CLECs in Arizona, there are no results of the above performance measures to report at this time.

D1 Installation Performance Indicators for Unbundled Transport and Switching

Installation Commitments Met (OP-3): Measures the percentage of unbundled elements, by type, for which the committed due date is met.

Installation Interval (OP-4): Measures the average interval (in business days) between the application date and the completion date for service.

Installation Trouble Reports (OP-5): Measures Maintenance/Repair requests received within thirty (30) calendar days of a completed service provisioning order as a percentage of the related new installation total orders.

Delayed Days (OP-6): Measures the average number of days service is delayed beyond the original due date for reasons attributed to U S WEST.

D2 Repair Performance Indicators for Unbundled Transport and Switching

Out of Service Cleared within 4 hours (MR-5): Measures the percentage of trouble reports for unbundled elements that are cleared within four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls due to a problem with the unbundled element.

Mean Time to Restore (MR-6): Measures the average time to resolve requests for repair. All U S WEST and CLEC-caused delays (no access, no available work force, etc.) are included.

Repair Repeat Report Rate (MR-7): Measures the percentage of repair reports that are repeated within 30 days.

Trouble Rate (MR-8): Measures the CLEC-specific trouble report rate of occurrences per 100 unbundled elements, by type, in service.

D3 Diagnostic Indicators for Unbundled Transport and Switching

CLEC or CLEC's Customer-caused Installation Misses (DOP-1): This diagnostic indicator measures the percentage of installation commitments missed for

CLECs' or CLECs' customers' reasons. Orders issued with a due date are included. CLEC and aggregate CLEC state specific results will be available.

Percent Delayed Orders Completed more than 15 days past the commitment date (DOP-2): This diagnostic indicator measures the percentage of orders for which service is delayed more than fifteen days beyond the original due date for reasons attributed to U S WEST.

Percent Delayed Orders Completed more than 90 days past the commitment date (DOP-3): This diagnostic indicator measures the percentage of orders for which service is delayed more than ninety days beyond the original due date for reasons attributed to U S WEST.

CLEC- or CLEC's Customer-caused Coordinated Cutover Misses (DOP-4): This diagnostic indicator measures the percentage of installation commitments missed for CLECs' or CLECs' customers' reasons.

CLEC or CLEC's Customer-caused Trouble Reports (DMR-1): This diagnostic indicator measures the percentage of all trouble reports that occur due to CLEC or CLEC end user customer action.

D4 Conclusions for Checklist Items 5 and 6 – Unbundled Transport and Switching

The foregoing performance results for installation and repair of unbundled transport and switching, including diagnostic results, will support the Commission in finding that:

- U S WEST is prepared to provide CLECs access to local transport and switching in Arizona on an unbundled basis in a nondiscriminatory manner and

to measure installation and repair performance when CLECs order these services;

- With performance indicators in place, the ability exists to insure that the market will remain open.

E. Checklist Item 7 – Access to 911/E911, Directory Assistance, and Operator Services

The Act calls for U S WEST to provide "nondiscriminatory access to (I) 911 and E911 services; (II) directory assistance services . . .; and (III) operator call completion services."[32] U S WEST provides six core performance indicators that directly address Checklist Item 7, as shown in Section 20.2.1 (paragraphs J and K) in U S WEST's SGAT. These are:

- ALI Database Updates Within 24 Hours (percent) [ES-1]
- 911/E911 ES Trunk Installation Intervals (average) [ES-2]
- Speed of Answer for Directory Assistance and Operator Services (average) [DA-1 and OS-1]
- Calls Answered to Directory Assistance and Operator Services within 10 seconds (percent) [DA-2 and OS-2]

E1 Emergency Services – 911/E911

ALI Database Updates Completed within 24 hours (ES-1): Measures the percentage of batch updates to the ALI Database accomplished within 24 hours of service order completion. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• ALI Database updates within 24 hours	100%	100%	100%

[32] Section 271(c)(2)(B)(vii).

These results demonstrate that U S WEST has completed all batch updates to the ALI database within twenty-four hours.

911/E911 ES Trunk Installation Interval (ES-2): Measures the average time (in business days) between the application date and the completion date for the service ordered. U S WEST did not install any 911 trunks for CLECs in the months of November through January 1999, so there are no results to report for this measure in recent months.

E2 Access to Directory Assistance

Speed of Answer – Directory Assistance (DA-1): Measures the average time following the first ring when a call is first picked up by the U S WEST agent to answer directory assistance calls. In order to report individual CLEC results, the CLEC must make special trunking and workforce arrangements which, to date, no CLEC has requested.

The results for the above indicator for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• DA Speed of Answer (seconds)	10.2	8.6	8.4

These results demonstrate that U S WEST is providing timely access to Directory Assistance.

Calls Answered within Ten Seconds – Directory Assistance (DA-2): Measures the percent of directory assistance calls that are answered within ten seconds of the first ring by the U S WEST agent. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Calls to DA answered < 10 seconds	89.8%	91.4%	91.6%

These results demonstrate that U S WEST Directory Assistance calls are answered in less than ten seconds about ninety percent of the time.

E3 Access to Operator Services

Speed of Answer – Operator Services (OS-1): Measures the average time following the first ring when a call is first picked up by the U S WEST agent to answer operator assisted calls. In order to report individual CLEC results, the CLEC must make special trunking and workforce arrangements which, to date, no CLEC has requested. The results for the above indicator for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• OS Speed of Answer (seconds)	10.9	11.6	10.4

These results demonstrate that U S WEST is providing timely access to Operator Services.

Calls Answered within ten seconds – Operator Services (OS-2): Measures the percent of Operator Assisted calls answered within ten seconds of the first ring by the U S WEST agent. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Calls to OS answered < 10 seconds	89.1%	88.4%	89.6%

These results demonstrate that U S WEST Operator Services calls are answered in less than ten seconds about ninety percent of the time.

1 **E4 Conclusions for Checklist Item 7 – 911/E911, DA, and OS**

2 Actual results for U S WEST's performance relating to this checklist item show
3 that:

4 • U S WEST is providing CLECs with access to 911/E911, DA, and OS in
5 Arizona; and

6 • The quality of that access is sufficient to give an efficient competitor a
7 meaningful opportunity to compete.

8 Specifically, highlights of the actual results show for 911/E911 that, while there
9 has been no CLEC activity ordering emergency services trunks in the months reported,
10 100% of ALI database updates have been completed within 24 hours. For access to
11 operator services and directory assistance, ninety percent or more of all calls are
12 answered within ten seconds in recent months, and average speeds of answer are
13 generally less than ten seconds for directory assistance and slightly more than ten
14 seconds for operator services.

15 **F. Checklist Item 11 – Interim Number Portability**

16 The Act calls for U S WEST to provide "interim telecommunications number
17 portability . . . with as little impairment of functioning, quality, reliability, and convenience
18 as possible."[33]

19 U S WEST provides eleven performance indicators that go well beyond satisfying
20 the Act. In addition to addressing INP as a subset of unbundled loops, U S WEST
21 addresses INP as a separate service grouping. These performance indicators are as

[33] Section 271(c)(2)(B)(xi).

shown in Section 20.2.1 (paragraphs L and M) in U S WEST's proposed SGAT. These are described in the following Table 5:

Table 5

U S WEST Performance Indicators, Checklist Item 11

Interim Number Portability

	Indicator Number	***Checklist Item 11 Performance Indicator***
1	OP-3	Installation Commitments Met
2	OP-4	Installation Interval
3	OP-5	Installation Trouble Reports (within 30 days of new install.)
4	OP-8	Coordinated Cutover Interval – INP
5	MR-3	Out of Service Cleared in 24 hours
6	MR-4	All Troubles Cleared in 48 hours
7	MR-5	Out of Service Cleared within 4 hours
8	MR-6	Mean Time to Restore
9	MR-7	Repair Repeated Report Rate
10	MR-8	Trouble Rate (under development for Jun 99)
11	DOP-1	CLEC or CLEC's Customer-Caused Installation Misses

F1 Installation of INP

Installation Commitments Met (OP-3): Measures the percentage of interim number portability orders for which the committed due date is met. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Installation Commitments Met	100%	no activity	no activity

These results demonstrate that U S WEST has met installation commitments for INP 100 percent of the time in the most recent month of CLEC activity.

Installation Interval (OP-4): Measures the average interval (in business days) between the application date and the completion date for interim number portability service. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Installation Intervals (average days):	4.8	no activity	no activity

These results demonstrate that, in the most recent month of CLEC activity, U S WEST provided INP within about five days from the time of order, on average.

Installation Trouble Reports (OP-5): Measures Maintenance/Repair requests received within thirty (30) calendar days of a completed service provisioning order as a percentage of the related new installation total orders. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• Installation Trouble Reports:	17.6%	0.0%	no activity

These results demonstrate that U S WEST is installing INP accurately, based on there being no trouble reports within 30 days of installations in recent months.

Coordinated Cutover Interval – INP (OP-8): Measures the average time to complete an Interim Number Portability cutover. Separate results are provided for interim number portability cutovers coordinated with and without unbundled loops.

	Nov-98	Dec-98	Jan-99
• INP w/o Unbundled Loop:	2 min.	no activity	no activity
• INP w/ Unbundled Loop:	no activity	no activity	no activity

These results demonstrate that, for the most recent month in which there was activity, U S WEST completed INP cutovers without unbundled loops in only two minutes, on average. For INP cutovers with coordinated unbundled loops, there was no

CLEC order activity in the most recent three months reported. Nevertheless, Exhibit MGW-2, Checklist Item 11, demonstrates that INP cutover times are generally less than thirty minutes (with only one month as an exception).

F2 Repair of INP

Out of Service Cleared within 24 Hours (MR-3): Measures the percentage of trouble reports for interim number portability that are cleared within twenty-four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• INP Out of Service Cleared within 24 hours:	75%	66.6%	41.2%

These results demonstrate that there have been very few out-of-service conditions affecting INP in the most recent three months reported. For December 1998, there were only two such events, and in January 1999, only one out-of-service condition.

All Troubles cleared within 48 hours (MR-4): Measures the percent of trouble reports cleared within 48 hours of a call from a CLEC. This measurement includes all applicable trouble reports, including those that are out of service and those that are only service-affecting. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• All INP Troubles Cleared within 48 hours:	93.8%	100%	94.1%

These results demonstrate that U.S WEST is responsive clearing all INP troubles, whether out of service or only service affecting, within 48 hours in recent months.

Mean Time to Restore (MR-6): Measures the average time to resolve requests for repair. All U S WEST and CLEC-caused delays (no access, no available work force, etc.) are included. The results, reported in hours:minutes format, for the months of December 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• INP Mean Time to Restore (hours:minutes):	6:21	6:01	9:35

These results demonstrate, consistent with the previous two indicators, that the average time to resolve all INP trouble reports is less than one day.

Repair Repeat Report Rate (MR-7): Measures the percentage of repair reports that are repeated within 30 days. Includes U S WEST network or system caused reports. The results for the above indicator for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• INP Repair Repeat Reports Rate:	0%	0%	0%

These results demonstrate that U S WEST is resolving INP troubles accurately, based on there being no repeat trouble reports within thirty days of previous trouble reports.

Trouble Rate (MR-8): Measures CLEC-specific trouble report rate of occurrences per 100 interim number portability arrangements in service. Measures U S WEST network or system causes, excludes reports due to CLEC action or CLEC

equipment failures. First results for this indicator will be gathered for the month of April 1999, and will be reported in June 1999.

F3 Diagnostic Results for INP

CLEC or CLEC's Customer-caused Installation Misses (DOP-1): This diagnostic indicator measures the percentage of installation commitments missed for CLECs' or CLECs' customers' reasons. Orders issued with a due date are included. CLEC and aggregate CLEC state specific results are available. The results for the months of November 1998 through January 1999 are:

	Nov-98	Dec-98	Jan-99
• CLEC or Customer-caused Installation Misses:	0%	no activity	no activity

These results show that there were no CLEC or CLEC Customer-caused installation misses to consider in evaluating installation commitments met or installation intervals performance results.

F4 Conclusions for Checklist Item 11 – Interim Number Portability

The foregoing results for installation and repair of interim number portability support the Commission in finding that:

- U S WEST is providing Interim Number Portability in satisfaction of Checklist Item 11.
- U S WEST's installation and repair performance results for INP provide efficient CLECs a meaningful opportunity to compete.

1 **G. Checklist Item 14 – Resale Services**

2 The Act calls for U S WEST (1) to insure that "telecommunications services are
3 available for resale . . . " and (2) "not to impose unreasonable or discriminatory
4 conditions or limitations on, the resale of such telecommunications service . . . ."

5 From the perspective of considering indicators of service performance, these
6 provisions call for nondiscriminatory service quality, even though they approach the
7 matter somewhat differently than other checklist items dealing with nondiscrimination
8 that focus primarily on terms and conditions, rather than service quality itself.

9 This nondiscrimination standard thus calls for U S WEST to provide equal quality
10 of service as between and among retail customers and CLECs to which U S WEST
11 provides the same retail/resale services.

12 U S WEST provides ten core and four diagnostic performance indicators that
13 directly address resale services, as shown in Sections 20.2.1 and 20.2.2 in U S WEST's
14 SGAT. These indicators are listed in Table 6 below:

15 **Table 6**

16 **U S WEST Performance Indicators for Checklist Item 14 – Resale**

	Indicator Number	***Checklist Item 14 Performance Indicator***
1	OP-3	Installation Commitments Met
2	OP-4	Installation Interval
3	OP-5	Installation Trouble Reports (within 30 days of new install.)
4	OP-6	Delayed Days
5	MR-3	Out of Service Cleared within 24 hours (non-designed repair process)
6	MR-4	All Troubles Cleared within 48 hours (non-designed repair process)
7	MR-5	Out of Service Cleared within 4 hours (designed repair process)
8	MR-6	Mean Time to Restore
9	MR-7	Repair Repeated Report Rate

	Indicator Number	Checklist Item 14 Performance Indicator
10	MR-8	Trouble Rate (under development for Jun 99)
11	DOP-1	CLEC or CLEC's Customer-Caused Installation Misses
12	DOP-2	Delayed Orders Completed more than 15 days past the commitment date
13	DOP-3	Delayed Orders Completed more than 90 days past the commitment date
14	DMR-1	CLEC or CLEC's Customer-Caused Trouble Reports

G1 Installation of Resale Services

As stated in the SGAT, U S WEST reports performance results for the above resale service quality indicators. These results are reported according to resale services provided to CLECs (shown below as "CLECs") and retail services provided to U S WEST's end user customers (shown below as "U S WEST").

Installation Commitments Met (OP-3): Measures the percentage of orders for resale services for which the committed due date is met. The results for the above indicator for the months of November 1998 through January 1999 are:[34]

- *Installation Commitments Met - Residence*

	November	December	January
CLECs	92.6%*	94.6%*	97.5%
U S WEST	96.2%	96.1%	95.6%

- *Installation Commitments Met - Business*

	November	December	January
CLECs	95.7%	96.6%	95.3%
U S WEST	93.2%	93.5%	93.8%

[34] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Installation Commitments Met - Centrex*

	November	December	January
CLECs	92.6%	94.7%	94.9%
U S WEST	93.5%	92.7%	92.5%

- *Installation Commitments Met - PBX*

	November	December	January
CLECs	89.3%	78.7%	80.9%
U S WEST	91.6%	86.8%	85.9%

- *Installation Commitments Met - Basic POTS ISDN*

	November	December	January
CLECs	86.3%	86.6%	72.4%
U S WEST	78.3%	76.9%	76.2%

- *Installation Commitments Met - Basic Designed ISDN*

	November	December	January[35]
CLECs	100.0%	14.3%*	33.3%*
U S WEST	48.8%	83.3%	61.1%

- *Installation Commitments Met - Primary ISDN*

	November	December	January
CLECs	75.0%	93.8%	75.0%
U S WEST	38.0%	69.2%	59.6%

- *Installation Commitments Met - DS0*

	November	December	January
CLECs	50.0%	50.0%	66.7%
U S WEST	42.0%	63.2%	77.9%

- *Installation Commitments Met - DS1*

	November	December	January
CLECs	37.1%*	59.7%*	52.0%*
U S WEST	61.0%	67.4%	68.4%

[35] As the second month with a statistically-significant difference, this indicator is under observation to determine whether the trend will continue into a third month, in which case an investigation will be triggered and, as applicable, action plans will be developed to resolve the difference, per provisions of the SGAT, Section 20.7.

- *Installation Commitments Met - DS3*

	November	December	January
CLECs	no activity	no activity	no activity

These results demonstrate that:

- For non-designed services, U S WEST consistently meets due dates more than 90 percent of the time. In recent months, and in the seven months reported, commitments met results reported for non-designed services have satisfied this checklist item and have reflected no significant differences adverse to CLECs, as defined in Section 20.7.1 of the SGAT and explained in Sections I.D.2 and III.B of this affidavit.
- For designed services, with the possible exception of one service, which is under investigation as I explain later, U S WEST consistently meets due dates in a nondiscriminatory manner. Only the commitments met results reported for resold DS1 service reflect a significant difference as defined in the proposed SGAT. This difference exists only in the most recent three months reported. The next appropriate step is to consider the situation in context and to place resold DS1 commitments met under investigation to determine whether the supporting facts provide a reasonable explanation or whether an action plan to resolve the difference is needed. U S WEST is now in the process of this investigation. In this context, it should be noted that, despite differences in commitments met, installation intervals for DS1 service (reported next) are either not significantly different or better for CLECs than for U S WEST retail, both in the most recent three months and in the seven months reported.

Installation Interval (OP-4): Measures the average interval (in business days) between the application date and the completion date for service. The results for the months of November 1998 through January 1999 are: [36]

- *Installation Interval - Residence*

	November	December	January
CLECs	3.3 days*	2.5 days	1.1 days
U S WEST	2.7 days	2.5 days	2.6 days

- *Installation Interval - Business*

	November	December	January
CLECs	3.0 days	2.0 days	2.2 days
U S WEST	3.6 days	3.3 days	3.0 days

- *Installation Interval - Centrex*

	November	December	January
CLECs	4.2 days	4.3 days	3.4 days
U S WEST	3.9 days	3.7 days	3.5 days

- *Installation Interval - PBX*

	November	December	January
CLECs	3.7 days	5.5 days	6.2 days
U S WEST	3.2 days	4.1 days	5.5 days

- *Installation Interval - Basic POTS ISDN*

	November	December	January
CLECs	11.2 days	10.4 days	12.7 days
U S WEST	11.1 days	11.9 days	12.7 day

- *Installation Interval - Basic Designed ISDN*

	November	December	January
CLECs	no activity	41.4 days*	33.3 days
U S WEST	14.0 days	8.0 days	11.8 days

- *Installation Interval - Primary ISDN*

	November	December	January
CLECs	12.3 days	37.7 days*	3.5 days
U S WEST	14.3 days	12.5 days	14.7 days

[36] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Installation Interval - DS0*

	November	December	January
CLECs	21.3 days	21.0 days	8.3 days
U S WEST	26.5 days	22.1 days	10.9 days

- *Installation Interval - DS1*

	November	December	January
CLECs	17.4 days	12.1 days	15.1 days*
U S WEST	15.7 days	14.2 days	11.9 days

- *Installation Interval - DS3*

	November	December	January
CLECs	no activity	no activity	no activity

These results demonstrate that:

- For non-designed resale services, both in recent months and throughout the seven month period reported in Exhibit MGW-2, U S WEST has provided reasonable and nondiscriminatory installation intervals to CLECs. For these non-designed services, only for two services (Residence and Basic Designed ISDN) was there one month that had a statistically-significant difference in service levels U S WEST provided to CLECs, and that was not repeated in the two months following, in each case. Otherwise, there are no significant differences as defined in the proposed SGAT, Section 20.7.1, and as further explained herein.
- For designed resale services, both in recent months and throughout the seven month period reported, U S WEST has provided reasonable and nondiscriminatory installation intervals to CLECs. For these designed services, there are also no significant differences adverse to CLECs as defined in the proposed SGAT, Section 20.7.1, and as explained herein. For these designed services, only two (Primary ISDN and DSI Service) had statistically-significant

differences in the most recent three months reported – and only one month in isolation in each case.

Installation Trouble Reports (OP-5): Measures Maintenance/Repair requests received within thirty (30) calendar days of a completed service provisioning order as a percentage of the related new installation total orders. Unlike other indicators, this measurement combines concepts of both installation and repair. The fundamental measurement supporting this indicator focuses on repair activity (i.e., measuring troubles reported soon after installation), but the purpose is to evaluate the accuracy of installation activity (i.e., presenting the result as a percentage of related new installation activity). Consequently, the calculation and statistical analysis for this indicator are also different than for other indicators, in that the results present the measurement on the basis of installation activity, while the statistical analysis focuses only on the repair dimension.

This approach demonstrates well whether installations are completed accurately. However, due to the dual repair/installation nature of the indicator, it is possible for some comparisons to show large differences, as a percentage of installation activity, that are not statistically significant differences from a repair perspective, as can be seen in some of the results below. This effect is sometimes magnified by the fact that installation activity is reported in terms of orders, each of which can include multiple services or lines, whereas trouble reports are targeted to individual lines or services.

The results for the above indicator for the months of November 1998 through January 1999 are:[37]

- *Installation Trouble Reports - Residence*

	November	December	January
CLECs	0.2%	0.3%*	0.1%
U S WEST	0.3%	0.2%	0.2%

- *Installation Trouble Reports - Business*

	November	December	January
CLECs	0.1%	0.1%	0.1%
U S WEST	0.4%	0.4%	0.3%

- *Installation Trouble Reports - Centrex*

	November	December	January
CLECs	0.3%	0.2%	0.6%
U S WEST	0.5%	0.5%	0.6%

- *Installation Trouble Reports - PBX*

	November	December	January
CLECs	4.3%	0.9%	0.0%
U S WEST	0.0%	0.0%	0.1%

- *Installation Trouble Reports - Basic POTS ISDN*

	November	December	January
CLECs	0.0%	0.0%	0.0%
U S WEST	0.2%	0.0%	0.1%

- *Installation Trouble Reports - Basic Designed ISDN*

	November	December	January
CLECs	0.0%	0.0%	0.0%
U S WEST	0.0%	0.0%	0.0%

- *Installation Trouble Reports - Primary ISDN*

	November	December	January
CLECs	92.9%	37.5%	15.0%
U S WEST	37.1%	45.9%	28.9%

[37] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Installation Trouble Reports - DS0*

	November	December	January
CLECs	51.3%[38]	160.0%[39]	214.3%[40]
U S WEST	32.5%	64.5%	44.6%

- *Installation Trouble Reports - DS1*

	November	December	January
CLECs	10.0%*	5.5%	10.7%
U S WEST	6.4%	5.3%	8.1%

- *Installation Trouble Reports - DS3*

	November	December	January
CLECs	10.0%	no activity	no activity
U S WEST	0.0%	no activity	no activity

These results demonstrate that, for both non-designed and designed services, U S WEST is consistently performing service installations for CLECs' customers with an accuracy level that is reasonable and nondiscriminatory in comparison to installation accuracy levels associated with retail services installations. For this performance indicator, all services in all months (except residence in the month of December 1998) report results for this indicator that demonstrate nondiscriminatory service.

Delayed Days (OP-6): Measures the average number of days service is delayed beyond the original due date for reasons attributed to U S WEST.[41]

Results available for this indicator for the months of November 1998 through January 1999 are:

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[38] *Ibid.*

[39] *Ibid.*

[40] *Ibid.*

[41] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Delayed Days (average days) - Residence*

	November	December	January
CLECs	10.3	10.4	8.5
U S WEST	10.8	10.8	10.6

- *Delayed Days (average days) - Business*

	November	December	January
CLECs	11.4	9.7	8.9
U S WEST	11.5	11.6	10.3

- *Delayed Days (average days) - Centrex*

	November	December	January
CLECs	7.4	7.5	11.3
U S WEST	10.5	10.2	11.9

- *Delayed Days (average days) - PBX*

	November	December	January
CLECs	9.2	11.3	17.8
U S WEST	10.2	8.0	12.8

- *Delayed Days (average days) - Basic POTS ISDN*

	November	December	January
CLECs	14.5	11.3	18.1
U S WEST	13.3	15.8	18.7

- *Delayed Days (average days) - Basic Designed ISDN*

	November	December	January
CLECs	no CLEC Activity	37.0*	36.5[42]
U S WEST	no CLEC Activity	12.2	12.4

- *Delayed Days (average days) - Primary ISDN*

	November	December	January
CLECs	20.0[43]	0.0	0.0
U S WEST	8.4	na	na

[42] Only two orders this month and not statistically significant, per permutation test as reported in Exhibit MGW-2, Checklist Item 14, for this indicator.

[43] *Ibid.*, (i.e., again, only two orders and not statistically significant).

- *Delayed Days (average days) - DS0*

	November	December	January
CLECs	18.0	24.0[44]	1.0
U S WEST	19.5	19.9	4.1

- *Delayed Days (average days) - DS1*

	November	December	January
CLECs	14.3	14.5*	18.3* [45]
U S WEST	17.6	16.1	17.4

- *Delayed Days (average days) - DS3*

	November	December	January
CLECs	no activity	no activity	no activity

These results demonstrate that CLECs are generally experiencing nondiscriminatory average delayed days. There are no significant difference in results for average delayed days as defined in the proposed SGAT, Section 20.7.1. However, the results for DS1 service are under observation, as there have been two months of statistically significant difference.

Turning to the related diagnostic indicators for additional context on DS1 service performance (as reported below); however, CLECs experienced a lower percentage of delayed orders beyond 15 days than U S WEST retail in the months of November and December.

G2 Repair of Resale Services

Out-of-Service Cleared within 24 Hours (MR-3): Measures the percentage of trouble reports for resold services that are cleared within 24 hours of a call from a

[44] *Ibid.*, (same comment).

[45] As the second month with a statistically-significant difference, this indicator is under observation to determine whether the trend will continue into a third month, in which case an investigation will be triggered and, as applicable, action plans will be developed to resolve the difference, per provisions of the SGAT, Section 20.7.

CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. The purpose for this performance indicator is to show what percentage of out-of-service troubles are resolved within 24 hours, which is the standard repair time estimate for clearing out-of-service non-designed services. Results for this performance indicator for the months of November 1998 through January 1999 are:[46]

- *Out of Service Cleared in 24 Hours - Residence*

	November	December	January
CLECs	25.2%*	36.6%	44.2%
U S WEST	38.7%	40.0%	40.4%

- *Out of Service Cleared in 24 Hours - Business*

	November	December	January
CLECs	45.8%	41.9%	58.1%
U S WEST	53.8%	54.0%	48.2%

- *Out of Service Cleared in 24 Hours - Centrex*

	November	December	January
CLECs	39.1%	22.2%*	43.6%
U S WEST	47.4%	50.5%	40.7%

- *Out of Service Cleared in 24 Hours - PBX*

	November	December	January
CLECs	37.0%	17.9%	25.0%
U S WEST	40.0%	no activity	no activity

- *Out of Service Cleared in 24 Hours - Basic POTS ISDN*

	November	December	January
CLECs	no activity	no activity	no activity

These results demonstrate that, from the perspective of clearing out-of-service troubles within the standard estimated time of twenty-four hours, U S WEST is providing

[46] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

CLECs with nondiscriminatory repair. In the most recent three months reported, only two services experienced a significant difference in CLEC versus U S WEST performance – each in one isolated month – and the situation was not repeated in following months.

All Troubles cleared within 48 hours (MR-4): Measures the percentage of trouble reports cleared within 48 hours of a call from a CLEC. This measurement includes all applicable trouble reports, including those that are out of service and those that are only service-affecting. The purpose for this performance indicator is to show what percentage of all troubles are resolved within 48 hours, which is the standard repair time estimate for all troubles involving non-designed services. Results for this indicator for the months of November 1998 through January 1999 are:[47]

- *All Troubles Cleared in 48 Hours - Residence*

	November	December	January
CLECs	94.3%	91.4%	95.8%
U S WEST	89.6%	94.5%	93.1%

- *All Troubles Cleared in 48 Hours - Business*

	November	December	January
CLECs	81.4%*	93.5%	93.0%
U S WEST	93.9%	96.6%	95.5%

- *All Troubles Cleared in 48 Hours - Centrex*

	November	December	January
CLECs	87.0%	96.3%	89.7%
U S WEST	89.1%	94.6%	90.6%

- *All Troubles Cleared in 48 Hours - PBX*

	November	December	January
CLECs	100.0%	100.0%	93.8%
U S WEST	100.0%	100.0%	100.0%

- *All Troubles Cleared in 48 Hours - Basic POTS ISDN*

	November	December	January
CLECs	no activity	no activity	no activity

These results demonstrate that, from the perspective of clearing all troubles within the standard estimated time of forty-eight hours, U S WEST is providing CLECs with nondiscriminatory repair. Only one service category experienced a significant difference in one month, and that situation was not repeated in the two months following.

Out of Service Cleared within 4 hours (MR-5): Measures the percentage of trouble reports for designed resold services that are cleared within four hours of a call from a CLEC. The measurement includes only out of service trouble reports, which are defined as the inability to initiate or receive calls. The purpose of this performance indicator is to show what percentage of out-of-service troubles are resolved within the standard estimate for designed services of four hours. The results for the November 1998 to January 1999 timeframe are:[48]

- *Out of Service Cleared in 4 Hours – DS0*

	November	December	January
CLECs	80.7%	83.1%	81.4%
U S WEST	80.3%	79.8%	82.8%

- *Out of Service Cleared in 4 Hours – DS1*

	November	December	January
CLECs	76.2%	74.6%	75.6%
U S WEST	73.3%	75.8%	74.8%

[47] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

[48] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Out of Service Cleared in 4 Hours – DS3*

	November	December	January
CLECs	66.7%	57.1%	85.7%
U S WEST	94.1%	72.7%	66.7%

- *Out of Service Cleared in 4 Hours - Basic Designed ISDN*

	November	December	January
CLECs	no CLEC activity	0.0%	0.0%
U S WEST	no CLEC activity	0.0%	0.0%

- *Out of Service Cleared in 4 Hours - Primary ISDN*

	November	December	January
CLECs	60.7%	30.6%	54.1%
U S WEST	68.2%	37.9%	64.7%

These results demonstrate that, from the perspective of clearing out of service troubles for designed services within the standard estimate time of four hours, U S WEST is providing CLECs with nondiscriminatory repair. There were no instances in the most recent three months reported of any statistically significant differences.

Mean Time to Restore (MR-6): Measures the average time to resolve requests for repair. All U S WEST and CLEC-caused delays (no access, no available work force, etc.) are included. The results for the months of November 1998 through January 1999, shown in "hours:minutes" format, are:[49]

- *Mean Time to Restore - Residence*

	November	December	January
CLECs	14:19	19:39	19:42
U S WEST	20:11	13:57	17:35

- *Mean Time to Restore - Business*

	November	December	January
CLECs	23:21*	12:43	21:14
U S WEST	14:11	10:41	13:26

[49] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Mean Time to Restore - Centrex*

	November	December	January
CLECs	18:42	10:50	19:15
U S WEST	17:05	12:49	19:03

- *Mean Time to Restore - PBX*

	November	December	January
CLECs	7:23	2:42	18:25
U S WEST	4:29	0:00	4:00

- *Mean Time to Restore - Basic POTS ISDN*

	November	December	January
CLECs	no activity	no activity	no activity

- *Mean Time to Restore - Basic Designed ISDN*

	November	December	January
CLECs	no activity	no activity	8:00

- *Mean Time to Restore - Primary ISDN*

	November	December	January
CLECs	10:54	21:11	9:12
U S WEST	8:03	18:45	7:22

- *Mean Time to Restore - DS0*

	November	December	January
CLECs	4:02	2:31	3:18*
U S WEST	2:35	2:42	2:22

- *Mean Time to Restore - DS1*

	November	December	January
CLECs	3:49	3:42	3:56
U S WEST	4:19	4:05	2:59

- *Mean Time to Restore - DS3*

	November	December	January
CLECs	7:20	3:51	1:30
U S WEST	1:16	31:43	8:03

These results demonstrate that, from the overall repair perspective of average time to resolve all trouble reports, U S WEST is providing CLECs with nondiscriminatory repair. Only two services had differences in results, each in only one month of the three recent months reported above.

Repair Repeat Report Rate (MR-7): Measures the percentage of repair reports that are repeated within 30 days, and includes U S WEST network or system caused reports. The results for the months of November 1998 through January 1999 are:[50]

- *Repair Repeat Rate - Residence*

	November	December	January
CLECs	13.0%	9.7%	11.6%
U S WEST	11.3%	9.8%	8.9%

- *Repair Repeat Rate - Business*

	November	December	January
CLECs	23.7%*	12.9%	18.6%
U S WEST	12.5%	11.0%	8.1%

- *Repair Repeat Rate - Centrex*

	November	December	January
CLECs	26.1%	11.1%	15.4%
U S WEST	15.6%	13.9%	11.1%

- *Repair Repeat Rate - PBX*

	November	December	January
CLECs	18.5%	10.7%	6.3%
U S WEST	20.0%	0.0%	0.0%

- *Repair Repeat Rate - Basic POTS ISDN*

	November	December	January
CLECs	no activity	no activity	no activity
U S WEST	0.0%	7.7%	3.6%

- *Repair Repeat Rate - Basic Designed ISDN*

	November	December	January
CLECs	no activity	0.0%	0.0%
U S WEST	0.0%	0.0%	0.0%

- *Repair Repeat Rate - Primary ISDN*

	November	December	January
CLECs	23.0%	22.4%	17.6%
U S WEST	24.8%	22.7%	21.0%

[50] Differences in results (reflecting CLECs receiving lower quality) that are statistically significant according to the results of the permutation test or proportions test, as reported in the statistical scores in Exhibit MGW-2 for this checklist item, are marked with an asterisk (*).

- *Repair Repeat Rate – DS0*

	November	December	January
CLECs	22.4%	25.8%	27.1%
U S WEST	31.2%	30.4%	30.3%

- *Repair Repeat Rate - DS1*

	November	December	January
CLECs	33.6%	35.7%	33.3%
U S WEST	41.6%	35.2%	26.7%

- *Repair Repeat Rate - DS3*

	November	December	January
CLECs	33.3%	14.3%	14.3%
U S WEST	29.4%	54.5%	33.3%

These results demonstrate that U S WEST is repairing trouble reports accurately and, from that perspective, in a nondiscriminatory manner. Only one service had a statistically significant difference in one month; which was not repeated in the two months following.

Trouble Rate (MR-8): Measures CLEC-specific trouble report rate of occurrences per 100 trunks in service caused by the U S WEST network or system. The measurement excludes reports due to CLEC action or CLEC equipment failures. U S WEST will gather the first results for this indicator for the month of April 1999 and will report the results in June 1999.

G3 Diagnostic Performance Results for Resale Services

CLEC or CLEC's Customer-caused Installation Misses (DOP-1): This diagnostic indicator measures the percentage of installation commitments missed for CLEC or CLEC's customer's reasons. The results for the months of July 1998 through January 1999 are reported in Exhibit MGW-2. In this case, as none of the results

reported for core indicators suggested any problems for which this diagnostic indicator would be of help, no further analysis involving this indicator is necessary at present.

Percent Delayed Orders Completed more than 15 days past the commitment date (DOP-2): This diagnostic indicator measures the percentage of orders for which service is delayed more than fifteen days beyond the original due date for reasons attributed to U S WEST. The results for the months of November 1998 through January 1999 are:

- *Delayed Orders 15 days Past Commitment - Residence*

	November	December	January
CLECs	22%	21%	17%
U S WEST	26%	26%	24%

- *Delayed Orders 15 days Past Commitment - Business*

	November	December	January
CLECs	32%	20%	18%
U S WEST	29%	29%	24%

- *Delayed Orders 15 days Past Commitment - Centrex*

	November	December	January
CLECs	12%	21%	24%
U S WEST	26%	24%	33%

- *Delayed Orders 15 days Past Commitment - PBX*

	November	December	January
CLECs	17%	39%	56%
U S WEST	18%	17%	30%

- *Delayed Orders 15 days Past Commitment - Basic POTS ISDN*

	November	December	January
CLECs	46%	26%	62%
U S WEST	38%	46%	51%

- *Delayed Orders 15 days Past Commitment – Basic Designed ISDN*

	November	December	January
CLECs	no CLEC activity	100%*	100%
U S WEST	no CLEC activity	17%	21%

- *Delayed Orders 15 days Past Commitment - Primary ISDN*

	November	December	January
CLECs	50%	no CLEC activity	0%
U S WEST	11%	no CLEC activity	21%

- *Delayed Orders 15 days Past Commitment - DS0*

	November	December	January
CLECs	67%	50%	0%
U S WEST	50%	51%	4%

- *Delayed Orders 15 days Past Commitment - DS1*

	November	December	January
CLECs	40%	35%	50%
U S WEST	49%	51.9%	46%

- *Delayed Orders 15 days Past Commitment - DS3*

	November	December	January
CLECs	no activity	no activity	no activity

Because the core indicator addressing the category of delayed days (Indicator OP-6) indicated no problems requiring further diagnosis, this indicator does not need to be specifically applied. Nevertheless, these results confirm the finding supported by the core indicator that U S WEST is providing nondiscriminatory resale services to CLECs.

Percent Delayed Orders Completed more than 90 days past the commitment date (DOP-3): This diagnostic indicator measures the percentage of orders for which service is delayed more than ninety days beyond the original due date for reasons attributed to U S WEST. For the months of November 1998 through January 1999, the results of this indicator were zero percent for all services, meaning that no service had delayed more than ninety days.

These results demonstrate that U S WEST has kept delays on orders to less than ninety days and, as reported above for delayed days beyond fifteen, has usually kept the number of delays to well less than fifteen days.

CLEC or CLEC's Customer-caused Trouble Reports (DMR-1): This diagnostic indicator measures the percentage of all trouble reports that occur due to CLEC or CLEC end user customer action. The results for the months of July 1998 through January 1999 are reported in Exhibit MGW-2. In this case, none of the results reported for core repair indicators identified problems requiring further diagnosis. Therefore, no further analysis involving this indicator is necessary at present.

G4 Conclusions for Checklist Item 14 – Resale Services

The foregoing performance results for Checklist Item 14, Resale Services, will support the Commission in finding that:

- U S WEST has opened its local exchange markets in Arizona to competition by providing telecommunications services for resale to CLECs in a nondiscriminatory manner in comparison to its own retail services;
- In doing so, U S WEST is providing reasonable and timely installation and repair of residence, business, and designed (or special) services to CLECs; and
- The service performance indicators U S WEST is reporting in accordance with its SGAT in Arizona are sufficient to ensure that the local market for resale services will remain open.

III. SERVICE PERFORMANCE REPORTING

A. U S WEST's Service Performance Indicator Reports Support Appropriate Evaluations of Nondiscrimination Under the Act

A1 Reporting Format

U S WEST reports the "Quantity Meeting Criteria," the "Sample Size," and the "Indicator Result," in Exhibit MGW-2 in accordance with the following definitions.

The Quantity Meeting Criteria is the sum of the time intervals or the number of qualifying events that the performance indicator is defined to evaluate (such as installation intervals or commitments met, respectively). Accordingly, the Quantity Meeting Criteria is either the sum of all time intervals measured by the indicator (if the indicator is defined to report average intervals) or the number of all measured transactions meeting the criteria specified by the indicator (if the indicator is defined to report a certain percentage). For example, for installation intervals, the Quantity Meeting Criteria is the sum of all installation intervals measured in the month being reported. Or, for installation commitments met, it is the number of installation orders that were completed on time.

The Sample Size is the total number of observed/measured events underlying the time intervals or events measured by the indicator (such as the total number of orders or trouble tickets). For this item, whether the indicator is measuring time intervals or qualifying events, the Sample Size is the total number of events contributing to the intervals or qualifying events. For example, for installation intervals, the Sample Size is the total number of applicable installation orders in the month being reported.

1 And, for installation commitments met, it is also the total number of applicable
2 installation orders.

3 **The Indicator Result** is the calculated number representing the defined aspect
4 of performance quality (in terms of an average or percentage) that is obtained by
5 dividing the Quantity Meeting Criteria by the Sample Size.

6 Thus, the Quantity Meeting Criteria is called the "numerator," and the Sample
7 Size the "denominator," of the calculation that gives the Indicator Result.

8 In addition, for each month, U S WEST includes data columns containing the
9 appropriate standard deviation and "statistical score" for the comparisons of results (i.e.,
10 CLEC to CLEC aggregate, CLEC to U S WEST Retail (as applicable), and CLEC
11 aggregate to U S WEST Retail (as applicable)).

12 For Exhibit MGW-2, which reports the CLEC Aggregate and U S WEST Retail
13 results, the statistical score refers to the comparison of those two sets of results, where
14 they are comparable, and applies the statistical methods described in Section 20.7 of
15 U S WEST's proposed SGAT and later in this affidavit.

16 For individual CLEC results, two columns are used to provide the statistical
17 scores relating to the comparison of (1) CLEC to CLEC aggregate results and (2) the
18 comparison of CLEC to U S WEST Retail (as applicable).

19 **A2 Reporting Frequency**

20 U S WEST reports results for performance indicators monthly, with emphasis on
21 evaluating rolling three-month periods of results to establish trends and determine what
22 is significant and relevant. U S WEST reports results to CLECs according to

1 requirements specified in interconnection agreements or pursuant to the proposed
2 SGAT.

3 **B. U S WEST proposes specific statistical tests for determining statistical**
4 **significance.**

5 **B1 The Role of Statistical Analyses**

6 Comparisons of service performance may require statistical analyses, because
7 all behaviors of systems have inherent degrees of variability. Statistical tests may be
8 needed to determine whether any differences observed in comparisons of performance
9 come from random variations in service or from some other source. While an average
10 may be calculated from a number of observations, the individual events contributing to
11 the overall calculation naturally fall on either "side" of the average, above or below it.
12 The degree to which the events vary from each other, overall, is measured by an aptly-
13 named statistic called "variance." In this context, the purpose of statistical tests is to
14 determine whether two averages come from two different sets of performance or
15 whether they simply lie within the usual ranges of variance of the events being
16 measured.

17 The range of variance to be used for this purpose is determined according to the
18 degree of confidence desired in identifying an actual difference. A higher confidence
19 level uses a wider range. For example, a difference that is equal to two standard
20 deviations is considered to be statistically significant at the 95 percent confidence level.
21 However, it would not be statistically significant at the 99 percent confidence level,

which instead would require a difference of about 2.5 standard deviations before the difference would be statistically significant.

Accordingly, if the difference between two averages being compared is greater than the number of standard deviations that corresponds to the desired confidence level, their difference is said to be statistically significant at that level of confidence. The commonly known "Z Test" yields a "score" that in essence converts the difference calculated between two results into the number of standard deviations the difference represents. Using a specified confidence level, that score then can be used to determine whether the difference is statistically significant.

B2 Statistical Significance

A statistically significant difference means that the observed numerical difference does represent a probable difference in actual service performance that is not due to mere random variations, at least to the level of confidence used in designing the statistical test. However, a statistically significant difference cannot, of itself, mean that unlawful discrimination exists, because other factors could have caused the difference.

As an example, consider the cutover interval for INP. The measurement covers the time from start to completion of each cutover. Each cutover consists of numbers of orders with different numbers of lines and telephone numbers involved. A CLEC with large numbers of lines per cutover will see a cutover time that is longer, on average, than a CLEC with relatively small numbers of lines per cutover requested. Thus, such variability from one CLEC to another may cause a difference in cutover time that is not discrimination.

1 Accordingly, performance measurements and the associated statistical tests are
2 only the first step in a process of identifying differences in performance. Further
3 analysis and investigation, depending on the situation, will be needed to focus on
4 causes and to effect any changes that might be called for.

5 **B3 Operational and Material Significance**

6 Beyond statistical significance are the concepts of operational and material
7 significance. To explain, a statistical analysis only looks at numbers relating to
8 performance, and it may detect a difference that has no operational or practical
9 importance. Therefore, in the interest of efficiently focusing the limited resources of
10 regulators and carriers, a statistically significant difference should next trigger an
11 assessment of "operational and material significance."

12 Operational significance is related to the magnitude of the difference between
13 comparable performance results. It defines the difference level beyond which there
14 begins to be a perceptible and meaningful effect on customers, CLEC operations, or
15 competition. For example, a half-second difference in system response times might be
16 statistically significant, but probably is not operationally significant.

17 Material significance is related to the number of incidents contributing to an
18 overall average difference in performance results, and helps to define the minimum
19 sample size that should be used in focusing attention and responsive actions. For
20 example, a difference of one day in average installation interval might be statistically
21 significant, but if it came from only a few observations (say, five, ten, or even twenty), it
22 is probably not materially significant.

Thus, statistically significant differences that have no perceptible operational effect or meaningful materiality should be monitored for trending purposes, but should not be allowed to distract attention and resources away from other statistically-significant indicators that are operationally and materially significant.

Using these criteria for defining what reasonably represents statistical, operational, and material significance, U S WEST and CLECs can focus on identifying performance areas that require attention. These are the bases for U S WEST's proposals for minimum sample sizes of 30 and minimum trending of rolling three-month periods.

B4 Statistical Method for Testing Differences in Means

Where service performance results are expressed in terms of averages, statistical tests designed to evaluate "differences in means" are commonly used.

As defined in U S WEST's proposed SGAT, the Permutation Test overcomes problems associated with skewed data. This test uses what is commonly referred to as a standard "Z" statistic and a maximum of 1,000 randomly selected permutations of the samples. This approach achieves the designed confidence level with greater accuracy than the standard Z Test, because it does not depend on normal distributions of data points.

B5 Statistical Method for Testing Differences in Proportions

Where service performance results are expressed in terms of percentages, statistical tests designed to evaluate "differences in proportions" are commonly used. As defined in U S WEST's proposed SGAT, the significance of a difference in

1 proportional measurements will be based on a direct calculation of the probability of
2 observing such a difference, using the binomial distribution with a pooled "p value."[51]

3 **B6 Determining Statistical Significance**

4 As outlined in U S WEST's proposed SGAT, "a difference in results by either test
5 type (i.e., differences in means or differences in proportions) will be deemed statistically
6 significant if the appropriate one tailed test indicates, with 99 percent confidence, that
7 the performance indicator results being compared appear to be from different
8 populations of performance. In other words, that service being provided to CLEC
9 appears to be inferior to that represented by the comparable results (such as, results
10 representing service provided to CLECs in aggregate or to U S WEST retail)."

11 **B7 Reporting of Statistical Information**

12 Consistent with U S WEST's proposals, I include in this affidavit statistical
13 information that includes permutation test results where averages are reported and
14 proportion test results where percentages are reported. In addition, since the
15 permutation test is more computation intensive, I am also providing applicable standard
16 deviations for each performance indicator reported, where there is a relevant
17 comparison of results to be made. This will permit the commission staff and other
18 parties to perform their own statistical analyses.

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[51] Measurements that are reported as proportions result from processes which have two possible outcomes (e.g. "yes/no," "met/not met," or "blocked/not blocked"). The outcomes of these processes follow a "binomial distribution," and statistical tests for detecting differences in proportions must be based on that distribution. The defining characteristic of a binomial distribution is its "p value." For example, if one percent of all calls attempted on all final trunks are blocked, the p value for the population is 0.01. The variance of a binomial distribution also depends on its p value (i.e. variance = p(1-p)).

IV. CONCLUSIONS

U S WEST has opened its local exchange markets in Arizona to competition and has provided tens of thousands of confirming service performance data points representing literally millions of work activities over the period reported.

Further, the fact that U S WEST's Service Performance Indicators have been developed and are providing useful results demonstrates that the capability now exists to insure that these local exchange markets in Arizona remain open to competition.

Finally, U S WEST's proposed Statement of Generally Available Terms insures that the performance measurements reported herein are available to CLECs who desire to have them reported under legally binding terms and conditions. Included are provisions for self-executing remedies that insure that immediate and responsive actions will be taken to insure that U S WEST's services remain nondiscriminatory and, where required, at least equal in quality to that which it provides to itself.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

EXHIBITS OF

MICHAEL G. WILLIAMS

U S WEST COMMUNICATIONS

MARCH 25, 1999

INDEX OF EXHIBITS

DESCRIPTION	EXHIBIT
U S WEST's Service Performance Indicators	MGW-1
U S WEST's Service Performance Results, Combined CLEC and U S WEST	MGW-2
U S WEST's Service Performance Results, CLEC-Specific	MGW-2A
Correlation of U S WEST's Performance Indicators with Recent FCC NPRM	MGW-3

U S WEST's Service Performance Indicators

Checklist Items -->		1	2	4		5	6	11	14				
Performance Indicators		Interconnection LIS Trunks	Access to Network Elements	Unbundled Loops		Unbundled Transport	Unbundled Switch	Interim Number Portability	Resale				
				Analog	Digital				Res	Bus	DS0	DS1	DS3
INSTALLATION													
OP-1	Speed of Answer – Provisioning Center	(See Chk # 2)	X	(See under Checklist Item 2)									
OP-2	Percent Call Answered within 20 sec – Prov.	(See Chk # 2)	X	(See under Checklist Item 2)									
OP-3	Installation Commitments Met	X	na	X	X	X	X	X	X	X	X	X	X
OP-4	Installation Interval	X	na	X	X	X	X	X	X	X	X	X	X
OP-5	Installation Trouble Reports	X	na	X	X	X	X	X	X	X	X	X	X
OP-6	Average Delayed Days	X	na	X	X	X	X	X	X	X	X	X	X
OP-7-9	Coordinated Cutover Interval	X	na	X	X	X	X	X	X	X	X	X	X
REPAIR													
MR-1	Speed of Answer – Repair Center	(See Chk # 2)	X	(See under Checklist Item 2)									
MR-2	Percent Calls Answered < 20 Seconds – Repair	(See Chk # 2)	X	(See under Checklist Item 2)									
MR-3	Out of Service Cleared within 24 hours – Non-designed Repair	na	na	na	na	na	na	na	X	X	na	na	na
MR-4	All Troubles Cleared within 48 hours – Non-designed Repair	na	na	na	na	na	na	na	X	X	na	na	na
MR-5	All Troubles Cleared within 4 hours – Designed Repair	X	na	X	X	X	X	X	na	na	X	X	X
MR-6	Mean Time to Restore	X	na	X	X	X	X	X	X	X	X	X	X
MR-7	Repair Repeated Report Rate	X	na	X	X	X	X	X	X	X	X	X	X
MR-8	Trouble Rate	X	na	X	X	X	X	X	X	X	X	X	X

U S WEST's Service Performance Indicators

Checklist Items -->		1	2	4		5	6	11	14				
Performance Indicators		Interconnection LIS Trunks	Access to Network Elements	Unbundled Loops		Unbundled Transport	Unbundled Switch	Interim Number Portability	Resale				
				Analog	Digital				Res	Bus	DS0	DS1	DS3
OTHER / DIAGNOSTIC													
DPO-1	Electronic LSR Flow-through to Order Proc.	(See Chk # 2)	X	(See under Checklist Item 2)									
DPO-2	LSR Rejection Notice Interval	(See Chk # 2)	X	(See under Checklist Item 2)									
DPO-3	LSRs Rejected	(See Chk # 2)	X	(See under Checklist Item 2)									
DPO-4	Firm Order Confirmation Interval	(See Chk # 2)	X	(See under Checklist Item 2)									
DOP-1	CLEC-caused Installation Misses	X	na	X	X	X	X	X	X	X	X	X	X
DOP-2	Delayed Orders Compl. more than 15 days late	X	na	X	X	X	X	X	X	X	X	X	X
DOP-3	Delayed Orders Compl. more than 90 days late	X	na	X	X	X	X	X	X	X	X	X	X
DOP-4	CLEC-caused Coord. Cutover Misses	X	na	X	X	X	X	X	X	X	X	X	X
DMR-1	CLEC-caused Repair Reports	X	na	X	X	X	X	X	X	X	X	X	X
DNI-1	Provisioning Interval – USW Interoffice Trunks	X	na	X	X	X	X	X	X	X	X	X	X
DNI-2	Local Interconnection Final Trunk Utilization	X	na	X	X	X	X	X	X	X	X	X	X

Confidential exhibits

Correlation of U S WEST Performance Indicators With Measurements Identified by the FCC

FCC NPRM Measure-ment Number	FCC NPRM Measurement	*U S W* Indicator Number	*U S WEST* Performance Indicator
I. Pre-Ordering		***Pre-Order***	
I.	Average Response Time	PO-1	Pre-Order Response Time – Human-to-Computer (average)
		PO-2	Pre-Order Response Time – Computer-to-Computer (average)
II. Ordering / Provisioning		***Ordering and Provisioning***	
II.A.1.	Average Completion Interval	OP-4	Installation Interval (average)
II.A.2.	Percentage of Due Dates Missed	OP-3	Installation Commitments Met (percent)
II.B.	Average Coordinated Customer Conversion Interval	OP-7	Coordinated Cutover Interval – Unbundled Loop (average)
		OP-8	Coordinated Cutover Interval – INP (average)
		OP-9	Coordinated Cutover Interval – Unbundled Loop with INP (average)
II.C.1.	Average Reject Notice Interval	DPO-2	LSR Rejection Notice Interval (average)
II.C.2.	Average FOC Notice Interval	DPO-4	FOC Interval (average)
II.C.3.	Average Jeopardy Notice Interval	na	(No nondiscrimination issue.)
II.C.4.	Percentage of Orders Given Jeopardy Notices	na	(No nondiscrimination issue.)
II.C.5.	Average Completion Notice Interval	na	(Nondiscriminatory completion notification process in place.)
II.D.	Average Interval for Held Orders	OP-6	Delayed Days (average)
II.E.	Percentage of Troubles in 30 days for New Orders	OP-5	Installation Trouble Reports (percent within 30 days)
II.F.1.	Percentage of Order Flow Through	DPO-1	Electronic Flow-through of LSRs to Service Order Processor – DOP-1A = without human intervention (percent) – DOP-1B = without manual retyping (percent)
II.F.2.	Percentage of Rejected Orders	DPO-3	LSRs Rejected (percent)
II.F.3.	Average Submissions per Order	DPO-4 & DPO-2	(Submissions per order can be calculated from numbers reported in conjunction with FOC and Rejection indicators.)
II.G.1	Percentage of Accurate 911 and E911 Database Updates	ES-1	Percent of ALI Database Updates Completed Accurately within 24 hours
II.G.2	Percentage of Missed Due Dates for 911 and E911 Database Updates <u>or</u> Average Time to Update 911 and E911 Databases	ES-1	Percent of ALI Database Updates Completed Accurately within 24 hours
III. Repair and Maintenance		***Maintenance and Repair***	
III.1.	Average Time to Restore	MR-6	Mean Time to Restore (percent)
III.2.	Trouble Rate	MR-8	Trouble Rate (percent) (under development for Jun 99)
III.3.	Frequency of Repeat Troubles in 30-day period	MR-7	Repair Repeated Report Rate (percent within 30 days)
III.4.	Percentage of Customer Troubles	MR-3	Out of Service Cleared within 24 hours (non-designed)

FCC NPRM Measure-ment Number	FCC NPRM Measurement	*U S W* Indicator Number	*U S WEST* Performance Indicator
	Resolved Within Estimated Time		(percent)
		MR-4	All Troubles Cleared within 48 hours (non-designed) (percent)
		MR-5	All Troubles Cleared within 4 hours (designed) (percent)
IV. Billing		***Billing***	
IV.1.	Average Time to Provide Usage Records	BI-1	Mean Time to Provide U S WEST-recorded Usage Records
IV.2.	Average Time to Deliver Invoices	BI-2	Mean Time to Deliver Invoices
V.A. Systems Availability		***Gateway Availability***	
V.A.	Percentage of Time Interface is Available	GA-1	Gateway Availability – via Human-to-Computer Interface (percent)
		GA-2	Gateway Availability – via Computer-to-Computer Interface (percent)
V.B. Center Responsiveness		***Access to Centers***	
V.B.	Average Time to Answer Competing Carrier Calls	OP-1	Speed of Answer – Calls to Provisioning Center (average)
		OP-2	Calls Answered within 20 Seconds – Provisioning Center (percent)
		MR-1	Speed of Answer – Calls to Repair Center (average)
		MR-2	Calls Answered within 20 Seconds – Repair Center (percent)
V.C. OS/DA		***Operator Services and Directory Assistance***	
V.C.	Average Time to Answer	OS-1	Speed of Answer – Calls to Operator Services (average)
		OS-2	Calls Answered within 10 Seconds to Operator Services (percent)
		DA-1	Speed of Answer – Calls to Directory Assistance (average)
		DA-2	Calls Answered within 10 Seconds to Directory Assistance (percent)
VI.A. Trunk Blockage		***Network Interconnection***	
VI.A.1	Percent Blockage on Interconnection Trunks	NI-1	Trunk Blocking – Interconnection Trunks (percent)
VI.A.2	Percent Blockage on Common Trunks	NI-2	Trunk Blocking – Local Interoffice ("Common") Trunks (percent)
VI.B. Collocation		***Collocation Provisioning***	
VI.B.1	Average Time to Respond a Collocation Request	DCP-2	Collocation Feasibility Study Interval (average)
		DCP-3	Collocation Feasibility Study Commitments Met (percent)
		DCP-4	Collocation Quote Interval (average)
VI.B.2	Average Time to Provide a Collocation Arrangement	CP-2	Collocation Installation Interval (average)
VI.B.3	Percent of Due Dates Missed With Respect to the Provision of Collocation Arrangements	CP-1	Collocation Installation Commitments Met (percent)

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238** **AFFIDAVIT OF Michael G. Williams**
STATE OF UTAH	)	
	:	**SS**
COUNTY OF SALT LAKE	)	

Michael G. Williams, of lawful age being first duly sworn, deposes and states:

1. My name is Michael G. Williams. I am Director, Wholesale Interconnection Implementation of U S WEST Communications in Salt Lake City, Utah.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Michael G. Williams

SUBSCRIBED AND SWORN to before me this Sixteenth day of January, 1999.

Notary Public

My Commission Expires:

Notary Public
SUSAN K. WHITE
2085 Walker Lane
Holladay, Utah 84117
My Commission Expires
November 27, 19[illegible]
State of Utah

AFFIDAVIT OF BUHLER

BEFORE THE ARIZONA CORPORATION COMMISSION

CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238**

AFFIDAVIT OF

DEAN W. BUHLER

U S WEST COMMUNICATIONS

MARCH 25, 1999

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IDENTIFICATION OF AFFIANT

My name is Dean W. Buhler. I am employed by U S WEST Communications, Inc. (U S WEST) as a Regulatory Manager in the Information Technologies Wholesale Systems Regulatory Support Group.

Currently, my responsibilities include identifying and managing regulatory issues involving U S WEST's operational support systems (OSS) as a result of the Telecommunications Act of 1996, FCC orders, state commission decisions, and other legal and regulatory matters. Prior to my current assignment, I was involved in application development projects for 9 years in a variety of roles: logical data modeling, systems engineering, user requirements definition, functional specifications definition, programming and project management. Each role is an essential step in traditional software development life-cycle. I also have experience in object-oriented modeling, a new software development methodology.

My educational background includes a B.A. from Willamette University, an M.A. from Middlebury College, an M.B.A. from Portland State University and a J.D. from the University of Denver.

PURPOSE OF AFFIDAVIT

The purpose of my affidavit is to demonstrate that U S WEST has satisfied the requirements of the Telecommunications Act of 1996 (Telecom Act) and related FCC rulings and regulations with respect to nondiscriminatory access to OSS.

First, my affidavit will demonstrate that U S WEST has deployed the necessary systems and personnel to provide CLECs sufficient access to each of the necessary OSS functions. To make this demonstration, I will: 1) define OSS and electronic interfaces; 2) describe the electronic interfaces and downstream OSSs that U S WEST has developed to support resale services, unbundled network elements, and interconnection; and 3) describe the business processes that U S WEST has established to support CLEC orders. Second, my affidavit will prove that U S WEST is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them, through training, documentation, and assistance. Lastly, my affidavit will prove that U S WEST's OSSs are operationally ready, by demonstrating that U S WEST's systems and centers are handling current demand and that U S WEST has sized its systems and centers to handle reasonably foreseeable demand. As further support, my affidavit will demonstrate that U S WEST's systems and processes have been subject to thousands of rigorous tests, including and internal testing, third-party testing, and carrier-to-carrier testing.

EXECUTIVE SUMMARY

In this testimony, I will establish that U S WEST has met all OSS standards set forth by the FCC in its First Report and Order and in its orders on other BOCs' 271 applications. I will establish that U S WEST satisfies the two prong test set forth by the FCC in those orders. U S WEST has satisfied the first prong of this test, namely that U S WEST has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and is adequately assisting competing

carriers to understand how to implement and use all of the OSS functions available to them. I will also establish that U S WEST has satisfied the second prong of this test, that the OSS functions that U S WEST has deployed are operationally ready as a practical matter.

U S WEST satisfies the first part of this two-prong test if it demonstrates that it has developed sufficient electronic and manual interfaces to allow competing carriers to access all of the necessary OSS functions. U S WEST has built and offers a human-to-computer real-time electronic interface, IMA GUI (Interconnect Mediated Access – Graphical User Interface), and a computer-to-computer electronic interface, EDI (Electronic Data Interchange), for pre-ordering, ordering, and provisioning of resale and line-side unbundled network elements (UNEs). For repair capabilities, U S WEST also offers two types of electronic interfaces to CLECs. The IMA GUI provides real-time repair functionality through a human-to-computer electronic interface, while EB-TA (Electronic Bonding – Trouble Administration) provides those capabilities through a real-time computer-to-computer electronic interface. U S WEST also offers a computer-to-computer interface, EXACT (Exchange Access Control Tracking), for ordering of interconnection (LIS trunks) and trunk-side unbundled network elements.

U S WEST also provides relevant billing data to CLECs that allows them to generate a bill to their end-user customers. U S WEST provides batch files to CLECs which contain all of the recurring charges, non-recurring charges, and usage data necessary for CLECs to appropriately bill their customers. U S WEST also provides to

1 CLECs completion and loss reports, which advise them when to start and stop billing
2 their customers.

3 In addition to electronic interfaces, U S WEST has engaged in extensive
4 development work to modify its existing downstream OSSs that support the pre-
5 ordering, ordering, provisioning, repair, and billing functions for resale products and
6 unbundled network elements. Generally, these modifications fall into four categories: 1)
7 changes to support new resale and unbundled network element products; 2) creation of
8 new account structures identifying the CLEC as the billed and contact party;
9 3) assignment and tracking of services and facilities to a particular CLEC; and
10 4) support of local number portability. In all, U S WEST has spent over $100 million and
11 several years of effort to develop electronic interfaces and modify its OSSs to
12 accommodate CLEC orders.

13 In addition, U S WEST has ensured that it will provide sufficient access to its
14 OSS, by sizing its systems and centers to handle current and future demand.
15 Moreover, U S WEST has developed processes to monitor current utilization for its
16 systems and centers and add additional systems capacity and/or personnel, when
17 needed.

18 U S WEST also assists CLECs to understand how to implement and use all the
19 OSS functions available to them, thereby satisfying the second portion of the FCC's
20 analysis. An organization, entitled Wholesale Systems Regulatory Support, has been
21 established comprised of individuals dedicated to ensuring that CLECs receive all of the
22 information and assistance needed to set up their systems interfaces and the processes

that support them. User guides, training manuals, and a Website have been provided to CLECs. Furthermore, U S WEST has established help desks and has dedicated system-administrator personnel to answer CLEC inquiries. An account representative is assigned to each CLEC to act as the CLEC's principal point of contact with U S WEST. U S WEST also offers both business and technical training.

Lastly, to demonstrate that the OSS functions are operationally ready as a practical matter, U S WEST can demonstrate that it is providing access to several CLECs in the state of Arizona. In addition to this usage, U S WEST has demonstrated that it is operationally ready by performing internal testing, third-party testing, and carrier-to-carrier testing to ensure that necessary functionality and capacity exists. Furthermore, U S WEST has developed service performance indicators to verify that it is providing nondiscriminatory access to its OSS.

In summary, U S WEST has deployed the <u>necessary system and personnel</u> to provide sufficient access to its OSS, <u>adequately assists</u> CLECs to use all of the OSS functions available to them, and has demonstrated that its OSS functions are <u>operationally ready</u>, as a practical matter. Therefore, the Commission should find that U S WEST has made its OSS functions available to CLECs on a nondiscriminatory basis.

CHECKLIST ITEM #2 NONDISCRIMINATORY ACCESS TO OSS

OVERVIEW

1. Legal and Regulatory OSS Requirements

1.1 Telecommunications Act of 1996

Although the phrase "Operational Support Systems" is not found anywhere in the Telecom Act, the FCC has determined that the Telecom Act imposes two standards on the ILECs, each of which relate to OSSs in appropriate circumstances. For resold services, section 251(c)(4) (B) of the Telecom Act establishes the standard by imposing upon the BOC "[t]he duty – not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on . . . resale."[1] The standard for access to unbundled network elements is different: Section 251(c)(3) of the Telecom Act imposes the duty to provide, upon request, just, reasonable and nondiscriminatory access to unbundled network elements.

1.2 FCC Rulings

In its First Report and Order, the FCC expanded the definition of a network element, and classified access to operational support systems as an unbundled network element that must be unbundled <u>upon request</u> under section 251(c)(3).[2] In addressing access to unbundled network elements, the FCC concluded that "an incumbent LEC must provide

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[1] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, *codified at* 47 U.S.C. §§ 151 *et seq.* (*Telecom Act*), §251(c)(4)(B).

[2] *See In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, and In the Matter of Interconnection between Local Exchange Carriers and Commercial

1 nondiscriminatory access to their operations support systems functions for pre-ordering,
2 ordering, provisioning, maintenance and repair, and billing available to the LEC itself."[3]
3 The FCC defined nondiscriminatory access as including: "access to the functionality of
4 any internal gateway systems the incumbent employs in performing the above functions
5 for its own customers."[4] However, the FCC has not determined the type of access the
6 BOC must provide to its OSS. In fact, the FCC stated that it "has not required that
7 incumbent LECs follow a prescribed approach in providing access to OSS functions."[5]

8 As more fully explained below, the Supreme Court has vacated the FCC's Rule
9 319, which was the rule that declared OSSs an unbundled network element. The FCC
10 will reconcile that rule under stricter standards, and it may limit the extent to which an
11 ILEC must provide access to OSS.

12 The FCC has provided rulings and comments in connection with section 271
13 applications filed by other BOCs. While it would be improper to mechanically or rigidly
14 apply those rulings and comments concerning other BOC's OSSs to U S WEST's
15 OSSs, portions of those rulings give guidance to the issues in this case.

16 In those orders, to determine whether a BOC is providing nondiscriminatory
17 access to its OSS, the FCC concluded that it was necessary to consider all automated

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Mobile Radio Service Providers, CC Docket No. 95-185, ¶ 516 (rel. Aug. 8, 1996), (*FCC First Report and Order*) (emphasis added).

3 *FCC First Report and Order*, ¶ 523.

4 *FCC First Report and Order*, ¶ 523.

5 *See In re Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan,* CC Docket No. 97-137, Memorandum Opinion and Order, FCC 97-137, ¶ 135 (rel. Aug. 19, 1997) (*FCC Ameritech Order*).

1 and manual processes used by the BOC.[6] The FCC employs a two-prong test to make
2 this evaluation.[7] The first inquiry is "whether the BOC has deployed the necessary
3 systems and personnel to provide sufficient access to each of the necessary OSS
4 functions and whether the BOC is adequately assisting competing carriers to
5 understand how to implement and use all of the OSS functions available to them."[8] The
6 second inquiry is "whether the OSS functions that the BOC has deployed are
7 operationally ready, as a practical matter."[9]

8 Under the first part of this two-prong test, the FCC stated that the "BOC must
9 demonstrate that it has developed sufficient electronic and manual interfaces to allow
10 competing carriers to access all of the necessary OSS functions."[10] For those OSS
11 functions that are analogous to the OSS functions that a BOC provides to itself, such as
12 pre-ordering, ordering and provisioning for resale services, the FCC stated that the
13 "BOC must offer access to competing carriers equivalent to the access the BOC
14 provides for itself."[11] "Equivalency" is <u>not</u> defined as identical, but rather as systems
15 that provide access in "substantially the same time and manner."[12] The FCC concluded
16 that equivalent access "must be construed broadly to include comparisons of analogous
17 functions between the competing carriers and the BOC, even if the actual mechanism
18 used to perform the function is different for competing carriers than for the BOC's retail

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6 *See FCC Ameritech Order*, ¶ 134.
7 *FCC Ameritech Order*, ¶ 136.
8 *FCC Ameritech Order*, ¶ 136.
9 *FCC Ameritech Order*, ¶ 136.
10 *FCC Ameritech Order*, ¶ 137.
11 *See In re BellSouth Corp. et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in South Carolina*, CC Docket No. 97-208, Memorandum Opinion and Order, FCC 97-418, ¶ 98 (rel. Dec. 24, 1997) (*FCC BellSouth Order*); *In re BellSouth Corp., BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Louisiana, CC-98-121, Memorandum Opinion and Order*, FCC98-271, ¶ 87 (rel. Oct. 13, 1998) (*FCC BellSouth Louisiana 2nd Order*).
12 *FCC BellSouth Louisiana 2nd Order*, ¶ 87.

operations."[13] The FCC did not require any specific type of access, [14] simply stating that, for those OSS functions that "the BOC itself accesses electronically, the BOC must offer electronic access for competing carriers."[15]

Notably, the FCC did not impose an equivalency requirement on those OSS functions that the BOC does not perform for itself, "such as ordering and provisioning of unbundled network elements."[16] For those functions, the BOC is not required to provide any specific type of access; rather, "the BOC must demonstrate that the access it provides to competing carriers satisfies its duty of nondiscrimination because it offers an efficient competitor a meaningful opportunity to compete."[17]

Under the second part of this two-prong test, the inquiry is "whether the OSS functions provided by the BOC to competing carriers are actually handling current demand and will be able to handle reasonably foreseeable demand volumes."[18] Here, the FCC will examine performance measurements and other evidence of commercial readiness to determine if the OSS functions are operationally ready.

As evidence that OSS functions are operationally ready, the FCC stated that, in addition to actual commercial usage, "[c]arrier-to-carrier testing, independent third-party testing, and internal testing also can provide valuable evidence pertaining to operational readiness."[19]

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[13] *FCC Ameritech Order*, ¶ 139.
[14] See *FCC Ameritech Order*, ¶ 135.
[15] *FCC BellSouth Order*, ¶ 98.
[16] *FCC BellSouth Order*, ¶ 98; *FCC BellSouth Louisiana 2nd Order*, ¶ 87.
[17] *FCC Ameritech Order*, ¶ 141.
[18] *FCC Ameritech Order*, ¶ 138.
[19] *FCC Ameritech Order*, ¶ 138.

1 This is important for two reasons. First, it is the CLECs that choose whether or
2 not to use U S WEST's electronic interfaces. This freedom of choice potentially could
3 place U S WEST in a catch-22 situation. If U S WEST were required to show that
4 CLECs are using a particular interface, it would be solely in the CLECs' control whether
5 U S WEST could make that showing. Recognizing the unfairness that could result from
6 this situation, the FCC stated that while the "BOC has a duty to provide items on the
7 checklist to competing carriers, this duty does not include the duty to ensure that
8 competing carriers are currently using each and every OSS function."[20] If a CLEC
9 chooses not to enter a particular market or state, a decision that is solely within the
10 control of the CLEC, the BOC should not be penalized. To emphasize this point, the
11 FCC stated that "[a]s long as the BOC can demonstrate that the reason competing
12 carriers are not currently using a particular OSS function is because of the competing
13 carriers' business decisions, rather than a lack of the practical availability of the
14 necessary OSS functions," it may consider "carrier-to-carrier testing, independent third-
15 party testing, and internal testing, without commercial usage, as evidence of commercial
16 readiness."[21]

17 Second, some CLECs may not be in a position to build to one of U S WEST's
18 electronic interfaces, and for that reason may choose to use manual interfaces.
19 Because of this, the FCC stated "that incumbent LECs have an obligation to provide
20 interfaces that allow competing carriers of all sizes a meaningful opportunity to compete
21 in the local market. We do believe that Congress intended an incumbent's

[20] *FCC Ameritech Order*, ¶ 138 (emphasis added).
[21] *FCC Ameritech Order*, ¶ 138.

1 nondiscriminatory obligation to apply to smaller carriers as well as large carriers."[22] The
2 FCC went on to state that it "would have concerns that an interface could potentially be
3 discriminatory to smaller businesses' ability to enter the local exchange market if
4 building the interface required significant expenditures by competing carriers in order to
5 use."[23] In these cases, carrier-to-carrier testing, third-party testing, and internal testing
6 take on greater significance when demonstrating operational readiness of electronic
7 interfaces.

8 Therefore, in a 271 proceeding, the FCC will look to see whether the BOC has
9 deployed the necessary system and personnel to provide sufficient access to its OSS,
10 the BOC is adequately assisting competing carriers to employ OSS functions, and the
11 OSS functions are operationally ready, as a practical matter.

12 **1.3 8th Circuit Court of Appeals**

13 The FCC rules implementing the 1996 Act were appealed by several ILECs and
14 state commissions, among others. The United States Court of Appeals for the Eighth
15 Circuit consolidated the cases pending in that circuit and, on July 18, 1997, issued an
16 opinion in Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997). The Eighth Circuit
17 affirmed some of those rules and vacated others. That decision was then appealed to
18 the Supreme Court of the United States. The Supreme Court has recently issued an
19 order also affirming some rules and vacating others. As I will explain further, the full
20 impact of the Supreme Court decision has yet to be determined. What can be
21 determined with certainty is that while some of the obligations the FCC has imposed on

[22] *FCC Ameritech Order*, ¶ 220 (emphasis added).

BOCs to unbundle OSSs may be reduced, no additional obligations will be imposed on BOC's.

The opinion of the Eighth Circuit Court bears directly on electronic interfaces. First, it held that the FCC did not exceed its authority when it recognized ILECs to provide nondiscriminatory access to OSS. The court further found that subsection 251(c)(3) requires unbundled access only to an ILEC's existing network, not to a yet unbuilt superior one.

The FCC attempted to establish in its First Report and Order that, upon a request by a CLEC, an ILEC had to provide the CLEC with interconnection, unbundled network elements, and access to those elements at levels of quality superior to the levels at which the ILEC provides those services to itself. The Eighth Circuit rejected this standard, finding that "the FCC violated the plain terms of the Act when it issued these rules. . . . Plainly, [section 251(c)(2)(C) of] the Act does not require incumbent LECs to provide its competitors with superior quality interconnection."[24] The court rejected the FCC's rationale in support of the superior quality rule:

> While the phrase "at least equal in quality" leaves open the possibility that incumbent LECs may agree to provide interconnection that is superior in quality when the parties are negotiating agreements under the Act, this phrase mandates only that the quality be equal—not superior. In other words, it establishes a floor below which the quality of the interconnection may not go. Because the Commission's rule *requires* superior quality interconnection when requested, *see* 47 C.F.R. 51.305(a)(4), the rule is not supported by the Act's language. We also agree with the petitioners' view that subsection 251(c)(3)

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[23] *FCC Ameritech Order*, n. 566.
[24] *Iowa Utils. Bd. v. FCC,* 120 F.3d at 812.

> implicitly requires unbundled access only to an incumbent LEC's *existing* network—not to a yet unbuilt superior one. Additionally, the nondiscrimination requirements contained in these subsections of the Act do not justify these FCC rules. The fact that interconnection and unbundled access must be provided on rates, terms, and conditions that are nondiscriminatory merely prevents an incumbent LEC from arbitrarily treating some of its competing carriers differently than others; it does not mandate that incumbent LECs cater to every desire of every requesting carrier.[25]

1.4 Supreme Court Opinion

Some sections of the Eighth Circuit Court of Appeals' opinion were appealed to the Supreme Court, which issued an opinion on January 25, 1999. The Eighth Circuit Court's superior network holdings were not part of the appeal to the Supreme Court, and the FCC's rules requiring superior quality remain vacated. Thus, the Eighth Circuit's interpretation of the "at least equal in quality" standard remains the law.

Regarding the sections that were appended, the Supreme Court determined that the FCC's inclusion of OSSs as a network element was reasonable.[26] However, the Court held that the FCC used a wrong standard when determining which network elements need to be unbundled, including OSS. The court held that the FCC must make a determination regarding each network element whether access is necessary and whether failure to provide access would cause an impairment to the CLEC.[27] Rejecting the idea that "any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element 'necessary,' and causes the failure to provide that element to 'impair' the entrant's ability to offer its desired services," the Court found that it was "simply not in accord with the ordinary and fair meaning of those

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[25] *Id.* at 812-813 (underlined emphasis added, italicized emphasis in original, footnote omitted).

terms."[28] Thus, the FCC will have to reconsider its decision regarding which network elements must be unbundled, including OSS. The FCC may determine that ILECs need not unbundled their OSS, or more likely, the FCC may limit the extent to which ILECs need to provide access to OSSs.

1.5 Compliance with Legal and Regulatory Obligations

To comply with its obligations, U S WEST has engaged in extensive development work to create electronic interfaces and modify its existing OSSs that support the pre-ordering, ordering, provisioning, repair and billing functions for resale and unbundled elements. U S WEST has spent over $100 million to develop electronic interfaces and modify its OSSs to accommodate CLECs, not including the money it has spent to support number portability. U S WEST has not been able to recover most of these costs. The OSS modifications U S WEST has made fall into four general areas: 1) changes to support new product definitions created as a result of the obligation to provide resale and unbundled elements; 2) changes to support the creation of new account structures to accommodate CLECs as the customer rather than the end user; 3) changes to support the need to assign and track services and facilities to a particular CLEC; and 4) changes to support local number portability. Without these modifications, a CLEC would be able to send U S WEST an electronic request for service, but U S WEST would not be able to process and provision the request.

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[26] *AT&T Corp. v. Iowa Utils. Bd.*, No. 97-826, *slip op.* at 19-20 (U.S. Jan. 25, 1999).
[27] *Id.* at 22.
[28] *Id.* at 22.

U S WEST has Deployed the Necessary Systems and Personnel

2. Introduction to Systems

2.1 Definition of OSS and Electronic Interfaces

U S WEST uses a variety of computer systems to support the operations of its telecommunications business. An operational support system does not directly provide telecommunications service to customers, but supports employees performing "operational" duties, such as selling products and services, issuing service orders, testing trunks and maintaining switching systems. These operational support systems are specialized; each provides different functionality. Certain operational support systems allow for the ordering of products and services for customers, while other systems record and process trouble tickets. Other operational support systems permit other functions. Because of the broad range of demands that OSSs address, these systems are extremely complex and sophisticated.

In contrast to OSS, electronic interfaces facilitate the exchange of information between operational support systems. The primary methods are batch transfers and real-time transactions. A batch transfer electronic interface processes large amounts of information and transmits the information from one computer system to another. This type of data processing accumulates large amounts of information, groups related transactions together, and transmits them on a scheduled basis, generally once a day. Batch transfers enable a large amount of information to be transmitted efficiently between computers. For example, although switches can record call detail messages

as they are made, U S WEST's CRIS Billing System processes the call details on a scheduled daily basis.

Alternatively, a real-time electronic interface processes data and/or transactions in an interactive mode, similar to a conversation. A transaction or query is sent from one computer system to another and a response is sent back without waiting for the scheduled transfer time. For example, the first computer system may submit a request for a piece of information (i.e., a customer service record (CSR)), and the second computer system will receive the request, make a query to its internal databases and transmit a copy of the applicable CSR back to the first computer system. Unlike batch transmissions, real-time transactions are executed in direct response to the request, with the only delay between the request and its response being the time it takes to handle that specific request. The second computer system will answer the first computer as soon as it has the answer to the question. Generally, a real-time electronic interface is necessary whenever the information requested is needed to influence the next step of an ongoing process.

2.2 Types of Interfaces

When a CLEC and U S WEST jointly provide service to an end-user customer, they must perform operational activities in conjunction with one another. These activities and exchanges of information can be accomplished through manual processes, e.g., paper and phone calls, or they can be accomplished through some level of mechanization, e.g., electronic interfaces, or they can be accomplished through a combination of both.

1 The following is a very simple, high-level example of how these operational
2 activities can be performed manually. If a customer wished to switch its local service
3 provider to a CLEC marketing resold services, the customer would place a call to the
4 CLEC. The CLEC would employ its defined negotiation and ordering business
5 processes and, if possible, its systems to obtain the necessary information from the
6 customer. The CLEC would fill out the appropriate Local Service Ordering Guideline
7 ("LSOG") forms as defined by the Ordering and Billing Industry Forum ("OBF") and
8 transmit them by facsimile to U S WEST. U S WEST would receive that information and
9 translate it into the data fields and formats required by its internal service order systems
10 to process the order request. (Please refer to Exhibit DWB-001 for a sample copy of an
11 LSR and the corresponding U S WEST service order.) U S WEST would then return
12 the appropriate ordering and installation information to the CLEC via facsimile and
13 switch the customer's service to the CLEC in the appropriate interval. U S WEST would
14 bill the CLEC, as appropriate, after the conversion of service.

15 It is important that U S WEST support these manual processes. Not all CLECs
16 have automated their businesses with extensive computer systems, which, depending
17 on functionality, can be very expensive. A CLEC's preferred business practice may be
18 to use paper and manual methods, just as many banking customers prefer tellers to
19 ATMs (automatic teller machines). In fact, CLECs can conduct business and provide
20 service to their end-users through the use of manual methods, such as a facsimile
21 machine. Moreover, the FCC has stated that for some functions, manual access may

need to remain available as an additional mode of access.[29] Furthermore, the FCC stated that "there may be a number of smaller competing carriers that prefer to fax or phone in their orders because the number of customers they serve would not support the amount of investment required to build a form of electronic interface."[30]

Other CLECs prefer to use an electronic interface between the CLEC and U S WEST, which would allow the CLEC to send the LSR to U S WEST electronically. U S WEST offers two electronic interfaces for pre-ordering, ordering and provisioning: IMA and EDI. U S WEST then sends relevant confirmation information to the CLEC electronically. When U S WEST receives an LSR through an electronic interface the LSR is converted, either electronically or manually, into the required data and format of its service order systems, and U S WEST then processes it.

2.3 Types of Access Methods

There are different types of electronic interfaces. An electronic interface can be provided either through direct access or mediated access. Mediated access can be further broken down into categories of human-to-computer interfaces and computer-to-computer interfaces. Please refer to Exhibit DWB-002 for details regarding these interfaces.

Using direct access means that a user interacts directly with an OSS. The user must use the specific commands known to the particular OSS and interact with the specific screens and data contained on those screens. In many cases, U S WEST retail

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[29] *FCC Ameritech Order*, ¶ 137.
[30] *FCC Ameritech Order*, fn. 333.

service representatives have direct access for pre-ordering, ordering, and repair functionality. In other cases, U S WEST service representatives use a form of mediated access. In the course of establishing a customer service request, they must access several different OSS. Different screens and data are accessed with the following systems: Appointment Scheduler (schedule installation technician visits), BOSS (Business Office Support System; contains customer record information), PREMIS (Premises Information System; telephone number and address administration system), and SONAR (Service Order Negotiation and Retrieval System; order entry system). A schematic drawing demonstrating the relationship between a user using direct access and the OSS is provided in Exhibit DWB-002.

There would be advantages and disadvantages providing CLECs direct access. The primary advantage is that direct access would provide the CLEC with the exact same interface used by U S WEST retail service representatives. However, that advantage is outweighed by its disadvantages.

A major disadvantage of direct access is that it essentially eliminates U S WEST's ability to provide security of customer records and U S WEST proprietary information and to ensure only authorized use of its systems. U S WEST's ability to maintain the integrity of its systems for their intended purposes could not be maintained with direct access. Another disadvantage of direct access is the fact that U S WEST systems are very complex and vary among its regions. For example, BOSS is the system that contains customer account information in the U S WEST Central and Eastern Regions. There are four (4) processors (SYS J/K, COACCT, NMACCT, and

UTACCT), each containing different customer accounts. They reside in four (4) separate data centers (Denver, Albuquerque, Salt Lake City, and Omaha). This means that multiple accesses would be required for CLECs that operate in more than one region. Moreover, the customer record system in the U S WEST Western Region, CARS, is a completely different system from the system used in the Central and Eastern Regions, BOSS, creating more complexity for the CLEC operating in more than one U S WEST region.

Furthermore, these U S WEST systems, which have been developed over a 20 - 30 year span, do not employ the functional, data, and communications standards defined by multiple forums. Generally, these are the agreed upon national standards for information exchanges between ILECs and CLECs – which have been the subject of intense industry effort since the passage of the Telecom Act. Accordingly, U S WEST has developed mediated access interfaces to support these national standards to simplify U S WEST's OSSs for easier CLEC use.

Mediated access is a method in which a system resides between the OSSs of two companies and "mediates" the access one company's OSSs has with the other company's OSS. This frees the CLEC user from having to know the behavioral peculiarities of each OSS, the different commands required by various OSSs, and sometimes the proprietary data of an OSS. In other words, mediated access makes disparate OSSs appear as a single system to the CLEC user. It also helps to ensure that the systems remain secure, that their intended use is properly authorized, and that

their integrity is maintained. There are two types of mediated access: human-to-computer and computer-to-computer.

2.4 Human-To-Computer Electronic Interface

A human-to-computer mediated access provides a CLEC with an interface to one or more OSS. An interface may be text-based, or it may be a graphical user interface ("GUI") that generally employs text, color, graphics, and point-and-click capabilities. U S WEST has developed a GUI interface, IMA, which is depicted in Exhibit DWB-002. GUI access gives the CLEC an integrated set of screens and functionality, allowing it to obtain in real-time the information required to support pre-ordering, ordering, provisioning and repair interactions with U S WEST.

The advantages of mediated access through a human-to-computer interface include the ease of use that results from an integrated set of screens with the same look and feel. This significantly reduces the training time required for CLECs' service representatives and the likelihood of CLEC errors. Another advantage is that a small CLEC needs only a personal computer to access U S WEST's OSS. This human-to-computer interface also allows U S WEST to implement appropriate security measures within the gateway. A disadvantage of this type of mediated access, as with all mediated access, is that a translation of the request or message being sent must occur in order to pass information to U S WEST's OSS. For example, U S WEST receives an EDI-formatted message requesting a list of available telephone numbers. This message must be translated into the computer language for routing and into the format recognized by the OSS that contains the list of available telephone numbers (PREMIS).

2.5 Computer-To-Computer Electronic Interface

A computer-to-computer interface essentially allows a CLEC's OSSs to communicate with U S WEST's OSSs through the exchange of defined transaction sets and transmission protocols between the applications code of each gateway. It requires the CLEC to have its own OSSs and gateway interface components. The CLEC representatives can use the CLEC's OSS interface to create requests that are translated by its gateway components into agreed upon transaction sets and transmitted to U S WEST. U S WEST's components receive the requests and send them on to be translated into requests that are understood by U S WEST's OSSs. U S WEST's OSSs process the requests and send back responses. These responses are translated back into the defined gateway messages and sent on to the CLEC. The CLEC's gateway components receive the messages and translate them into messages understood by its OSSs. EDI and EB-TA are examples of computer-to-computer electronic interfaces that U S WEST has developed and deployed for CLEC use. An example of computer-to-computer mediated access is depicted in Exhibit DWB-002.

The primary advantage of a computer-to-computer interface is that the CLEC gateway has an agreed upon and specified way to exchange information with U S WEST's gateway. The primary disadvantage to this type of interface is the level of detailed negotiations and specifications that must be completed in order to develop a working interface. The development work for such an interface is very time-consuming and expensive. Additionally, it requires a CLEC not only to have a gateway to format

and exchange messages, but also to develop or to purchase its own set of OSS. This is an expense not all CLECs wish to bear.

U S WEST has built a human-to-computer electronic interface, called Interconnection Mediated Access (IMA GUI) and a computer-to-computer electronic interface, EDI (electronic data interchange), to support pre-ordering, ordering, and provisioning capabilities. U S WEST also provides a human-to-computer interface, IMA GUI, and a computer-to-computer interface, Electronic Bonding – Trouble Administration (EB-TA), to support repair functionalities.

2.6 Electronic Interface Components and Flow-Through

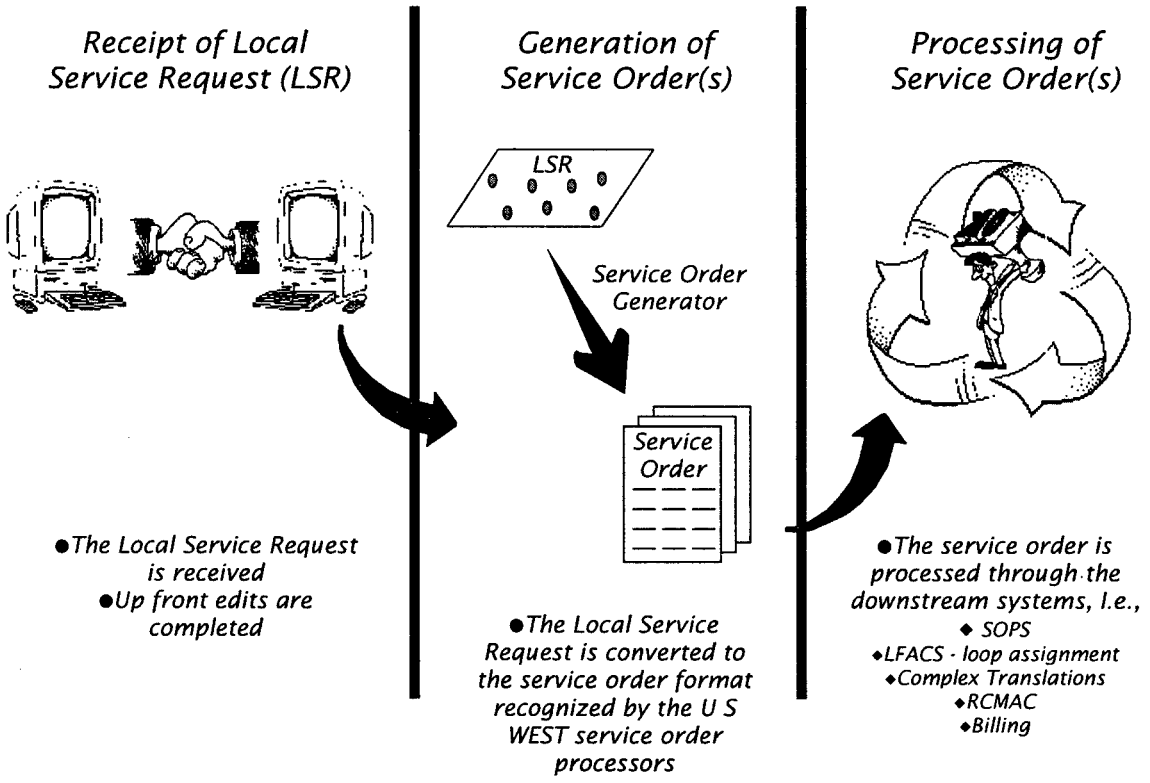
Once a request for service is submitted to U S WEST, the LSR (local service request –the CLEC's request to U S WEST to add new service or change existing service) must be processed through all of the systems necessary to deliver service to a customer. The service ordering process is the component that takes the CLEC's LSR and converts it to the service order format required to process the request through U S WEST service order systems. That conversion can occur in one of two ways when the LSR is received: 1) it may either be manually keyed in based on its complexity (or other reasons), or 2) it may flow-through.

The ordering process is comprised of three major functions;

1) <u>Order Request Generation and Receipt</u>. A CLEC generates an LSR, as defined by the OBF, and transmits it to U S WEST either via an electronic interface or facsimile.

2) Service Order Generation. U S WEST must take the information from the LSR and create one or more service orders. A service order contains product codes (USOCs - Universal Service Order Codes) and Field Identifiers (FIDs - additional information required to provide the product). U S WEST's OSSs only understand USOCs and FIDs contained on service orders, not LSRs.

3) Service Order Processing. Service orders are processed by many downstream systems until service is provisioned and customer accounts are updated.



Flow-through involves: 1) the electronic translation of the information on the LSR into service orders recognized by U S WEST's OSSs; and 2) the electronic creation of

1 the service order in the appropriate format. There are different formats and systems
2 that support U S WEST's Western Region, Central Region, and Eastern Region.

3 For both its IMA GUI and EDI electronic interfaces, U S WEST has flow-through
4 capability for "conversion-as-is," "conversion-as-specified," and "conversion-as-
5 specified with add/delete lines." A conversion-as-is LSR is issued when an existing
6 end-user customer decides to purchase resold local service from a CLEC without any
7 change in the products and services it is currently receiving. The other type of flow-
8 through capability, "conversion-as-specified," is utilized when the end-user customer
9 chooses a CLEC as its local service provider, but wants to change the products and
10 services on the account, or wants to add an additional line or remove a line.

11 In either case, once the LSR is received, it is quickly reviewed by a
12 representative in the ISC for errors or to spot the need to refer the LSR to another work
13 center. If the LSR is ready to be processed downstream, it is sent within a few seconds
14 by the representative to the service order constructor system, where it is electronically
15 translated into a U S WEST service order, with the appropriate product codes (USOCs
16 and FIDs) populated on it. The ISC does not re-type these LSRs. Because the service
17 order constructor electronically translates the local service request into the applicable
18 service orders, this screening process does not increase the opportunities for error,
19 lengthen the amount of time required to process CLEC orders, or limit the volume of
20 CLEC orders that can be processed. Once the service orders are created, they are
21 processed through the same systems and in the same time and manner as all other
22 service orders. If the service order is of the type to flow-through automatically to

completion with no further need for manual handling, it will do so. See Exhibit DWB-003 for an example of an LSR request for the conversion of a resale account as-is and the corresponding U S WEST service orders.

As stated previously, one LSR may require U S WEST to issue many service orders. For example, where a customer decides to switch to a reseller, U S WEST must issue numerous service orders when the customer has some products that are available via resale and other products that are not, such as directory advertising. U S WEST must issue a service order removing the product that is not available for resale. One or more additional service orders must be issued to transfer the customer and the products available for resale to the CLEC. (Exhibit DWB-004 provides a breakdown of the number of service orders that can be generated from one LSR.) To accomplish this, the Interconnect Service Center (ISC) must issue a service order removing the non-resellable product or service and a record order to transfer the customer to the CLEC. Translation of an LSR to a service order is a complex task and is dependent upon many business rules and permutations. These permutations are driven by the hundreds of different resold and unbundled element products, multiplied by the varying ordering and billing scenarios as defined within U S WEST and by the OBF. See Exhibit DWB-005 for an example of an LSR request for an unbundled loop and the corresponding U S WEST service orders.

3. Systems Description

U S WEST relies on all of its systems and electronic interfaces to satisfy its obligations under Section 271 of the Telecom Act. This section provides a detailed description of U S WEST's electronic interfaces and OSS.

This section describes the U S WEST electronic interfaces and systems that provide CLEC access to OSS functions. The descriptions are divided into the following categories: Pre-ordering, Ordering, and Provisioning (both front-end and downstream processes); Repair; and Billing. Short descriptions are also included for electronic interface products, architectures, and standards.

3.1 Pre-ordering, Ordering, and Provisioning

The FCC determined that "[p]re-ordering and ordering includes the exchange of information between LECs about current or proposed customer products and services or unbundled network elements or some combination thereof."[31] The FCC determined that "[p]rovisioning involves the exchange of information between LECs where one executes a request for a set of products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports."[32] In pre-ordering, ordering and provisioning, U S WEST exchanges information with CLECs about current or proposed customer products and services, and unbundled network elements.

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[31] *FCC First Report and Order*, ¶ 514 n. 1244, ¶ 523 n. 1273.
[32] *FCC First Report and Order*, ¶ 514 n. 1245, ¶ 523 n. 1273.

3.1.1 Electronic Interfaces

U S WEST provides CLEC access to two electronic interfaces for the pre-ordering, ordering, and provisioning of resale and unbundled network elements: Interconnect Mediated Access graphical user interface (IMA GUI) and Electronic Data Interchange (EDI). In addition, U S WEST offers EXchange Access Control Tracking (EXACT) electronic interface to CLECs for the ordering and provisioning of interconnection trunks and other wholesale products.

3.1.1.1 IMA - Interconnect Mediated Access

U S WEST has deployed a real-time, human-to-computer, electronic interface called Interconnection Mediated Access (IMA), which allows CLECs access to each of the OSS functions necessary to support their customers' requests. IMA provides access to U S WEST OSS functions through the use of a graphical user interface (GUI). In so doing, IMA allows the CLEC's customer service representative to perform inquiry and selection functions and electronically transmit LSRs in real-time to U S WEST for processing.

CLECs can use the same interface to send their pre-ordering and ordering transactions, which are processed by the same OSSs that provide these functions to U S WEST's retail units. These transactions and their corresponding OSSs are provided below:

1

Function	Capability Type	OSS Supporting Function
Address Validation	Pre-Ordering	PREMIS (Premises Information System)
Service Availability Query	Pre-Ordering and Ordering	SONAR (Service Order Negotiation and Retrieval System – Internal Table)
Customer Service Record	Pre-Ordering	BOSS (Business Office Support System)
Facility Availability Query	Pre-Ordering	LFACS (Loop Facility and Activation Control System)
Telephone Number Retrieval	Pre-Ordering and Ordering	PREMIS
Telephone Number Selection	Pre-Ordering and Ordering	PREMIS
Appointment Scheduling Retrieval	Pre-Ordering and Ordering	Appointment Scheduler
Appointment Scheduling Selection/Reservation	Pre-Ordering and Ordering	Appointment Scheduler
Carrier List	Pre-Ordering	PREMIS
Product and Service Selection	Ordering	IMA/EDI Architecture
Customer Listing Creation	Ordering	IMA/EDI Architecture
Billing Number Selection	Ordering	IMA/EDI Architecture
Summary Information Review	Ordering	IMA/EDI Architecture
Order Storage and Retrieval	Ordering	IMA/EDI Architecture
Order Submission	Ordering	IMA/EDI Architecture

Function	Capability Type	OSS Supporting Function
Firm Order Confirmation	Ordering	IMA/EDI Architecture
Supplemental Order Submission	Ordering	IMA/EDI Architecture
Order Inquiry	Ordering	IMA/EDI Architecture
Order Completion	Ordering	IMA/EDI Architecture

A detailed description of each function and how it is performed by IMA is addressed in Exhibit DWB-006, IMA Functional Process Descriptions. For a detailed matrix of products and functions supported by electronic interfaces, including IMA, see Exhibit DWB-007, Electronic Interface Functionality. Also, see section 4 of this affidavit for information about the U S WEST processes that support pre-ordering, ordering, and provisioning.

3.1.1.2 EDI - Electronic Data Interchange

U S WEST has also deployed another real-time, electronic interface called Electronic Data Interchange (EDI). EDI gives CLECs access to the pre-ordering and ordering OSS functions through a computer-to-computer interface.

Like IMA, CLECs can use the same interface to send their pre-ordering and ordering transactions, which are processed by the same OSSs that provide these functions to U S WEST's retail units. These transactions and their corresponding OSSs are provided below:

Function	Capability Type	OSS Supporting Function
Address Validation	Pre-Ordering	PREMIS (Premises Information System)
Service Availability Query	Pre-Ordering and Ordering	SONAR (Service Order Negotiation and Retrieval System – Internal Table)
Customer Service Record	Pre-Ordering	BOSS (Business Office Support System)
Facility Availability Query	Pre-Ordering	LFACS (Loop Facility and Activation Control System)
Telephone Number Retrieval	Pre-Ordering and Ordering	PREMIS
Telephone Number Selection	Pre-Ordering and Ordering	PREMIS
Appointment Scheduling Retrieval	Pre-Ordering and Ordering	Appointment Scheduler
Appointment Scheduling Selection/Reservation	Pre-Ordering and Ordering	Appointment Scheduler
Carrier List	Pre-Ordering	PREMIS
Product and Service Selection	Ordering	Not Applicable[33]
Customer Listing Creation	Ordering	Not Applicable
Billing Number Selection	Ordering	Not Applicable
Summary Information Review	Ordering	Not Applicable
Order Storage and Retrieval	Ordering	Not Applicable

[33] The following transactions do not apply to U S WEST's EDI interface because the CLEC's OSSs contain the pertinent information and perform the desired functions: product and service selection, customer listing creation, billing number selection, summary information review, order storage and retrieval. In the case of pre-ordering transactions, U S WEST provides the data in response to the pre-ordering query for use by the CLEC when performing ordering transactions.

Function	Capability Type	OSS Supporting Function
Order Submission	Ordering	IMA/EDI Architecture
Firm Order Confirmation	Ordering	IMA/EDI Architecture
Supplemental Order Submission	Ordering	IMA/EDI Architecture
Order Inquiry	Ordering	IMA/EDI Architecture
Order Completion	Ordering	IMA/EDI Architecture

A detailed description of each function and how it is performed by EDI is addressed in Exhibit DWB-009, EDI / EB-TA Functional Process Descriptions. A detailed matrix of products and functions supported by electronic interfaces, including EDI, is presented in Exhibit DWB-007, Electronic Interface Functionality. Also, see section 4 of this affidavit for information about the U S WEST processes that support pre-ordering, ordering, and provisioning.

3.1.1.3 EXACT - EXchange Access Control Tracking

U S WEST provides access to EXACT, a Bellcore software product, for CLECs requesting products that require the use of an Access Service Request (ASR). EXACT is a system that was implemented at divestiture and has mechanized certain processes associated with access ordering. CLECs can electronically send ASRs, using third-party software like TELIS/UNIX to U S WEST's EXACT system. CLECs can also send ASRs via facsimile. If the CLEC chooses to use a vendor product, such as TELIS/UNIX, the CLEC create ASRs electronically, benefits from some editing capabilities of that vendor-product and can transmit them to U S WEST. If sent via

facsimile, U S WEST directly inputs them into EXACT. EXACT also validates the ASR data as defined by the Industry Standard Access Service Ordering Guidelines (ASOG), and processes and tracks the ASRs.

Because EXACT supports trunk-side products and services, such as Unbundled Dedicated Interoffice Transport (UDIT) and Local Interconnection Services (LIS) Trunks, pre-ordering transactions do not apply. The CLEC determines the type of service that it requires, refers to industry-defined information and creates an ASR that it transmits to U S WEST. Examples of industry-defined information are Network Channel (NC) and Network Channel Interface (NCI) codes. These codes define the characteristics of the circuit and its connecting points.

Once the ASR is received, EXACT supports retrieval, validation, management and completion of the ASR. EXACT converts ASRs into the formats needed for eventual placement into the service order processing flow.

A detailed matrix of products and functions supported by electronic interfaces, including EXACT, is presented in Exhibit DWB-007, Electronic Interface Functionality. Also, see section 4 of this affidavit for information about the U S WEST processes that support ordering and provisioning.

3.1.2 OSS

Several OSSs support the functions associated with processing of service orders. Again, these are the same OSSs that support all service orders despite whether the CLECs or U S WEST retail units originate them. These systems include:

OSS Acronym	OSS Acronym Description
ALOC	Access LOCation
AMA	Automatic Message Accounting
Appointment Scheduler	Appointment Scheduler (sometimes abbreviated as AS)
BOSS	Business Operations Support System
CMATE	Not an Acronym
CNUM	Customer NUMber Management System
CPS	Capacity Planning System
CRIS	Customer Records Information System
Event Tracker	Event Tracker (sometimes abbreviated as ET)
EXACT	Exchange Access Control and Tracking
Facility Check	Facility Check
FACS	Facility Assignment and Control System
FEPS	Facility and Equipment Planning System
IABS	Integrated Access Billing System
IFE	Integrated Front-End
LFACS	Loop Facility Assignment and Control System
LSS	Listing Services System
MIHR	Mechanized Installation History Reports
PREMIS	PREMises Information System
ROMS	Regional Operations Management System
RSOLAR	Regional Service Order Logistics and Retrieval

OSS Acronym	OSS Acronym Description
SMS	Service Management System
SOA	Service Order Administration
SOAC	Service Order and Activation Control
SOLAR	Service Order Logistics and Retrieval
SONAR	Service Order Negotiation and Retrieval
SOPAD	Service Order Processor and Distribution
SWITCH	Not an Acronym
TAG	Telephone Address Guide
TAXI	Not an Acronym
TIRKS	Trunk Integrated Records Keeping System
TUF	Translator of USOCs and FIDs
WFA	Work Force Administration

See Exhibit DWB-008, U S WEST System Descriptions, for a brief description of these U S WEST systems. Also, see section 4 of this affidavit for information about the U S WEST processes that support pre-ordering, ordering, and provisioning.

3.1.3 Downstream Service Order Processing

After an LSR is submitted to U S WEST, it must be converted into one or more service orders. The conversion itself and the processing in downstream OSSs are referred to as downstream processing. LSRs are either electronically converted into service orders and placed into the service order processing flow (flow-through) or a

U S WEST representative creates a service order in an order entry system (interfacing with a service order processor, referred to as a SOP) or directly into the appropriate SOP.

The SOPs, and other downstream installation OSSs, are critical components of the process that play a role after pre-ordering/ordering and provisioning functions, and before the later activities of maintenance and repair, and billing. While the SOPs vary somewhat by region within U S WEST's 14-state territory; in each region, they are the common points through which orders pass for most product types. For Arizona, which is in the central region, the SOP is known as the Service Order Processing and Distribution System (SOPAD). SOPAD receives service orders from several sources, such as Service Order Negotiation and Retrieval (SONAR), Integrated Front End (IFE), and Integrated Access Billing (IABS). SOPAD, in turn, communicates with the Service Order Activation and Control System (SOAC) that manages the service order process with respect to the specialized systems that design and activate network-based services, assign facilities, maintain central office inventory, and manage customer account information. In doing so, SOAC directs each service order through all steps necessary to complete the order.

CLEC orders, like the U S WEST orders, pass through the SOP in the region to which they pertain. Although the basic process of directing and completing a CLEC order is identical to directing and completing a U S WEST retail order, CLEC orders result in certain functions that are not performed for U S WEST orders. For example, the return of an FOC is a characteristic of a CLEC order only (part of the provisioning

1 acknowledgement/status of order notification) and is not provided as a result of a
2 U S WEST order.

3 **3.2 Repair**

4 The FCC defines maintenance and repair as "the exchange of information
5 between LECs where one initiates a request for repair of existing products and services
6 or unbundled network elements or combinations thereof from the other with attendant
7 acknowledgements and status reports."[34] The following section describes how
8 U S WEST supports the repair of services ordered by a CLEC through electronic
9 interfaces.

10 **3.2.1 Electronic Interfaces**

11 As with pre-ordering, ordering, and provisioning, CLECs may communicate with
12 U S WEST via its electronic interfaces for maintenance and repair. U S WEST provides
13 CLECs with access to two electronic interfaces for the repair OSS functions: IMA GUI
14 and EB-TA.

15 **3.2.1.1 IMA - Interconnect Mediated Access**

16 U S WEST's IMA GUI also supports real-time maintenance and repair functions.
17 In so doing, IMA allows the CLEC's customer service representative to make inquiries,
18 receive proactive status notifications, and electronically transmit trouble reports to
19 U S WEST for processing.

[34] *FCC First Report and Order*, ¶ 514 n. 1246, ¶ 523 n. 1273.

This interface also supports pre-ordering and ordering transactions as described earlier. The CLECs' repair transactions are processed by the same OSSs that provide these functions to U S WEST's retail units. These transactions and their corresponding OSSs are provided below:

Function	OSS Supporting Function
Trouble Report Creation	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report Modification	MEDIACC (Mediated Access) – LMOS (POTS)
Trouble Report Inquiry	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Active Notification of Status Change	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report Cancellation	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report Closure	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report History	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)

A detailed description of each function and how it is performed for U S WEST retail customers is addressed in Exhibit DWB-006, IMA Functional Process Descriptions And Comparisons. A detailed matrix of products and repair functions supported by

electronic interfaces, including IMA, is presented in Exhibit DWB-007, Electronic Interface Functionality.

3.2.1.2 EB-TA - Electronic Bonding &Trouble Administration

U S WEST has also deployed another real-time, electronic interface called EB-TA. EB-TA allows the CLEC's customer service representative to make inquiries, receive proactive status notifications, and electronically transmit trouble reports to U S WEST for processing. The CLECs' repair transactions are processed by the same OSSs that provide these functions to U S WEST's retail units. These transactions and their corresponding OSSs are provided below:

Function	OSS Supporting Function
Trouble Report Creation	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Test Results	MEDIACC (Mediated Access) – LMOS/MLT (Mechanized Loop Test) (POTS)
Trouble Report Modification	MEDIACC (Mediated Access) – LMOS (POTS)
Trouble Report Inquiry	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Active Notification of Status Change	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report Cancellation	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)
Trouble Report Closure	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled

Function	OSS Supporting Function
	Network Elements)
Trouble Report History	MEDIACC (Mediated Access) – LMOS (POTS) and WFA (Designed Services or Unbundled Network Elements)

A detailed description of EDI/EB-TA online transaction sets provided by U S WEST is addressed in Exhibit DWB-009, EDI Functional Process Description. Also, a detailed matrix of products and functions supported by electronic interfaces, including EB-TA, is presented in Exhibit DWB-007, Electronic Interface Functionality.

3.2.2 OSS

Several OSSs support the functions associated with processing of trouble reports. Again, these are the same OSSs that support all trouble tickets despite whether the CLECs or U S WEST retail units originate them. These systems include:

OSS Acronym	OSS Acronym Description
DELIVER	Not an Acronym
LMOS	Loop Maintenance Operations System
MEDIACC	Mediated Access
MLT	Mechanized Loop Testing
REACT	Not an Acronym
SARTS	Switched Access Remote Test System
WFA	Work Force Administration

See Exhibit DWB-008, U S WEST System Descriptions, for a brief description of these U S WEST systems. Also, see section 4 of this affidavit for information about the U S WEST processes that repair.

3.2.3 Repair Processing

After a trouble report is submitted to U S WEST, it must be converted into a trouble ticket. Trouble reports are electronically converted into trouble tickets that are recognized by LMOS for POTS or WFA for designed services and flow-through the repair processing flow. After conversion, trouble tickets are processed identically despite whether the CLECs or U S WEST originates them.

See Exhibit DWB-008, U S WEST System Descriptions, for a brief description of the above mentioned U S WEST systems. Also, see section 4 of this affidavit for information about the U S WEST processes that support repair.

3.3 Billing

The FCC has defined billing as "the provision of appropriate usage data by one LEC to another to facilitate customer billing with attendant acknowledgments and status reports. It also involves exchange of information between LECs to process claims and adjustments."[35]

U S WEST's billing systems generate the appropriate data needed by CLECs to perform their billing function. Generally, two types of U S WEST-generated data are required by CLECs to perform billing functions: usage data and customer activity data.

1 Optionally, a CLEC may choose to use a third type of data for billing: monthly wholesale
2 summary bills. The following section describes each of these data types and outlines
3 the electronic methods that U S WEST uses to provide billing data to CLECs.

4 A detailed description of each function and how it is performed is addressed in
5 Exhibit DWB-006, IMA Functional Process Descriptions. For a detailed matrix of
6 products and functions supported by electronic interfaces, see Exhibit DWB-007,
7 Electronic Interface Functionality. Also, see section 4 of this affidavit for information
8 about the U S WEST processes billing.

9 **3.3.1 Electronic Interfaces**

10 U S WEST provides billing data to CLECs through a series of batch files that
11 contain usage data, customer activity data, and wholesale summary bills. Because of
12 the high volume of data involved in billing, U S WEST also uses a batch process
13 internally and for transmitting this information to and from the interexchange carriers
14 (IXCs).

15 **3.3.1.1 Usage Data**

16 The primary source of usage data is call records. U S WEST sends call records
17 to CLECs via a daily usage feed. The daily usage feed is provided to CLECs on a
18 business day basis, approximately three days after the data is recorded on the switch.
19 The different file transmission methods available to CLECs in Arizona are:

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[35] *FCC First Report and Order*, ¶ 514 n. 1247, ¶ 523 n. 1273.

Medium	Availability
NDM (Network Data Mover; available through a direct line or dial-up)	Yes
Magnetic tape	Yes
Cartridge	Yes
File Transfer Protocol (FTP)	Yes
Comet	Yes
Web access	Yes

NDM, FTP, and Comet are protocols that handle electronic file transfer over a network. Magnetic tape and cartridge are media that allow the usage files to be copied and physically sent to CLECs. Web access allows CLECs to download usage data over the World Wide Web.

3.3.1.2 Customer Activity Data

U S WEST provides customer activity data to CLECs through two types of reports: completion reports and loss reports. Completion reports give a CLEC information about the completion dates for submitted LSRs, allowing the CLEC to assign a billing start date for its customer. Similarly, loss reports give information about the transition of an end-user to a different local service provider, allowing the CLEC to assign a billing end date for that customer. CLECs can receive both completion and loss reports in the following ways:

Medium	Availability
NDM (Network Data Mover; available through a direct line or dial-up)	Yes
File Transfer Protocol (FTP)	Yes
Facsimile	Yes

3.3.1.3 Monthly Wholesale Summary Bill Data

U S WEST produces monthly wholesale summary bills for CLECs to bill for wholesale services rendered. These wholesale, summary bills can be used in conjunction with the daily usage feeds to prepare and verify a CLECs end-user retail bill. Depending on the products that a CLEC has ordered to offer service to its end-users, a CLEC could receive a summary bill from either the CRIS system or from IABS. Summary bills can be received in the following ways:

Medium	Availability via CRIS	Availability via IABS
NDM (Network Data Mover; available through a direct line or dial-up)	Yes	Yes
Magnetic tape	Yes	
Cartridge	Yes	
CD ROM	Yes	
Diskette	Yes	
File Transfer Protocol (FTP)	Yes	Yes
Comet	Yes	
Web access	Yes	
Paper	Yes	Yes

A detailed matrix of products and which system supports the billing of that product, either CRIS or IABS, is presented in Exhibit DWB-007, Electronic Interface Functionality.

3.3.2 OSS

Several U S WEST systems support the OSS billing functions for CLECs. These systems include the following: Customer Record Information System (CRIS), Integrated Access Billing System (IABS), and Automatic Message Accounting (AMA). See Exhibit DWB-008, U S WEST System Descriptions, for a brief description of these U S WEST systems.

3.4 Products Supported by U S WEST's Electronic Interfaces

The electronic interfaces deployed by U S WEST currently support the OSS functions for resale products, unbundled network elements, and other wholesale products.

<u>Pre-Ordering and Ordering</u>

IMA currently provides pre-ordering and ordering capabilities for the following products:

- resale services
- private line
- Centrex
- unbundled loop

- interim number portability (INP)
- long term number portability (LNP)
- unbundled loop with INP
- unbundled loop with LNP
- unbundled analog line-side
- switch port (including the ability to specify shared transport)
- unbundled digital line-side switch port.

EDI provides essentially the same functionality and product support as IMA. EXACT provides pre-ordering, ordering and provisioning processing capabilities for Unbundled Dedicated Interoffice Transport (UDIT) service, LIS trunks, and Analog/Digital Trunk Ports.

Maintenance and Repair

IMA also provides repair capabilities for POTS and designed resale services and unbundled network elements. EB-TA provides CLECs the ability to enter repair requests for POTS and designed resale services, and unbundled network elements.

Billing

CRIS and IABS support the billing of POTS and designed resale services and unbundled network elements.

A detailed matrix of products and functions supported by U S WEST electronic interfaces is presented in Exhibit DWB-007, Electronic Interface Functionality.

3.5 Electronic Interface Architectures

3.5.1 IMA, EDI and EB-TA Architectures

For the IMA, EDI and EB-TA electronic interfaces, the following diagram depicts the mediated access architecture currently provided by U S WEST. As shown, the CLEC OSSs or workstations access the U S WEST gateways through a security firewall. They communicate with the U S WEST human-to-computer interface and/or the computer-to-computer interfaces to transmit and receive information.

Pre-Ordering and Ordering

Once the transaction is received by the U S WEST gateway, a set of business rules is applied to determine how to process the request. To obtain information from U S WEST's OSSs or pass information to them, the OSS Access Layer (Data Arbiter, Fetch and Stuff, and MEDIACC) communicates with the downstream OSSs to send or retrieve the data. Regardless of whether a transaction is received by the U S WEST gateway through the IMA GUI or EDI, it will be processed through the same set of business rules and travel through the same OSS Access Layer to reach the downstream OSSs.

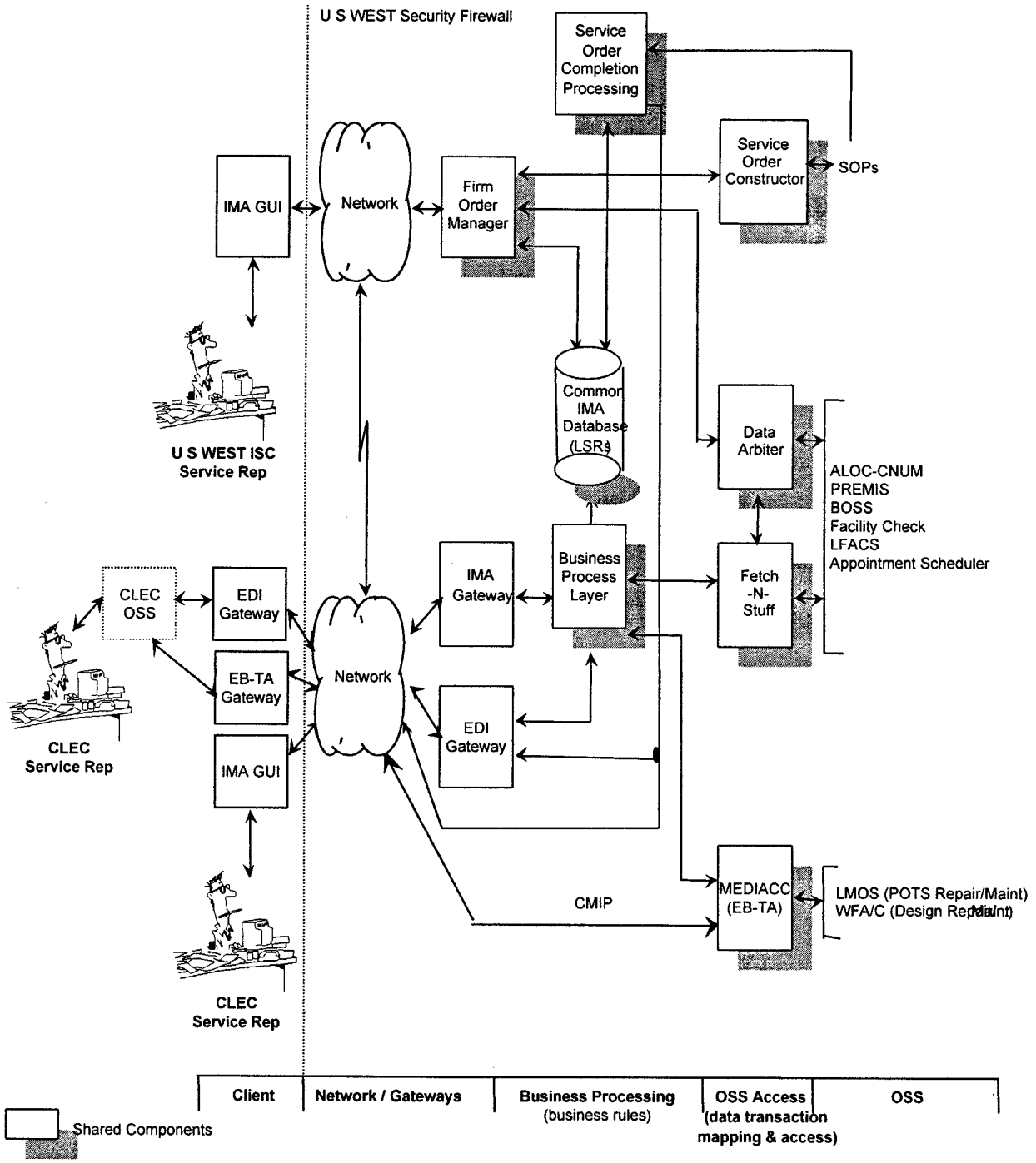
If the transaction is the submission of an LSR, the LSR is placed in the Common IMA database regardless of whether the LSR is transmitted through the IMA or the EDI gateway. This database is updated with status of the LSR as the Interconnect Service Center processes the LSR.

1 Maintenance and Repair

2 Likewise, if the transaction is a submission of a trouble report or any other trouble
3 report request, the transaction is processed through MEDIACC and routed to the
4 appropriate repair OSS.

5

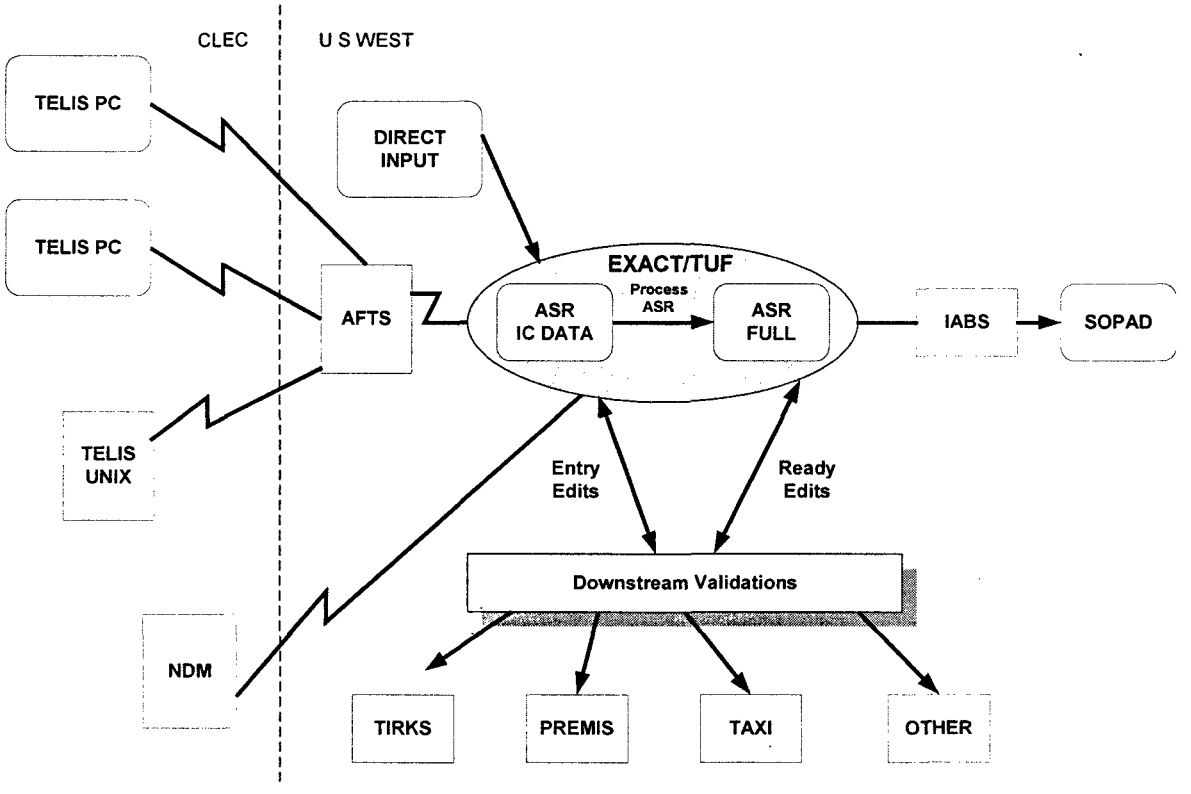
Mediated Access Architecture



3.5.2 EXACT Architectures

For the EXACT interface, the following diagram depicts the interface architecture. The CLEC may choose a variety of vendor products to electronically transmit ASRs to U S WEST's EXACT system: TELIS PC OR TELIS UNIX using AFTS (A File Transfer System) or ACOS or NDM communicating with EXACT. Once the ASR is received, handled by U S WEST's ISC, the TUF (Translator of USOCs and FIDs) subsystem translates the ASR and sends it to IABS and then onto the SOP. Once entered into the service order processing flow, the service order is processed the same as all other service orders whether they are for other CLECs or U S WEST's retail units.

EXACT

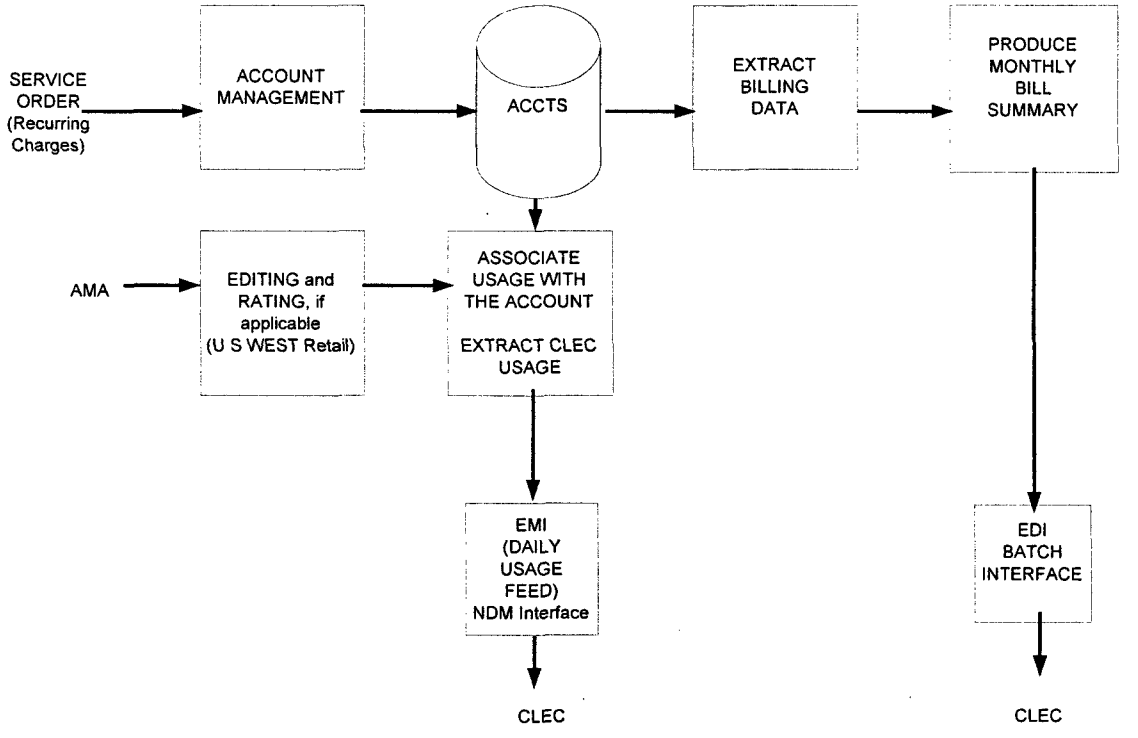


3.5.3 Billing Architectures

3.5.3.1 CRIS Architecture

For the billing interfaces, the diagram below describes the components that produce usage and monthly bill information. When an end-user customer's account is resold to a CLEC, the resulting service order updates the account to reflect that change. As the end-user customer generates toll usage, it is sent from the AMA system into the CRIS billing system, where it is associated with the CLEC's account. The toll usage is then forwarded to the CLEC in a daily usage feed file. U S WEST produces a billing summary file with all recurring and non-recurring charges and sends it to the CLEC on a monthly basis.

Billing Architecture

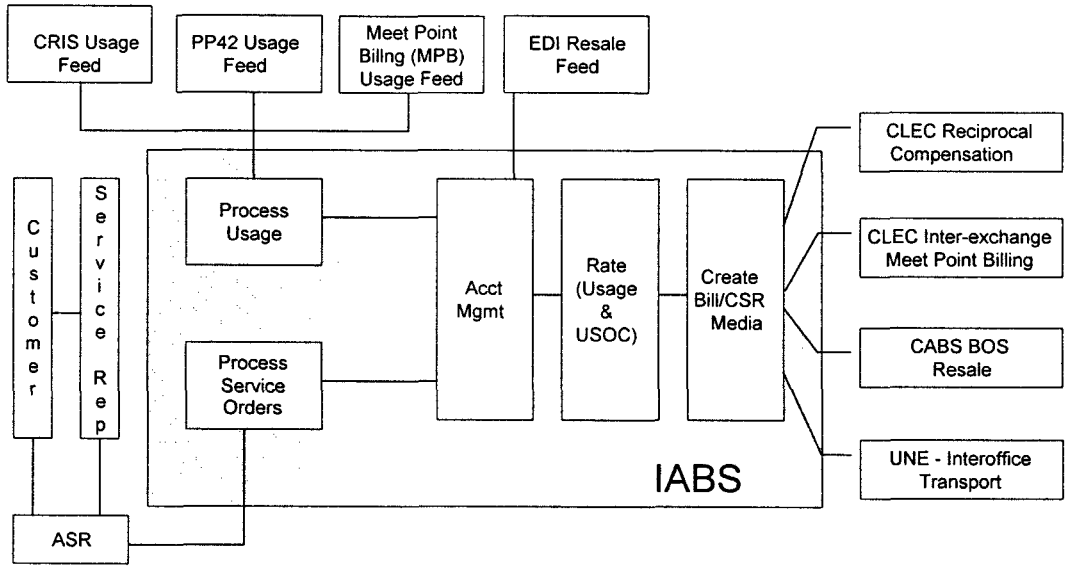


3.5.3.2 IABS Architecture

For the trunk-side UNEs and interconnection services, the architectural diagram shown below provides a high-level description of IABS. There are three usage feeds to the usage processing module. Another entry point is the ASR submitted by the customer service representative. These ASRs go to the service order processing module. Both usage and service orders are sent to the account management module to associate the usage and service order detail to accounts. Additionally, the EDI resale file is fed to the account management module.

After usage and service order details are associated to accounts, the accounts are rated, and bills and CSRs are produced. Outputs for reciprocal compensation, inter-exchange meet point billing, resale and UNEs are then provided to the CLECs.

IABS Billing Architecture



1 **3.6 Electronic Interface Standards**

2 The U S WEST OSS electronic interfaces comply with industry, national and
3 international standards as applicable for each interface. Listed below is a description of
4 the standards used by each of the electronic interfaces.

5 The IMA GUI system complies with applicable national standards. First, IMA's
6 LSR forms employ the Ordering and Billing Forum's (OBF) Local Service Order
7 Guidelines (LSOG) for ordering resold products and unbundled network elements. The
8 presentation of IMA screens employs the HyperText Markup Language (HTML), version
9 3, and JAVA – international standards for the presentation of graphical information.
10 Addressing linkages employ the international standard of HyperText Transport Protocol
11 (HTTP). Finally, the transmission of this information from a user's personal computer to
12 U S WEST's IMA gateway is done through the use of another international standard
13 known as Transmission Control Protocol/Internet Protocol (TCP/IP). IMA repair
14 functionality is also compatible with the ANSI T1.227/228 maintenance and repair
15 specification. The IMA repair functions are based on the Electronic Commerce
16 Implementation Committee (ECIC) Electronic Bonding-Trouble Administration
17 guidelines.

18 The EDI interface for pre-ordering, ordering and provisioning employs the OBF
19 Local Service Ordering Guidelines, the EDI X.12 message format standard as well as
20 the ECIC's Interactive Agent (IA) specification. U S WEST was instrumental in defining
21 the ECIC IA specification, which uses the TCP-IP/SSL-3 (Secured Sockets Layer-3)
22 transport protocol standard.

EB-TA, the U S WEST computer-to-computer interface for repair, is based on the ANSI T1.227/228 Trouble Administration Standard. It also uses the ECIC EB-TA guidelines as well as the ISO OSI CMIP/CMISE standard protocols (Open Systems Interface Common Management Information Protocol/Common Management Information Services Element).

EXACT is a Bellcore product. As such it is an industry standard for ordering products using an Access Service Request (ASR).

The billing batch files also use national industry guidelines. The daily usage feed uses Exchange Message Interchange (EMI) standard records. EDI is used for the monthly wholesale summary and detail feeds for POTS and designed services resale, unbundled loops, and line-side unbundled switch ports. Billing Output Specification (BOS) is used for trunk-side unbundled network elements and some resale supporting elements, such as Frame Relay. The customer activity files (loss and completion report) along with the daily usage feed and the wholesale summary bills, is available through the NDM transport protocol.

3.7 Summary of Systems Descriptions

U S WEST provides CLEC access to the OSS functions of pre-ordering, ordering, provisioning, repair, and billing though the following interfaces: IMA GUI, EDI, EXACT, EB-TA, and billing output files. They cover the breadth of the required products and services for POTS and designed services resale, line-side and trunk-side UNEs and interconnection services. Together with the U S WEST downstream OSSs, these

electronic interfaces help U S WEST meet its obligation to provide access to OSS functions.

4. Process Descriptions

A business process is a collection of activities that takes inputs and creates outputs. Processes in a company correspond to natural business activities, and usually, steps in the process are performed in a natural order. There can be multiple versions of the same process; each one tuned to the requirements of different markets, situations, or inputs. For example, a CLEC's request for new service (contained on an LSR) is an input to the ordering process. The provisioning of the products and services (contained on a service order) is the output.

In this section, I will discuss the processes used by U S WEST in support of the pre-order, ordering and provisioning, maintenance and repair, and billing for POTS and Designed Services Resale, Unbundled Network Elements, and Interconnection products. They are detailed in Exhibits DWB-010 through DWB-026. For each process there is a general description of the process, an illustration, a chart depicting the flow of activities, and a description for each task.

4.1 General Pre-Ordering, Ordering and Provisioning Processes

Processes supporting resale products, unbundled network elements, or interconnection involve responding to pre-ordering requests for information, processing orders for products and services, and managing information in U S WEST's OSSs. Among other items, the OSSs are updated to reflect that a particular end-user is being

1 served by a specific reseller, a facility-based CLEC has leased unbundled network
2 elements, or a facility-based CLEC interconnects with U S WEST. Once the resale
3 processes or the line-side UNE processes are completed, the CLEC becomes
4 U S WEST's customer and the end-user customer becomes the customer of the CLEC.
5 With trunk-side UNEs or interconnection services, there is not necessarily an end-user
6 customer involved and the CLEC becomes U S WEST's customer.

7 The process starts when the CLEC either is in discussions with the end-user
8 customer or determines its need for trunk-side UNEs or interconnection services. In
9 either instance, after gathering pre-ordering and/or ordering information, the CLEC
10 sends an order to U S WEST. The CLEC has the option of performing these tasks
11 either by facsimile, telephone call to the ISC or by using one of U S WEST's electronic
12 interfaces. A representative in U S WEST's ISC looks at the request to verify that the
13 information is correct, and either routes the request to the correct ISC site that converts
14 the LSR into one or more service orders,[36] or clicks the button to have the LSR
15 electronically converted into a service order and placed into the service order
16 processing flow. FOCs are then returned to the CLEC. The service order is assigned
17 and routed depending on its type. Orders that require special designs are routed to the
18 Design Services Center that creates the design, coordinates the central office work and,
19 if necessary, dispatches a technician. The circuit is tested, the CLEC notified and the
20 order completed. Orders that involve POTS products are routed directly to the
21 organizations that complete any necessary translations or provisioning work in the

[36] LSRs must be converted into service orders. This is because service orders predate the act and are the ordering forms that U S WEST's OSSs recognize. LSRs were created by national standards bodies, principally the OBF, and are intended to support local service ordering as a wholesale business.

switch and any inside or outside fieldwork. For all product types, after the assignment and provisioning work is completed, the service orders are marked as completed on a nightly basis. This completion notification is sent to the appropriate U S WEST's OSSs to ensure that billing, customer service records, repair line records, etc. are electronically updated. A completion file is transmitted the next morning to the CLEC containing information about orders completed the night before.

4.1.1 Conclusion

The CLEC activities within the processes are supported by online, real time electronic interfaces communicating with the same OSSs that support U S WEST's retail operations. For example, once a service request is entered into U S WEST's service order processor, SOPAD, the provisioning of products for both U S WEST and the CLEC are commingled and processed equally.

The detail identified in the exhibits prove that the pre-ordering, ordering and provisioning processes that are in place for POTS and designed services resale, unbundled network elements, interconnection and number portability. They demonstrate in detail that U S WEST's processes are developed and effective at supporting CLECs in a nondiscriminatory manner.

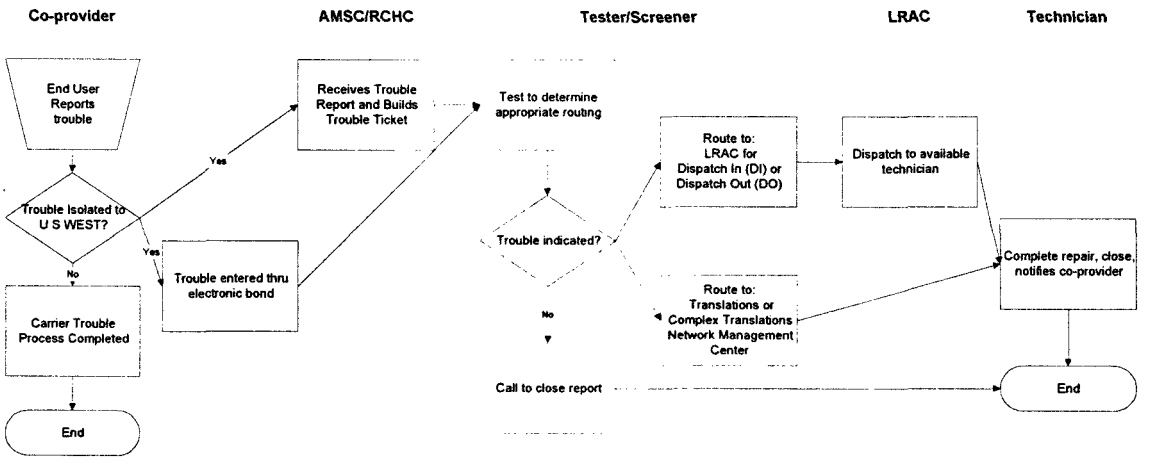
4.2 Maintenance & Repair Process

After service is installed, if a CLEC's customer experiences problems with their service, U S WEST has the processes and systems in place to support maintenance & repair functions for the CLEC and its customer.

When CLEC customers experience trouble with telecommunications equipment, such as a line failure or unstable connections, their first point of contact is the CLEC from whom they purchased service. Once the CLEC, following its internal process, has performed its trouble analysis and determined that a trouble report needs to be made to U S WEST, the CLEC has the option of submitting the trouble report (TR) via IMA or EB-TA or calling a U S WEST service center. U S WEST accepts the TR and issues a trouble ticket. This ticket is the fundamental unit for all repair activities. A trouble ticket identifies the customer, the service with which the customer is experiencing trouble, a description of the trouble, and the status of the activities taken to resolve the trouble.

4.2.1 General Maintenance & Repair Process Description

Detailed maintenance & repair flows and activity descriptions are included as Exhibits to this section of the affidavit. These exhibits include POTS, unbundled loop, unbundled switch, unbundled dedicated Interoffice transport, LIS trunking, number portability, and shared transport, Exhibits DWB-010 through DWB-026. The following diagram demonstrates, at a high level, the flow a trouble report can follow.



The repair process starts in one of two ways. One way is for the CLEC to enter the trouble information and create a ticket through an electronic interface, IMA or EB-TA. The other way is for the CLEC to contact either the Account Maintenance Support Center (AMSC) or the Repair Call Handling Center (RCHC), depending on product type, to report the trouble and a ticket will be created. Once the ticket is created, the repair process is identical for both U S WEST's retail customer and the CLEC customer. A tester performs tests to determine the appropriate routing of the trouble ticket. If the testing determines the trouble is not in the U S WEST equipment, the tester will close the ticket after talking to the CLEC. If trouble is indicated, one of two things can happen. Either the ticket is routed for dispatch to a technician who resolves the trouble and closes the ticket, or if translation work is needed, the ticket is routed to the Network Management Center for resolution and closure.

There may be supplemental activities that need to be performed after a ticket is opened but before it is closed. These activities, such as modifying the trouble ticket, obtaining status on the trouble, canceling the trouble ticket, reviewing the trouble history, and re-submitting or deleting the trouble ticket are discussed in Exhibit DWB-006 titled "IMA Functional Process Descriptions and Comparisons" presented in Section 3.2.1 IMA of this affidavit.

U S WEST also supports the CLEC when the source of the trouble does not rest within U S WEST's network facilities. At times, trouble can result when customers either have an incorrect understanding of the service they have requested or how to use their service. U S WEST supports the CLEC in this case through access to the

customer service record. By reviewing the customer service record, the CLEC can intercept issues that do not require network activities, hence saving time and cost where possible.

4.2.2 Conclusion

As the exhibits show, U S WEST's repair and maintenance processes are essentially the same for CLECs as they are for U S WEST retail. CLECs control and are responsible for the repair and maintenance of their own facilities, and U S WEST controls and is responsible for repair and maintenance of its facilities. Regardless of whether the end-user is a U S WEST retail customer or a CLEC retail customer, the repair processes and support are identical. U S WEST's electronic interfaces, IMA and EB-TA, make key repair functions and information available to the CLEC, which enable it to provide its end-user with the same service that U S WEST provides to its own end-users. This arrangement helps make the CLEC efficient and transparent as the intermediary between the end-user's trouble and U S WEST's repair functions. Because communication is an important part of supporting CLEC repair issues, U S WEST provides CLECs with active notification of trouble ticket status changes. This is beyond the capability provided to U S WEST internal representatives for trouble issues.

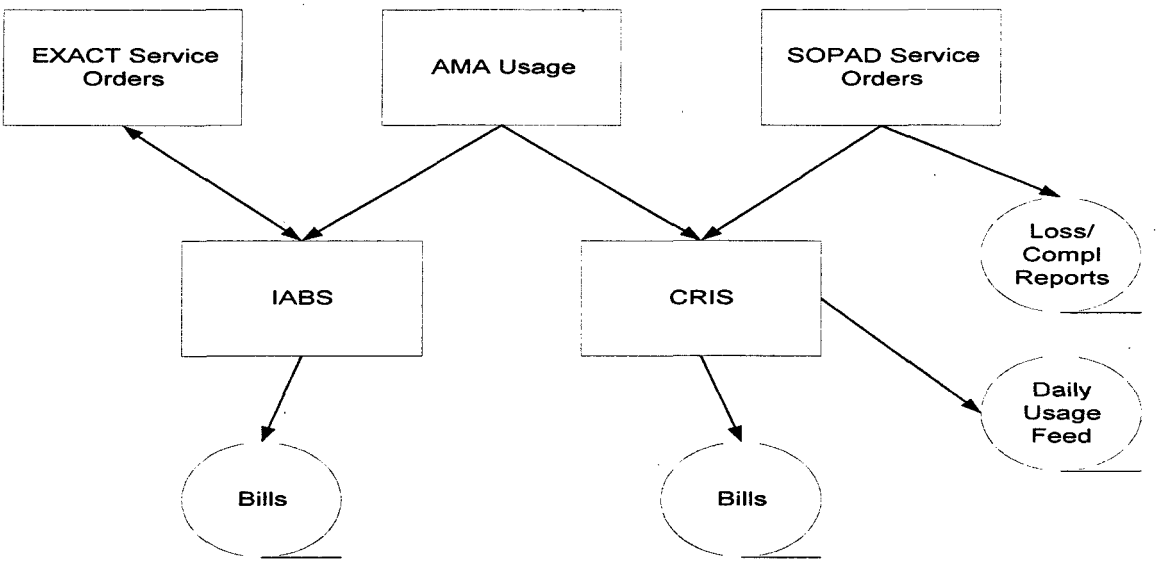
4.3 Billing

U S WEST has the processes and systems in place to support billing functions for CLECs. U S WEST provides both usage and service ordering information to support

the CLEC's billing of its retail customers. The relationship between U S WEST and a CLEC for billing functions is not the same as their relationship for other OSS functions. For pre-order, order and repair, U S WEST must enable the CLEC to perform the same functions that U S WEST representatives perform. CLEC representatives and U S WEST representatives both have the same task to complete in entering an order, for example. In the billing function, both U S WEST and the CLEC need to generate a retail bill to their respective retail customers, but U S WEST is not obligated to produce a bill for a CLEC's retail customer. Rather, U S WEST must provide the CLEC the data the CLEC needs to generate a bill.

Since retail telecommunication billing consists generally of usage charges and local service charges, an efficient CLEC needs both usage information and local service ordering information to bill its customers. U S WEST provides both usage and service ordering data pertaining to products such as resale and unbundled network elements to support CLEC's billing. Usage data is provided to the CLEC via the daily usage feed. Service ordering information is provided to the CLEC via the Completion and Loss Reports.

The following diagram illustrates the overall billing process between U S WEST and the CLEC:



4.3.1 Usage Data For Usage-Sensitive Charges

An important step in the billing process is the gathering of usage data. This usage data details charges that are based on the number, distance or duration of individual calls. A call record exists for each call that will be billed on a usage basis. It contains information on the origin, termination, and duration of the call. Some examples of usage data provided to the CLEC are call records for intraLATA toll calls, local measured service calls, and directory assistance calls. Where unbundling is involved, interexchange access records are also provided as required by the FCC. This usage information enables a CLEC to apply its own price to the call. CLECs can take the usage data, apply their pricing formulas, and generate usage amounts to bill their end-user customers.

1 The usage data for CLECs is derived from the same process that captures usage
2 data for all calls that travel on U S WEST facilities, regardless of whether those calls are
3 placed by U S WEST retail customers or by CLEC retail customers. The data is
4 gathered via the Automatic Message Accounting (AMA) OSS and then sent to the
5 Customer Records Information System (CRIS) OSS. When usage records are first
6 gathered in AMA, the identity of the local service provider (i.e., U S WEST or a CLEC) is
7 not on the record, and CLEC and U S WEST usage records cannot be distinguished.
8 Early in CRIS processing, CRIS determines whether each call belongs to a U S WEST
9 or a CLEC customer using a cross-reference file that associates the usage telephone
10 number with the local service provider. At this point, CLEC usage is separated from
11 U S WEST usage. Those messages belonging to CLEC customers are sent to the
12 CLEC in a daily usage feed. Messages belonging to U S WEST customers are sent
13 down to be further processed in U S WEST's billing system.

14 The daily usage feed is provided to the CLEC every business day. It is formatted
15 in the Exchange Message Interface (EMI) record format. CLECs input the usage data
16 into their billing systems, for use in creating bills for their local customers. CLECs can
17 also use the usage data to verify the monthly wholesale bill they receive from
18 U S WEST.

19 **4.3.2 Customer Service Ordering Activity Data**

20 Other important information needed by the CLEC for billing includes the local
21 products and services the CLEC is purchasing from U S WEST for its customers, and
22 the dates to start and stop billing these services. Information on relevant products and

1 services billed on a recurring basis is available to the CLEC via the IMA GUI and EDI
2 interfaces. U S WEST also provides the CLEC with a Completion Report that tells the
3 CLEC the date its service orders were completed. The last piece of data required by a
4 CLEC to manage its billing function is the date an end user leaves the CLEC. The Loss
5 Report provides this data, telling the CLEC the date to stop billing the end user. These
6 reports allow the CLEC to appropriately start and stop its billing of the services it
7 ordered for its customer, just as U S WEST starts and stops billing its customers based
8 on the completion date of service orders. Together, U S WEST's Completion and Loss
9 Reports provide the CLEC the customer ordering activity information necessary to
10 support CLEC retail billing. Refer to Section 3 of this affidavit titled "Systems
11 Description" for detail on IMA and Loss and Completion Reports.

12 **4.3.3 U S WEST Bills to CLEC**

13 U S WEST sends a monthly wholesale bill to a CLEC as a means of collecting
14 wholesale charges due from the CLEC. The wholesale bill is not the CLEC's primary
15 source for retail billing support. CLEC billing is supported by the daily usage feed and
16 the completion and loss reports. However, the CLEC can use the monthly bill to verify
17 or reconcile charges and other activities that have an impact on its retail customers. The
18 wholesale bill contains both usage and local service charges just as U S WEST bills do.

19 U S WEST uses two major billing systems to bill the CLEC: Integrated Access
20 Billing System (IABS) and Customer Record Information System (CRIS). Billing data for
21 CLECs is generated in the U S WEST billing system which best suits the wholesale
22 product the CLEC is purchasing from U S WEST. For most resale and unbundled

1 products, the billing system is CRIS. CRIS enables wholesale billing functions for
2 resold recurring/non-recurring charges, and usage services such as intraLATA toll calls.
3 Resale requires that wholesale prices be linked to the retail price therefore it is most
4 efficient to bill the products out of the same system as the retail product. CRIS
5 produces the monthly bill and provides it to the CLEC using the industry-standard
6 Electronic Data Interface (EDI) transaction set number 811. To prepare this bill for a
7 CLEC, U S WEST applies wholesale prices appropriate for the CLEC and runs CRIS
8 bill-cycle processing. U S WEST bills the CLEC at a summary account level. The bill
9 information provided to the CLEC includes charges and account balances. Charges are
10 broken down in categories such as recurring charges, usage and taxes. As with retail
11 bills, billing of recurring charges start and stop effective with the completion date of the
12 related service orders.

13 IABS, on the other hand, is well suited to bill interconnection charges to CLECs
14 because the interconnection model is similar to that for long distance carriers. IABS
15 also bills resold Frame Relay, LIS, Unbundled Trunks and Collocation since those
16 products are more compatible with IABS capabilities. U S WEST utilizes the Billing
17 Output Specifications/Carrier Access Billing System (BOS/CABS) specifications for the
18 format and transmission of IABS bills.

19 The following table summarizes the types of data provided to CLECs and the
20 source of that data from U S WEST.

Type of Data	U S WEST Source of Data for CLEC
Usage Data	Daily Usage Feed
Customer Activity	Completion and Loss Report
Wholesale Bill to CLEC	IABS and CRIS Bills

CLECs are today billing retail customers in Arizona thereby proving that U S WEST fulfils its obligation to provide the information necessary for billing.

U S WEST HAS PROVIDED SUFFICIENT ACCESS TO EACH OF THE NECESSARY OSS FUNCTIONS

5. OSS Capacity

5.1 Introduction

U S WEST's systems and centers are sized in anticipation of volumes well above the actual level of LSRs in U S WEST's fourteen-state territory. U S WEST is prepared to process both current and future demand in its systems and centers. This section describes the systems capacity planning and monitoring processes used by U S WEST to ensure the operational readiness of its systems. It also describes the human capacity planning and resources in place to support anticipated CLEC service request volumes.

5.2 Systems Capacity

U S WEST electronic interfaces and U S WEST's OSSs accessed by these interfaces have sufficient capacity to handle current volumes and are constantly monitored to ensure their ability to meet reasonably foreseeable, future demand. Capacity, as used here, means the physical sizing of computer hardware and software, including memory, storage devices and processing power (central processing units [CPU]), to ensure the ability to handle specific volumes of data. Capacity planning is required whenever U S WEST introduces an interface or OSS into its operational environment. This planning begins in an early stage of the project and is constantly reassessed as the project progresses.

5.2.1 System Capacity Inputs

The first inputs into the planning process include estimates of the volumes, location, hours, functionality, and performance requirements for the system. For example, the initial estimates for IMA were 10,000 transactions per CLEC, per week, per state, with approximately 20-30 CLECs per state, operating under a 14-hour prime-time shift Monday through Friday. This information, which is included in a capacity plan, ensures that the hardware components and infrastructure are sufficient to handle current and foreseeable demand. It can then be increased to handle additional processing and storage volume as volumes grow.

U S WEST has various organizations responsible for capacity planning. The process and individuals responsible for these systems maintain both the systems that

support retail customers and those that support wholesale customers. They are split between mid-range planning and monitoring, and mainframe planning and monitoring. Mid-range systems are those systems between a desktop and workstation computers and mainframe computers. Mid-range servers commonly run the Unix Operating System. The IMA and EDI interfaces are mid-range systems. Mainframe systems are large-scale, shared processing environments, which are located in centralized data centers serving the entire 14-state region via an internal data network. Examples include SOPAD, IABS and CRIS. The functions supported by these systems were described in section 3 - Systems Description.

5.2.2 Mid-Range Planning and Monitoring

As projects progress, capacity planners monitor the OSSs using simulated tests, random load tests, as well as transactions that model production. Based on the outcome of these tests, adjustments are made to hardware/software to ensure the interface is production ready. See Exhibit DWB-027 (CAPACITY ANALYSIS for IMA) for details of the IMA/EDI capacity analyses. This same process takes place for all systems. Since IMA/EDI was implemented, U S WEST has continued to assess capacity by monitoring and analyzing utilization using a monitoring tool, Capacity Planning System (CPS). This tool monitors all mid-range systems. It records specific component utilization statistics every 10 minutes and then forwards that data to a central server in the Capacity Planning Group at U S WEST. The data is not only queried for threshold exceptions, but all exceptions are detailed in a daily report. Should capacity of IMA/EDI begin to approach a threshold, it will be identified in the

monitoring system, so that appropriate measures/processes can be initiated to meet the demand. To ensure that capacity adjustments are proactively identified, a full time capacity planner is assigned to monitor IMA/EDI.

In addition to this internal planning and monitoring, U S WEST engaged Hewlett-Packard Consulting to conduct a third-party capacity load test. Hewlett-Packard concluded that the IMA gateway system "is adequate to handle the largest transaction rate that was tested, namely 3500 transactions per hour. Furthermore, although this transaction rate was intended to be a rate sustained in any peak hour, it appears that this rate could be sustained for an extended period of time." In this particular context, the use of the word "transaction" means one business transaction, not a computer transaction. For example, a business transaction can consist of one order event or one pre-order transaction, such as an address validation. Multiple computer transactions can be required to perform one business transaction. For more details on the Hewlett-Packard Consulting test, refer to Exhibit DWB-091 (Hewlett-Packard Company IMA Phase II Performance & Stress Testing Report).

5.2.3 Mainframe Planning and Monitoring

In the mainframe environment, there is a similar procedure. The inputs to this process are similar to those required for the mid-range environment; however, they are received from RMF (Resource Measurement Facility), SMF (System Management Facility) and MICS (MVS Integrated Control Facility). The individuals that support this process then determine the impact to the mainframe environment and make the appropriate changes.

The mainframe planning process is comprised of application sizing, capacity planning, hardware procurement, hardware acceleration and hardware delay. The application sizing process is used to identify, screen, size, and price application and infrastructure changes impacting various devices: 1) processor; 2) storage; 3) software; 4) network; and 5) print/COM/Mail/Optical devices. Additionally, personnel headcount changes necessary within the organization responsible for the purchasing, monitoring, and operating of the computers and associated devices are also identified here. The capacity-planners combine usage measurements with these applications and infrastructure changes to produce a requirement forecast. The final result is a hardware plan that satisfies the forecast. When this plan indicates the need to purchase hardware, the hardware procurement flow (illustrated in Exhibit DWB-028 Hardware Procurement Flow), is followed. This process normally takes approximately 2-3 months from initiation to installation.

Other processes safeguard against unexpected events. For example, the Hardware Acceleration process identifies and resolves unforeseen impacts that require accelerated hardware installation. Depending upon the business urgency and vendor availability, the time frame for emergency purchase can be accomplished in hours or days, rather than the normal 2-3 month time frame. Finally, the Hardware Delay process identifies and resolves impacts resulting in delayed hardware installation.

Performance Analysts using SMF, RMF, and MICS for trend analysis and Omegamon for real-time problem analysis continuously monitor mainframe usage. Based on these analyses, tuning adjustments to the environment are made as required.

Therefore, U S WEST has ample system capacity to handle current CLEC usage. Moreover, U S WEST has processes and procedures in place to monitor system usage and increase capacity as needed. The next section addresses the human capacity planning and resource allocations in U S WEST's centers dedicated to support CLECs.

5.3 Center Capacity

U S WEST has established carrier centers and repair centers to support CLECs' operations. They are properly staffed and can handle current and reasonably foreseeable volumes. Capacity, as used here, means the ability of the human resources to meet current and expected demand. As LSR and trouble report volumes increase, U S WEST continuously monitor the need to adjust center capacity.

5.3.1 Center Forecasting

U S WEST forecasts future demand through various figures gathered from both internal and external sources. Some of the sources include information contained in the Customer Questionnaire (See Exhibit DWB-029) in which CLECs are requested to provide forecasts of their line quantities for resale, unbundled network elements, and interconnection. Also, CLECs are requested to estimate dollar amounts for intraLATA and interLATA toll usage. Of the CLECs approved to conduct business in Arizona, only 40 of 46 (87%) provided U S WEST with estimated service volume forecasts. In addition to the questionnaire, the U S WEST Account Manager has regular contact with the CLEC and attempts to gather volume forecasts on an on-going basis. U S WEST

1 considers these forecasts when allocating resources for each center. The performance
2 of the centers is monitored on a regular basis. To enable U S WEST to dedicate
3 resources in a timely and responsive manner, processes have been established which
4 monitor demand and performance on a daily, weekly, monthly, quarterly and annual
5 basis.

6 Independent of the CLECs' forecasts, U S WEST also attempts to estimate future
7 demand based on internal research and industry trends. These estimates are provided
8 to the U S WEST Demand Forecast Center (DFC). The DFC inputs these estimates
9 into a forecasting model. This model produces anticipated volumes by product that are
10 provided to each center to allocate resources. The DFC forecasts are provided on
11 monthly, quarterly and annually. In addition, the centers supplement the forecasts with
12 historical LSR volumes, repair ticket volumes, and call volumes to refine the forecasts.

13 **5.3.2 Center Functions, Locations and Processing Volumes**

14 U S WEST has different service centers to support pre-order, order, provisioning,
15 repair & maintenance or billing requests. Pre-order, order, provisioning and billing
16 requests are handled by the carrier centers. The Repair Call Handling Center (RCHC)
17 and the Access Management Control Center (AMSC) handle requests for repair &
18 maintenance.

19 **5.3.2.1 Pre-Ordering and Ordering**

20 CLECs may use electronic interfaces such as IMA or EXACT to support their pre-
21 order, order and provisioning activities or they may elect to transmit their requests via

1 facsimile. There are three types of carrier centers. They are the Interconnect Service
2 Centers (ISCs), the Service Delivery Centers (SDCs) and the Billing & Collection
3 Centers (B&Cs). There are five ISCs, located in Cheyenne, Dallas, Denver, Duluth, and
4 Phoenix. There are three SDCs, in Des Moines, Minneapolis, and Salt Lake City and
5 two B&C Centers are located in Des Moines and Salt Lake City.

6 The ISCs handle LSR requests for interconnect resale services, number
7 portability, unbundled loops, and line-side unbundled network elements. In these
8 centers, there are 199 Service Order Administrators (SOA), 115 Order Specialists, 25
9 Service Order Coordinators, and 36 management personnel whose functions include
10 logging, screening, typing and tracking of LSRs, and, when necessary, correcting
11 errors, and managing jeopardies.

12 The SDCs handle LSRs for designed services and ASRs. There are 93 Service
13 Delivery Coordinators (SDC), 4 Data Specialists (DS), and 9 management personnel.
14 Their functions include logging, screening, typing and tracking of LSRs and ASRs, and,
15 when necessary, correcting errors, and managing jeopardies.

16 The B&C centers handle billing and collection functions. There are 55 SDCs and
17 5 management personnel who provide bills to CLECs, answer billing and collection-
18 related questions, and resolve disputes.

19 U S WEST has met current demand. In fact, in 1998, U S WEST processed
20 154,279 LSRs within its 14-state region. These are broken down into the following
21 categories.

	IMA/EXACT Number	IMA/EXACT %	Manual Number	Manual %	Total Number
LSRs (14 states)	59,374	38.5%	94,905	61.5%	154,279
LSRs (Arizona)	10,201	31.9%	21,766	68.1%	31,967
ASRs (14 states)	2,134	100%	N/A	N/A	2,134[37]
ASRs (Arizona)	12,415	100%	N/A	N/A	12,415

Both in Arizona and across the 14-state region, U S WEST witnessed increased transaction volumes through 1998 and was able to accommodate the increase in demand.

5.3.2.2 Repair

The repair centers operate seven days per week, twenty-four hours per day. These centers answer incoming CLEC calls, create repair tickets, provide ticket status, and isolate/resolve trouble. The RCHCs support simple business and residence, while the AMSCs support complex resale POTS, resale designed services, UNEs, number portability, and LIS trunking. The principal RCHCs that handle carrier calls are located in St. Paul, Phoenix, and Colorado Springs, with backup centers located in Des Moines and Salt Lake City. The AMSC Repair Center is located in Denver and employs approximately 45 Repair Service Attendants (RSA).

[37] ASR counts are for the final six-month count of 1998. Also, ASR counts include orders that were submitted electronically or manually.

U S WEST handled 127,762 repair calls and 89,044 repair tickets from CLECs in 1998 throughout its 14-state region. A detailed breakdown is contained in the table below.

Number of Contacts	January	December	Total Number
Repair Calls	8,633	12,269	127,762
Repair Tickets	4,645	9,997	89,044

U S WEST adequately handled the volume of repair calls even though the monthly volume increased by approximately one-third. In the same time period, U S WEST also adequately handled the volume of repair tickets even though the monthly volume more than doubled. These increases are to be expected because the volumes of LSRs also increased during this same time period.

5.3.2.3 Conclusion

U S WEST has developed processes to monitor existing OSS utilization (current demand), forecast future utilization based on the monitoring and make adjustments to meet approaching thresholds (future demand).

Similarly, the carrier and repair centers have successfully processed the current volumes of LSRs, ASRs and repair tickets (current demand) and are adequately staffed to meet foreseeable volumes (future demand). U S WEST has processes and procedures in place to monitor center usage and increase resources as needed.

U S WEST has Adequately Assisted the CLECs to Use All OSS Functions

6. Assistance to Competing Carriers

U S WEST assists CLECs to implement and use all of the OSS functions available to them. U S WEST provides support to CLECs in numerous ways, including: assigning key support personnel to each CLEC, offering training classes, supplying system documentation, and maintaining help desks and call centers.

The first part of this section will outline the process U S WEST has established for interfacing with a CLEC. Next, the information U S WEST provides to the CLECs to help them implement and use the OSS functions available will be addressed. Finally, there is a discussion on the support that U S WEST provides to CLECs as they conduct their business with U S WEST.

6.1 Process to Interface with a CLEC

U S WEST has developed and published an Interconnect and Resale Resource Guide (IRRG) for CLECs on the World Wide Web (See Exhibit DWB-030.) The IRRG contains general information about doing business with U S WEST, including business procedures, contacts, pre-ordering or set-up activities, resale product descriptions, unbundled network elements (UNEs), and standard installation intervals for the various products, as well as training schedules and worksheets to aid in preparing CLEC interfaces.

1 The IRRG also includes a contact number for a CLEC to initially contact
2 U S WEST. Once the CLEC makes an initial call to U S WEST, a U S WEST Account
3 Executive is assigned to the CLEC. The Account Executive will answer questions and
4 guide the CLEC through the necessary U S WEST processes for doing business with
5 U S WEST.

6 Initially, a U S WEST contract negotiation team may work with the CLEC to
7 obtain a mutually agreeable contract under which U S WEST and the CLEC can begin
8 doing business. Alternatively, the CLEC can opt into the SGAT or a previously
9 approved contract for another CLEC.

10 Once the State Public Utility Commission approves a new contract, the contract
11 negotiation team officially hands off the CLEC and its approved contract to the CLEC's
12 Account Executive. The Account Executive continues to be the primary source of
13 contact with U S WEST. In addition, an LSP Implementation and Deployment (LSP I &
14 D) Manager will be assigned to the CLEC.

15 Next, a questionnaire must be completed by the CLEC for each state in which
16 the CLEC is certified to do business. In this document, the CLEC provides technical
17 information necessary for U S WEST to set-up the various interfaces and gateways for
18 business communications between the CLEC and U S WEST. The LSP I & D Manager
19 will assist the CLEC and its Account Executive in completing the systems portions of the
20 questionnaire by explaining processes, options, and technical requirements. A copy of
21 the current questionnaire is included as Exhibit DWB-029.

The LSP I & D Manager will also oversee the internal U S WEST mechanized change request (MCR) and table updates to the appropriate OSSs, which must be completed before the CLEC can begin doing business with U S WEST. This manager coordinates the creation and testing of the appropriate summary billing accounts, completion reports, loss reports, daily usage reports, billing formats, and other necessary communications by internal U S WEST teams. When all the needed U S WEST-to-CLEC interfaces are operational, the LSP I & D Manager oversees the initial production orders to provide solutions for any remaining concerns or problems. Once the CLEC is in a stable production mode, this manager will officially hand off the CLEC to the LSP/CLEC Help Desk for continuing production support. See Exhibit DWB-31 for the documented procedures for "Production Readiness Verification", a process for testing electronic interfaces to ensure a CLEC is ready for production.

When a CLEC chooses to use the IMA GUI electronic interface, the U S WEST Account Executive or the LSP I & D Manager contacts the IMA Deployment and Training Team (IMA D&T). The IMA D&T team then assists the CLEC with IMA specific questions, concerns, and training. This team also contacts the CLEC when the IMA software is improved and periodically re-released.

When a CLEC chooses to use the EDI electronic interface, the U S WEST Account Executive or the LSP I & D Manager contacts the U S WEST EDI Coordinator. This coordinator will work with the CLEC and help manage the process of EDI testing and implementation for the CLEC. The IMA D&T team also notifies CLECs using EDI when the software is improved and periodically re-released.

The CLEC's Account Executive continues to act as the primary contact for the CLEC with U S WEST. Routine, on-going production support is provided by the LSP/CLEC Help Desk, the Unified Help Desk (UHD),[38] the appropriate ISC Help Desks, and the Repair Service Centers.

6.2 Assistance in Implementing OSS Functions

U S WEST provides the information and assistance necessary for CLECs to implement OSS functions in the following manner. U S WEST has added a Wholesale Systems Regulatory Support Group comprised of individuals dedicated to supporting wholesale processes. As stated previously, the LSP I & D Manager, the IMA D&T, and the Account Executive provide support from the initial set-up and deployment through production support and training.

In addition to providing information to the CLECs, U S WEST uses the information provided by the CLEC to aid in ensuring that the CLEC's deployment will be smooth. For example, the information provided by the CLEC in the New Customer Questionnaire is used to define system requirements and capacity needed to support the CLEC's specific activity, to establish input and output requirements, to identify client hours and holidays, and to set up the data transfers between U S WEST and the CLEC.

For information on most resale products, the Account Executive and/or the LSP I & D Manager refer CLEC personnel to the appropriate industry standard bodies (e.g. ATIS, OBF). In addition, the LSP I & D Manager provides U S WEST interface

[38] The Unified Help Desk provides after-hours support to CLECs for questions normally handled by the LSP/CLEC Help Desk.

information on an as-needed basis. During the questionnaire completion process, the LSP I & D Manager and the Account Executive coordinate meetings between various U S WEST and CLEC technical representatives to facilitate communication of formats, protocols, and other technical discussions. Often, technical tests are performed to verify the proper connectivity and the accurate transmission of data between U S WEST and a CLEC. U S WEST is committed to solving problems jointly with CLECs, and to getting the appropriate systems and software deployed for the CLECs. The following table depicts the types of information provided to CLECs and the source of that data.

Applicable Standard/Guideline or Other Documentation	**Source**
Ordering & Billing Forum's (OBF) standards/guidelines for: • Interconnect • Resale • Access (long distance)	Alliance for Telecommunications Industry Solutions (ATIS) See http://www.atis.org/
Data documenting where U S WEST differs from the OBF standards/guidelines	Interconnect and Resale Resource Guide (IRRG) See Exhibit DWB-030.
Documentation about: • EDI • End-user documentation for IMA • IMA release notes • Street Address Guide Area (SAGA) data • Facility Availability Matrix (FAM) data	LSP Information Website (available on IMA main menu). See Exhibit DWB-032, LSP Information Website.

Applicable Standard/Guideline or Other Documentation	Source
Expanded Message Record / Exchange Message Interface (EMR/EMI)	ATIS
U S WEST-specific connectivity data • Daily loss reports on usage • Lost customers • Completed orders for resale, unbundled loop, and unbundled switch products	LSP Implementation and Deployment Manager
Documentation for EB-TA	American National Standards Institute (ANSI): Standard T1.227/228, Trouble Administration http://www.ansi.org Account Executive
Documentation for EXACT	Bellcore

U S WEST is open to helping CLECs participate in national standards committees and advocates the use of national standards by CLECs. U S WEST supports CLECs in submitting issues to the standards committees and also helps to sponsor debate on issues that CLECs have submitted.

U S WEST informs the CLECs of the changes and expected date of implementation for each IMA and EDI release through the use of release notes. (See Exhibits DWB-33 through DWB-68 for past IMA Release Notes, and Exhibit DWB-069 for a list of the IMA releases). These release notes are not intended to be a replacement for training or user guides, but are informational in nature. Also, for each

1 IMA release, the IMA Deployment and Training Team provides up-to-date training for
2 the updated functionality.

3 U S WEST provides access to the internal LSP Information Website to those
4 CLECs that choose to use the IMA GUI (see Exhibit DWB-032, LSP Information
5 Website). This Website contains a number of system documents online for both the
6 IMA GUI and the EDI interface. In addition, U S WEST also provides the IMA Users'
7 Guide, the IMA System Administrator's Guide, and the IMA Repair Guide to those
8 CLECs using IMA. The IMA Users' Guide provides information to assist CLECs when
9 using IMA to order services for their customers. It also contains a chapter that
10 discusses security, system requirements on the CLEC side, and instructions for dialing
11 in and logging on to the IMA GUI. The IMA System Administrator's Guide provides
12 information about system administration tasks, such as maintaining user lists and billing
13 account number lists. The IMA Repair Guide provides information about how to report
14 trouble.

15 For CLECs using EDI, U S WEST provides the IMA EDI Implementation Guide,
16 the IMA EDI Disclosure Document, and Appendix A of the EDI Disclosure Document.
17 The IMA EDI Implementation Guide includes a comparison of EDI and the IMA GUI.
18 CLECs can refer to this guide to determine if they want to explore using an EDI
19 electronic interface. The IMA EDI Disclosure Document describes the interface
20 requirements for the exchange of pre-ordering and ordering transactions using EDI.
21 This document (see table of contents in Exhibit DWB-070, EDI Disclosure Contents)
22 provides extensive information, including the information needed to set up the

translation processes and guide data mapping and to define transport and OSS interfaces and end-to-end testing parameters. Appendix A lists the EDI Data Dictionaries for the EDI Disclosure Document.

In addition to accessing these documents for EDI, a CLEC must participate in detailed negotiations and develop a close working relationship with U S WEST for the duration of implementation and testing of the EDI electronic interface. To facilitate this relationship, the two companies will develop a Joint Implementation Agreement (JIA), which will cover all needed details and information for implementation. U S WEST and MCI are currently joint-testing MCI's interface to EB-TA.

U S WEST also provides CLECs with instructions on how to download the FAM (Feature Availability Matrix) and the SAGA (Street Address Guide Area) data. In addition, U S WEST provides interface specifications and documentation for the other electronic interfaces U S WEST offers to the CLECs, i.e., EB-TA, EXACT, usage records, and loss and completion reports.

EB-TA is based on the American National Standards Institute (ANSI) Standard T1.227/228, Trouble Administration. This standard can be obtained from ANSI directly on the World Wide Web at the following address http://www.ansi.org. Bellcore will provide the following documents for EXACT: EXACT User Manual (BR 252-575-301), EXACT On-line Message Directory (BR 252-575-260), and EXACT Format Field Directory (BR 252-575-790). The LSP Implementation and Deployment Manager provides specifications on usage reports and loss and completion reports to CLECs during the Production Readiness Verification process.

6.3 Disclosure of Internal Business Rules for OSS Functions

U S WEST provides internal business rules for products, including USOCs (Universal Service Order Code) and FIDs (Field Identifier), to help CLECs place orders and have them efficiently processed by U S WEST's systems.

There are several ways that U S WEST provides the necessary information to CLECs. If the business rules are product-specific, they are provided in U S WEST's business training. U S WEST also allows CLECs access to a product database that contains business information related to products. In addition, U S WEST provides USOC information based on an NPA/NXX in the service availability query pre-ordering and ordering transactions in IMA.

The Interconnection Training Team offers training classes on interconnection, unbundled network elements, resale products, and business processes to CLECs, U S WEST Account Executives, and other internal staff. This team develops, maintains, and distributes training materials and other pertinent information. The IRRG, available on the World Wide Web (See Exhibit DWB-030), contains product training schedules (Exhibit DWB-071) and course topics (Exhibit DWB-072). Because the business classes are product based, U S WEST provides USOCs and FIDs for specific products as part of the training. Also, documents from a Product Database (discussed below) are reviewed in the training, and CLECs are encouraged to use the Product Database as a product reference.

During 1997, business-training sessions were held for 102 CLEC employees in 45 training sessions. In 1998, training sessions were held for about 327 CLEC employees in 73 training sessions. So far in 1999, training sessions have been held for about 45 CLEC employees in 19 training sessions. The classes and numbers of individuals in attendance are listed in Exhibit DWB-073, Business Training Attendance.

For interested CLECs, U S WEST also provides a Product Database that can be downloaded. This database contains business information and process rules, including USOCs and FIDs. As new documents are created, they are added to this collection of product information and made available to CLECs. After downloading the database, CLECs can search it using their own search engines. See Exhibit DWB-074, Product Database Index File as of 02-02-99, for a listing of the files currently available to CLECs in this database. In addition, IMA GUI and EDI have a USOC table that CLECs can access through the service availability query when ordering products. Finally, if needed, U S WEST also provides access to tariff information through an online directory. See Exhibit DWB-075, U S WEST Tariff Directory.

6.4 Assistance in Using OSS Functions

Along with the items discussed above, U S WEST also helps CLECs properly use OSS functions available to them. To help CLECs submit valid electronic requests, U S WEST provides support by offering training, holding forums and conferences, making help desks available, assigning I& D Team managers, and supplying information via the IRRG and IMA Co-provider Website.

As mentioned above, the Interconnection Training Team delivers periodic training sessions on interconnection, unbundled network elements, and resale products and processes. Also, the IMA D&T provides IMA training for the CLECs. This team coordinates IMA training with the Interconnection Training Team schedule. As with business training, a current schedule of IMA classes is available in the IRRG. See Exhibit DWB-076, IMA Training Schedule.

U S WEST delivers IMA training to CLEC trainers, CLEC business methods and procedures writers, and other CLEC personnel, as appropriate. Because U S WEST anticipated increased requests for IMA training during 1999, the IMA D&T team is planning sessions in Denver, as well as at other U S WEST regional centers outside of Colorado. Reasonable requests for on-site training at CLEC cities and offices are accommodated when time and staff are available.

During 1997, U S WEST IT delivered 44 IMA training sessions to 83 CLECs. This training was given to 329 people, of which 140 were from CLECs. Others receiving IMA training included U S WEST staff, regulatory personnel, and congressional delegations. In 1998, U S WEST IT delivered IMA training to 203 people, 147 of which were CLEC employees. So far, in 1999 U S WEST IT has given IMA training to 67, 31 of which were CLEC employees. See Exhibit DWB-077, IMA Training Attendance, for IMA training attendance figures.

Additionally, in October of 1998, U S WEST held an IMA User Group forum. This forum was held from October 27th to the 29th and covered topics related to the IMA GUI and EDI. Several people from U S WEST's wholesale division participated in the

Forum's training sessions, question and answer sessions, and CLEC feedback sessions. See the "News" section of Exhibit DWB-032, LSP Information Website, for a more detailed report of the event.

As discussed above, U S WEST also furnishes IMA and EDI related manuals and materials to the CLECs. A technical writing team continually revises and improves the IMA-related documentation. User manuals, specification documents, and release notes are available on the U S WEST IMA Co-Provider Website. The IRRG also contains product information as well as product forms used by U S WEST.

In order to support CLECs in their business operations, U S WEST maintains several help desks and call centers. The U S WEST Unified Help Desk has created a special LSP/CLEC Help Desk to assist CLECs with IMA and other OSS production support questions. The System Administrators (SYADs) who maintain and monitor the IMA production hardware and software systems also support the LSP/CLEC Help Desk. The ISC has a call center to assist CLECs with order-specific questions. The repair centers handle trouble reporting and status questions from CLECs. The contact numbers for each of these help desks and call centers are listed in either the IRRG or in IMA. See exhibit DWB-030, IRRG, or exhibit DWB-078, IMA pop-up window.

6.5 Summary of Assistance to Competing Carriers

In summary, U S WEST has established a group within its Information Technologies organization dedicated to supporting wholesale processes. U S WEST has created six primary points of contact to assist a CLEC. Two groups (the LSP

Implementation and Deployment Team and the IMA Deployment and Training Team) focus on helping the CLEC get implemented and deployed. The other four contacts (the Account Executive, the CLEC/LSP Help Desk, the ISC Call Center, and the Repair Centers) continue ongoing support of the CLEC in a production mode. U S WEST also provides additional training and system user guides and manuals to CLECs to help them continue using the available OSS functions.

THE OSS FUNCTIONS THAT U S WEST HAS DEPLOYED ARE OPERATIONALLY READY, AS A PRACTICAL MATTER

7. Operational Readiness

As evidence that OSSs are operationally ready, the FCC states that in addition to actual commercial usage "[c]arrier-to-carrier testing, independent third-party testing, and internal testing also can provide valuable evidence pertaining to operational readiness."[39] U S WEST has processed commercial usage and has conducted extensive internal and external tests to demonstrate the operational readiness of its OSSs and electronic interfaces.

7.1 Commercial Usage

One method of determining whether U S WEST's OSSs are operationally ready is actual commercial usage. Usage statistics show the actual demand handled by U S WEST and show how this demand has changed over time. They also demonstrate

[39] *FCC Ameritech Order*, ¶ 138.

that U S WEST has handled increases in demand and will be able to handle reasonably foreseeable demand in the future.

Several of U S WEST's interfaces currently have commercial usage. IMA has been used for more than two years now and has met CLECs' actual demand. Likewise, the batch billing interfaces have been operational during this same time frame and are also meeting current demand. Both are sized to meet foreseeable demand. Additionally, the EXACT interface has been in operation since Divestiture (1984) and has been meeting actual demand since that time. EDI has been in production since December 1997, and EB-TA has been in production since April 1998. Both EDI and EB-TA are currently in process of carrier-to-carrier testing for CLEC interface implementation[40].

Exhibit DWB-079, Arizona Local Service Provider (LSP) Inputs and Outputs, provides a measure of the level of CLEC activity both in Arizona and in all 14-states of the U S WEST region. For each CLEC, it lists the number of LSRs submitted through each interface type, the number of repair tickets submitted to U S WEST, and the method of delivery chosen by each CLEC for billing outputs. A count of the pre-ordering activity totaled for all 14 U S WEST states is also included. Exhibit DWB-080, EXACT ASR Count by CLEC, lists the number of CLEC ASRs submitted in Arizona through EXACT. It also shows the total ASR activity in all 14 states for the CLECs who submitted ASRs in Arizona. These two exhibits show that 43 CLECs have had some level of order activity with U S WEST.

1 Exhibits DWB-081, DWB-082, and DWB-083 show how CLEC activity increased
2 during 1998. For each of these increases, U S WEST has met the change in demand.
3 DWB-081, IMA and Fax LSR count by month, shows that CLECs are faxing less and
4 less and using IMA more and more. The total number of monthly LSRs submitted in
5 1998 increased from 7,389 to 19,589. This represents a 165% increase. DWB-082,
6 EXACT ASR count by month, provides the same picture for ASRs submitted via
7 EXACT. The number of ASRs that CLECs submitted increased from 1,758 in July to
8 2,634 in December which constitutes a 50% increase. DWB-083, Total Repair count vs.
9 IMA Repair count by month, gives a picture of the total repair tickets created vs. the
10 repair tickets created via IMA. During 1998, total monthly repair tickets submitted by
11 CLECs increased from 4,645 to 9,997, 115% increase.

12 U S WEST Public Services is using IMA as its primary trouble reporting process.
13 Exhibit DWB-084, IMA Repair count for U S WEST Public Services by month, discloses
14 U S WEST's level of IMA usage.

15 The above statistics and measurements demonstrate that U S WEST OSS
16 interfaces are meeting current demand, have handled increases in demand, and can
17 meet a reasonably foreseeable demand in the future.

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[40] McLeodUSA Telecommunications is currently implementing and testing the EDI interface with U S WEST for Centrex ordering. MCImetro Access Transmission Services is currently implementing and testing the EB-TA interface with U S WEST. Inc.

7.2 Testing

7.2.1 Introduction

U S WEST performs several types of testing to ensure wholesale products can be successfully pre-ordered, ordered, provisioned, maintained/repaired, and billed. Each software development group has independent, but similar, testing methods, procedures, processes, and testing teams to ensure the operational quality of electronic interfaces and OSSs. Testing may be both external and internal. External tests include carrier-to-carrier and third party testing. Internal tests include System and Business Integration Testing (BIT). These test types are defined in the following sections. Each test type section includes a reference to exhibits of test documentation and test results. An explanation of how to read the test exhibits is found in Exhibit DWB-085.

7.2.1.1 Carrier-To-Carrier Test

U S WEST has participated in carrier-to-carrier testing to verify that the electronic interfaces meet functionality specifications. This type of testing includes, but is not limited to, ensuring that the communications protocol works properly, returning a CSR upon request and depositing an LSR into the FOM are consistently successful.

In this context of carrier-to-carrier testing, interoperability validates that the computer components between the CLECs and U S WEST can successfully communicate. This type of testing also allows the CLEC and U S WEST to identify problems that may require additional development work or correction. Tests are performed using test systems and test scenarios that have been mutually defined and

1 documented. An example of a test scenario is making a request for order status. The
2 test scenario would include the steps involved in making such a request and the specific
3 customer/order data to be used.

4 Following the completion of interoperability testing, EDI certification testing is
5 performed. Certification testing consists of the controlled submission and execution of
6 EDI transactions that contain actual account information and ensure these transactions
7 can be transmitted in the production environment. Certification testing validates that the
8 CLEC can transmit EDI data that meets X.12 standards definitions and complies with all
9 U S WEST business rules. The results are used to assess the CLEC's ability to
10 successfully exchange EDI transactions in production.

11 Carrier-to-carrier tests have demonstrated that the electronic interfaces are
12 operationally ready. U S WEST completed testing of over 20 order scenarios with MCI
13 in U S WEST's first release of EDI. U S WEST is now participating in EDI testing with
14 McLeod. As of March 1999, there have been 12 order scenarios with a total of 510 EDI
15 pre-order transactions successfully exchanged between U S WEST and McLeod.
16 Testing of ordering transactions is currently in progress. At this time, only McLeod is
17 actively building an EDI interface with U S WEST. U S WEST has its interface ready for
18 other CLECs whenever they choose to build their side of the interface. For EB-TA,
19 U S WEST and MCI participated in 34 test cases and 15 business test case scenarios,
20 and the results proved that EB-TA successfully processes repair information between
21 them.

Another type of carrier-to-carrier testing occurred when U S WEST participated in industry-defined LNP testing with other carriers in the region. Each test document includes the overall test result and statements from each of the participating carriers. These tests were conducted with five service providers in the Phoenix metropolitan statistical area (MSA) and five service providers in the Tucson MSA. These tests demonstrated that telephone numbers could effectively be ported between service providers in a production environment.

See Exhibit DWB-086 through DWB-090 for examples reflecting carrier-to-carrier tests in which U S WEST participated.

7.2.1.2 Third Party Test

Third party testing is an evaluation by an independent party. The scope included electronic interfaces, OSSs, and/or processes. Hewlett-Packard conducted two third-party tests of the IMA GUI and proved that IMA can operationally support CLEC transactions for pre-ordering, ordering, and provisioning. These tests proved that IMA capacity is adequate to handle the largest transaction rate tested, namely 3,500 transactions per hour and that this rate could be sustained for an extended period of time. As mentioned in Section 7, these volumes are well above the actual usage volumes and any reasonable foreseeable increase in demand. Exhibits DWB-091 and DWB-092 set forth examples of the third-party tests in which U S WEST participated.

1 **7.2.1.3 System Test**

2 In system tests, U S WEST test personnel verify that a requirements-defined
3 level of functional accuracy, system performance, and system stability have been met.
4 System tests also incorporate regression testing and interoperability testing.
5 Regression tests repeat previously performed tests in order to verify that functionality
6 continues to perform as expected. In this context, interoperability testing verifies that
7 the system will operate in a production environment and will interact with other
8 applications and systems without degradation to other systems. Interoperability tests
9 take two or more computer components and execute transactions to ensure that they
10 communicate properly.

11 U S WEST has performed a multitude of systems tests. In 1998, over 5,000
12 System Tests were successfully completed and show that the IMA/EDI electronic
13 interfaces are operationally ready. Exhibits DWB-093 through DWB-099 set forth
14 examples of system tests that have been performed on the IMA/EDI electronic
15 interfaces developed by U S WEST.

16 **7.2.1.4 Business Integration Test**

17 U S WEST conducts business integration tests (BIT), on a product-by-product
18 basis, to demonstrate overall end-to-end business functionality of OSSs, electronic
19 interfaces, and procedures as well as any supporting documentation that support the
20 order, provisioning and billing of wholesale products. BIT tests are conducted by
21 IMA/EDI release. Test cases for U S WEST's central region were successfully

completed and demonstrate that the business functionality can operate in the production environment.

Tests were performed on several interconnection products. In fact, in 1998, 25 tests were performed on the following products; combination unbundled switch and unbundled loop, LIS trunking, unbundled switch, unbundled loop-point-of-presence (POI) only, customer service record management, and interim number portability. In Exhibits DWB-100 through DWB-110, examples of Business Integration Tests that have been performed on both products and electronic interfaces of U S WEST are provided.

7.3 Conclusion

The commercial usage statistics as detailed in Section 7.1, the tests described above, and the samples contained in Exhibits DWB-086 through DWB-110 demonstrate the operational readiness of U S WEST's OSS functions and interfaces. U S WEST's electronic interfaces are currently used by CLECs. U S WEST has completed an inordinate number of tests and continues to test its various systems. Because of this, the OSS functions deployed by U S WEST are functional, meet current demand, and can meet any reasonably foreseeable demand.

SUMMARY

U S WEST has developed a variety of interfaces and OSS capabilities that allow CLECs to purchase resale services, unbundled network elements, and interconnection products. U S WEST has built and offers two real-time electronic interfaces for pre-

ordering, ordering, and provisioning of resale and line-side UNEs: They are the IMA GUI, a human-to-computer interface, and EDI, a computer-to-computer interface.

To order interconnection (LIS trunks) and trunk-side UNEs, U S WEST offers access through EXACT for those CLECs with computer-to-computer electronic interfaces. For those CLECs that choose to use a human-to-computer electronic interface, third-party products are available for purchase by vendors.

U S WEST also provides relevant billing data to CLECs so that they can generate a bill to their end-user customers.

For repair capabilities, U S WEST also offers two types of electronic interfaces to CLECs. They are the IMA GUI and EB-TA.

In addition to electronic interfaces, U S WEST has engaged in extensive development work to modify its existing downstream OSSs to support the pre-ordering, ordering, provisioning, repair, and billing functions for resale products, unbundled network elements, and interconnection services.

Also, U S WEST has ensured that it is providing sufficient access to its OSSs, by sizing its systems and centers to handle current and future demand. U S WEST has also developed processes to monitor utilization so that the need to increase capacity can be proactive.

Furthermore, U S WEST assists CLECs on how to implement and use all the OSS functions available to them. An organization has been established to assist

CLECs to set up their systems interfaces and processes that support them. In this effort, appropriate documentation and training are provided to CLECs.

As evidence that the OSS functions are operationally ready as a practical matter, several CLECs in the state of Arizona are using U S WEST's interfaces. In addition to this usage, U S WEST has demonstrated that it is operationally ready by performing carrier-to-carrier testing, third-party testing, and internal testing that prove the necessary functionality and capacity exists. In summary, U S WEST has deployed the necessary system and personnel to provide sufficient access to its OSS, adequately assists CLECs to use all of the OSS functions available to them, and has demonstrated that its OSS functions are operationally ready as a practical matter. Therefore, the Commission should find that U S WEST has made its OSS functions available to CLECs on a nondiscriminatory basis.

For a description of acronyms referenced in this affidavit, refer to Exhibit DWB-111.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	**DOCKET NO. T-00000B-97-0238 AFFIDAVIT OF DEAN W. BUHLER**
STATE OF COLORADO	)	
	:	**SS**
COUNTY OF DENVER	)	

Dean W. Buhler of lawful age being first duly sworn, deposes and states:

1. My name is Dean W. Buhler. I am Regulatory Manager of U S WEST Communications in Denver, Colorado.

2. I hereby swear and affirm that the statements and data contained in the attached affidavit and exhibit(s) are true and correct to the best of my knowledge and belief.

Dean W. Buhler

Dean W. Buhler

SUBSCRIBED AND SWORN to before me this 15th day of March, 1999.

Rebecca Herrera

Notary Public

My Commission Expires:

11/12/2000

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
CHAIRMAN
TONY WEST
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	DOCKET NO. T-00000B-97-0238

EXHIBITS OF

DEAN W. BUHLER

U S WEST COMMUNICATIONS

MARCH 25, 1999

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Sample Order – Resale POTS New Connect

Step 1: The Competitive Local Exchange Carrier (CLEC) enters the order into Interconnect Mediated Access (IMA).

The CLEC representative points the browser to the IMA browser address and opens the initial screen:

Sample Order – Resale POTS New Connect

Important or new IMA system information is presented in a pop-up window.

IMA Announcements - Netscape

Welcome to the new "IMA pop-up window"

This will be used to communicate system availability, IMA release implementation updates & schedules, and other periodic NEWS for our customers.

If you have any questions about this, please contact the IMA Help Desk at 1-888-796-9102

Message Announcing IMA Repair Hours

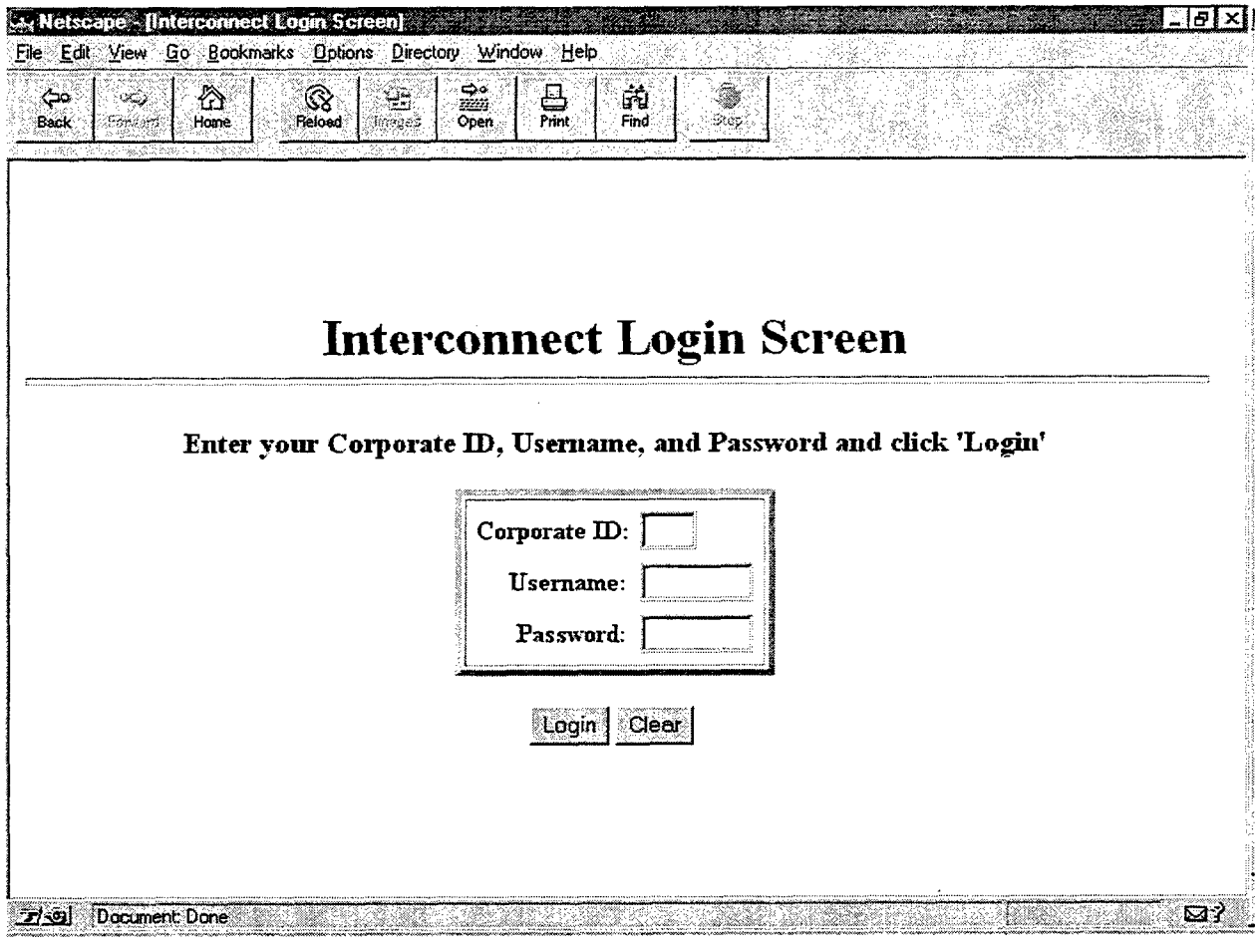
Effective immediately IMA Maintenance and Repair routine downtime has been aligned with normally scheduled Maintenance and Repair Legacy system downtime. This will provide maximum availability for IMA Maintenance and Repair users. Please refer to the schedule below for system availability. All times listed are in Mountain Standard Time unless otherwise stated. IMA pre-order and order supported hours are not affected by this change.

IMA is currently available during normally scheduled hours. Please refer to the schedule below.

	Monday - Friday	Saturday	Sunday
***IMA Maintenance and Repair Hours**	2:15 - 23:15	2:15 - 22:00	7:00 - 23:15

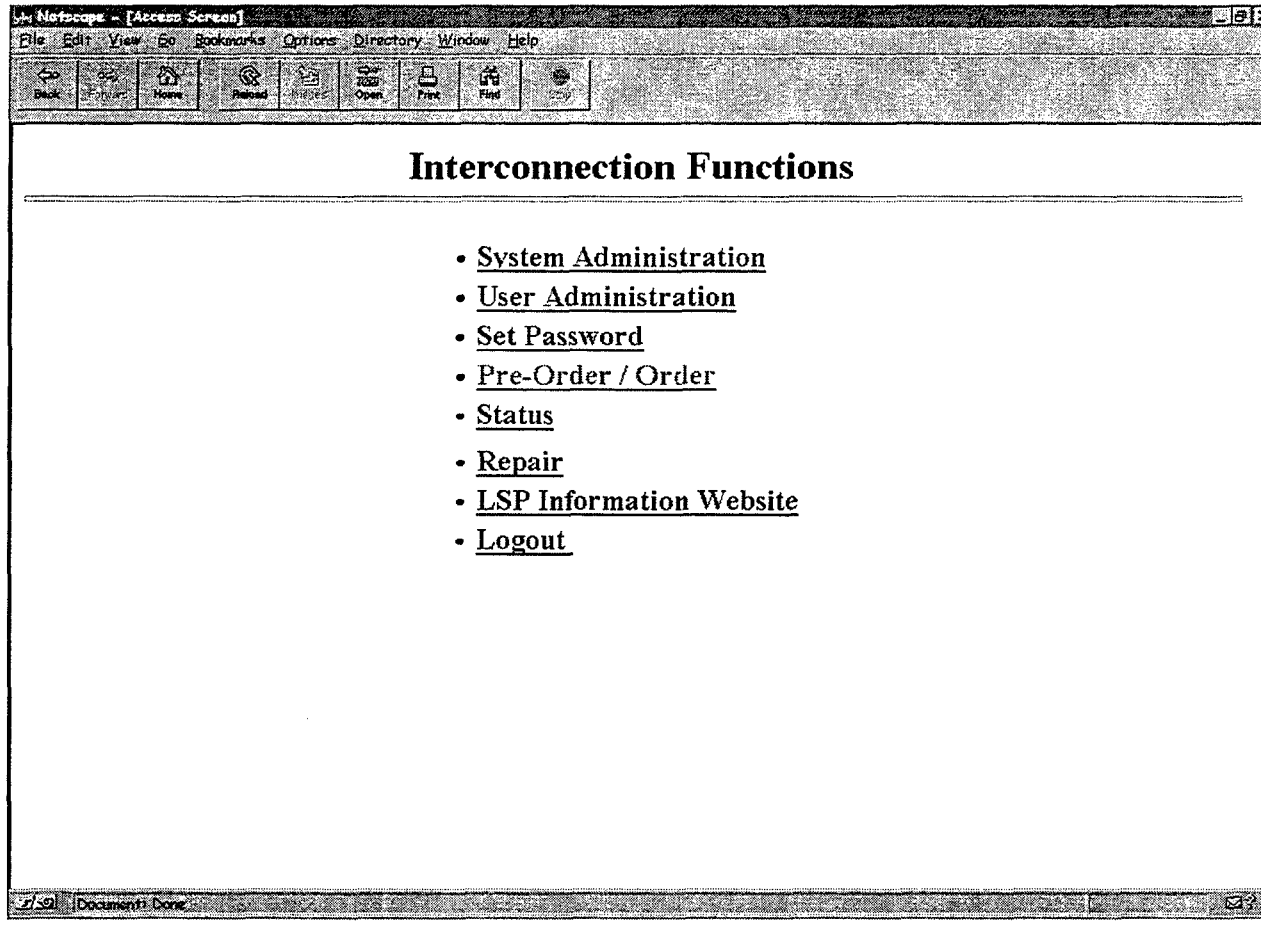
Sample Order – Resale POTS New Connect

After pressing the start button on the IMA initial screen, the CLEC representative logs into IMA.



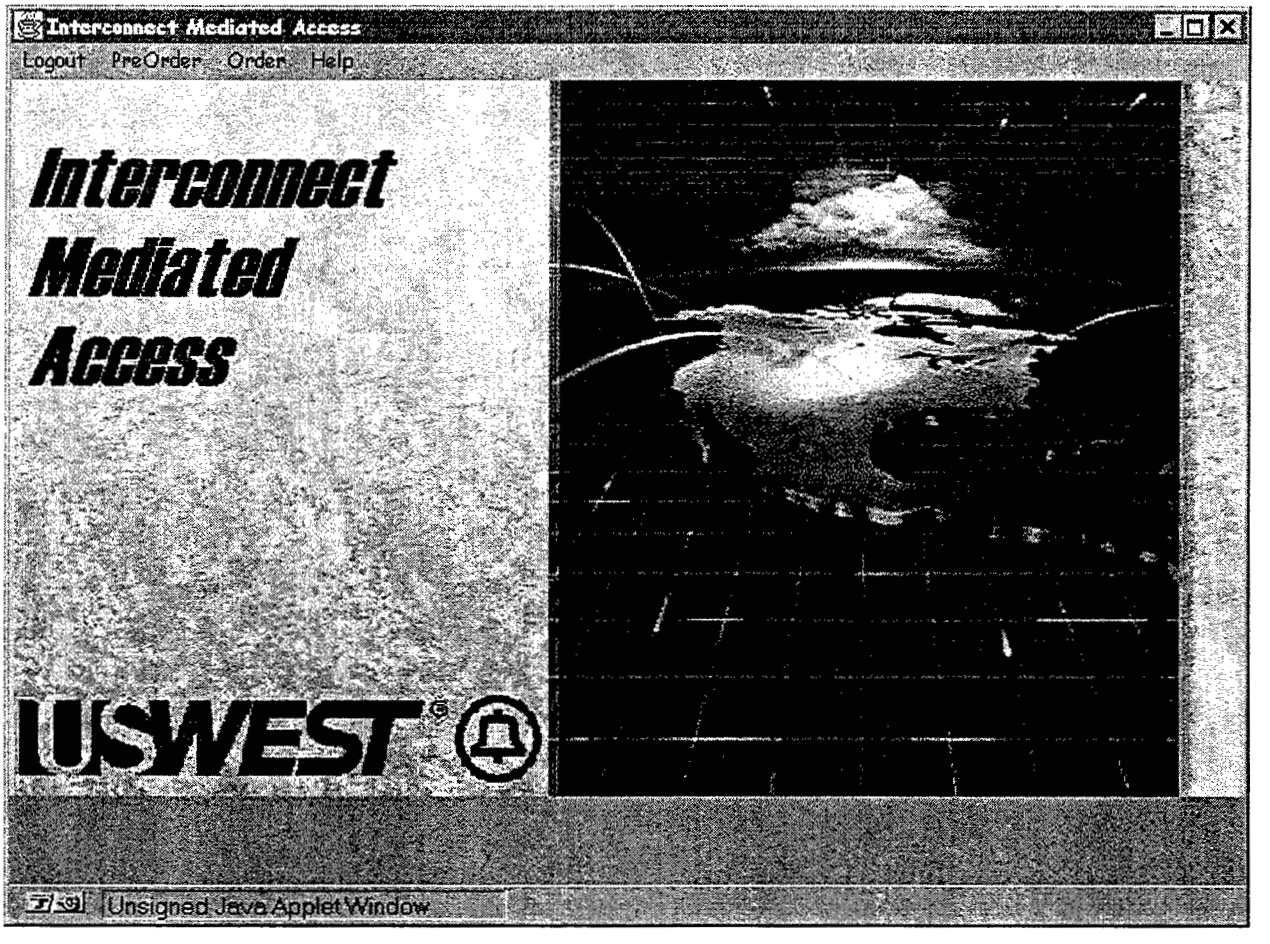
Sample Order – Resale POTS New Connect

The Pre-Order/Order function is selected on the main menu.



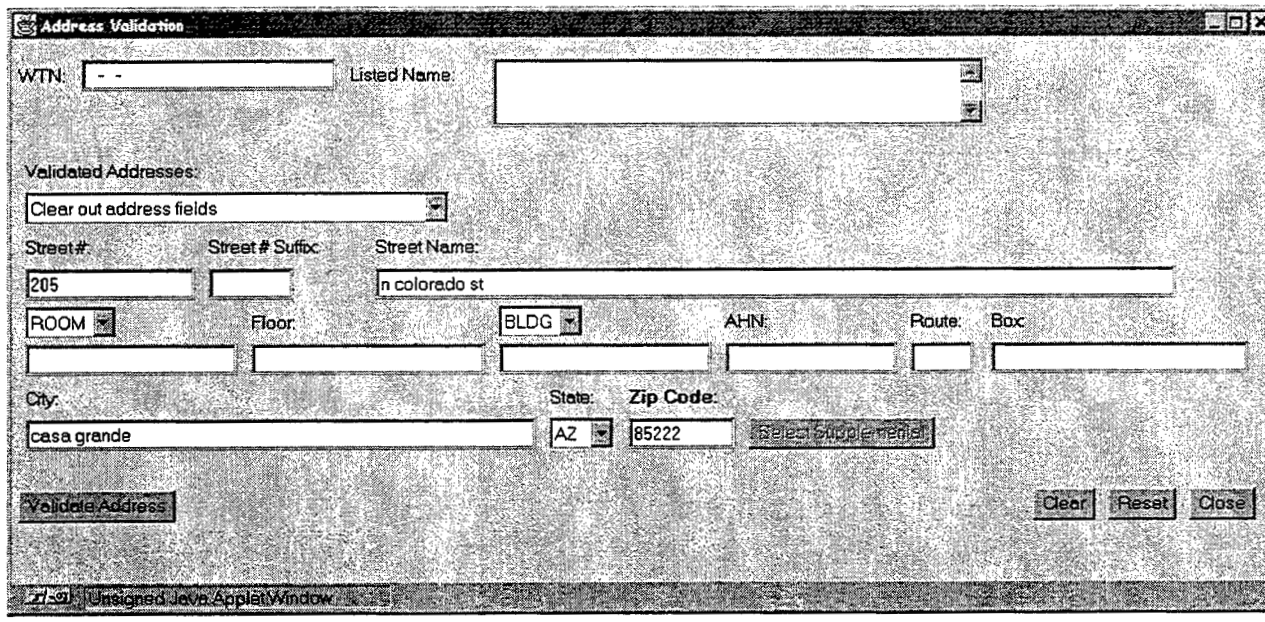
Sample Order – Resale POTS New Connect

The IMA Pre-order / Order screen is displayed:



Sample Order – Resale POTS New Connect

Address Validation Request screen. This screen is opened from the 'Pre-order' pull-down menu. For a new installation of POTS, the address validation is based on the address, not a telephone number.



Sample Order – Resale POTS New Connect

Address Validation Response screen. The address is validated.

Address Validation Response

WTN: - -

Listed Name:

Validated Addresses:
205 N COLORADO ST,CASA GRANDE,AZ,85222

Street #: 205
Street # Suffix:
Street Name: N COLORADO ST

ROOM
Floor:
BLDG
AHN:
Route:
Box:

City: CASA GRANDE
State: AZ
Zip Code: 85222
Select Supplemental

Descriptive:

Alternate Street:

Switch Info | PNA Remarks | SL Remarks

LSO: 520836
Rate Zone: 01
Site ID: CSGRAZMA
TTA: 836

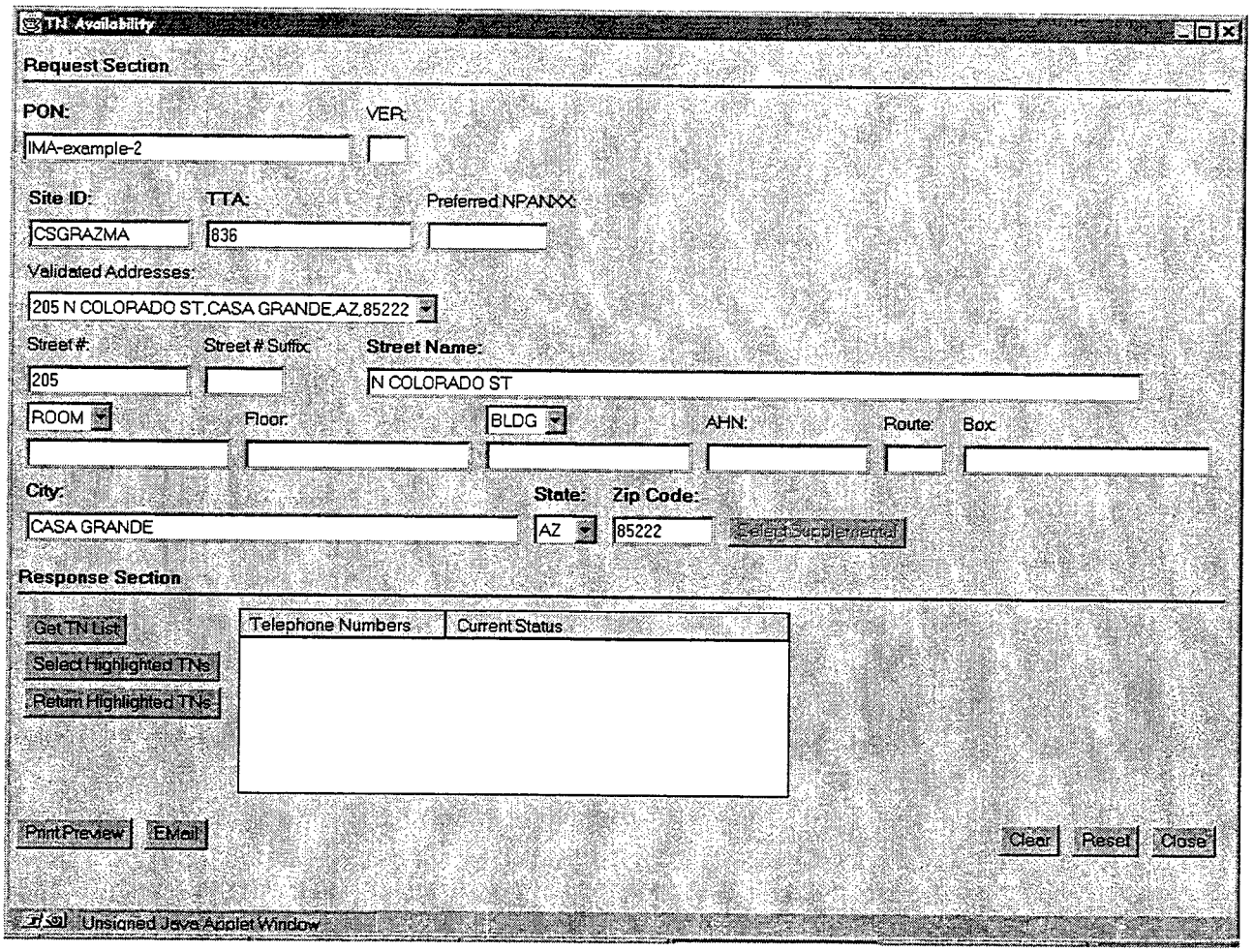
Switch Types:
D100

Print Preview | EMail | Close

Sample Order – Resale POTS New Connect

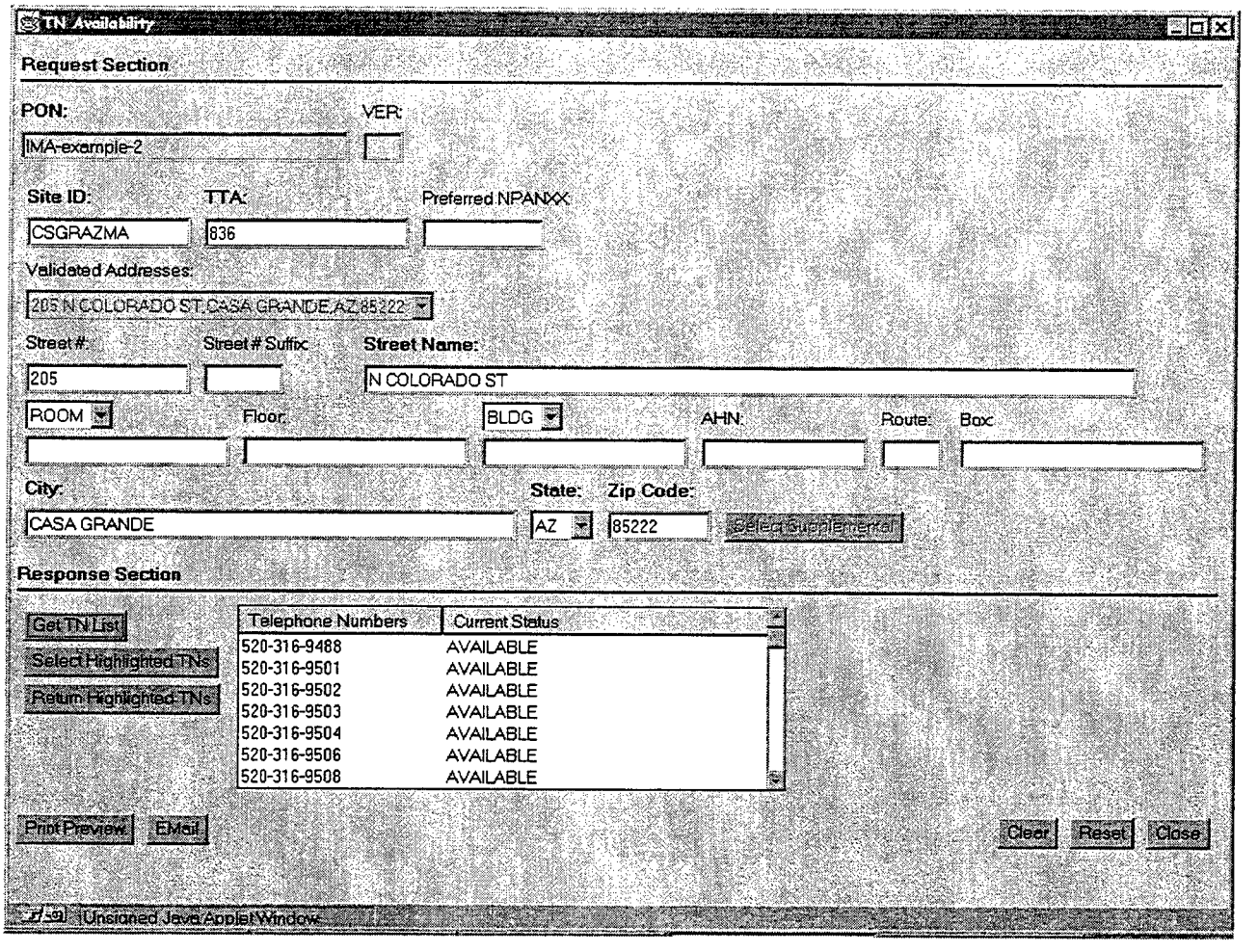
Select Telephone Number (TN) screen. This screen is opened from the 'Pre-order' pull-down menu. A TN must be selected from the list of available TNs. This will become the end user's new telephone number.

TN Request Screen:



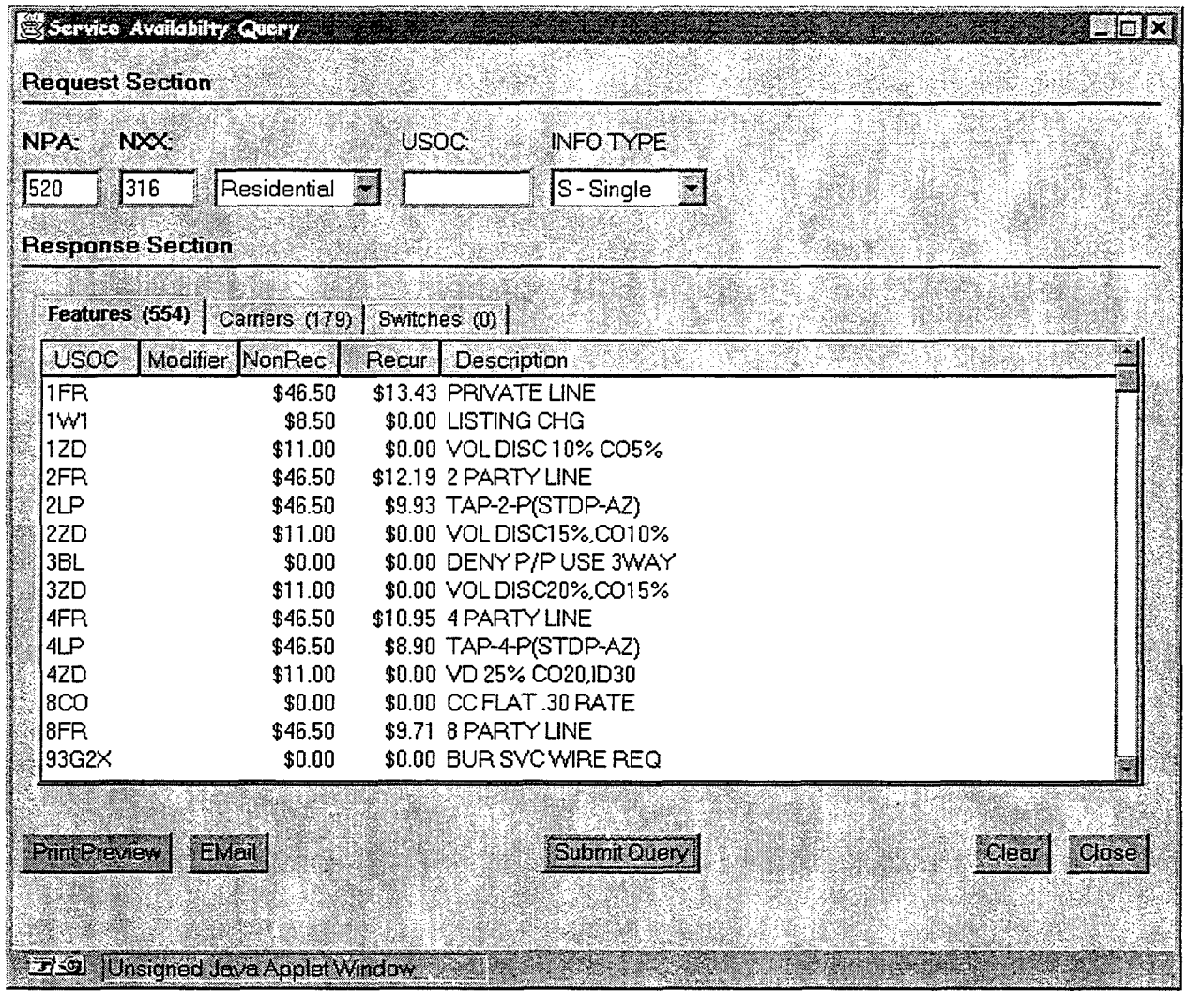
Sample Order – Resale POTS New Connect

TN Response screen. A list of available telephone numbers is returned, and a telephone number is selected.



Sample Order – Resale POTS New Connect

Service Availability Query and Response screen. This screen is opened from the 'Pre-order' pull-down menu. The Service Availability Query informs the co-provider of which USOCs and which Carriers are available at the location selected.



USOC	Modifier	NonRec	Recur	Description
1FR		$46.50	$13.43	PRIVATE LINE
1W1		$8.50	$0.00	LISTING CHG
1ZD		$11.00	$0.00	VOL DISC 10% CO5%
2FR		$46.50	$12.19	2 PARTY LINE
2LP		$46.50	$9.93	TAP-2-P(STDP-AZ)
2ZD		$11.00	$0.00	VOL DISC15%,CO10%
3BL		$0.00	$0.00	DENY P/P USE 3WAY
3ZD		$11.00	$0.00	VOL DISC20%,CO15%
4FR		$46.50	$10.95	4 PARTY LINE
4LP		$46.50	$8.90	TAP-4-P(STDP-AZ)
4ZD		$11.00	$0.00	VD 25% CO20,ID30
8CO		$0.00	$0.00	CC FLAT .30 RATE
8FR		$46.50	$9.71	8 PARTY LINE
93G2X		$0.00	$0.00	BUR SVC WIRE REQ

Sample Order – Resale POTS New Connect

Service Availability Response screen: Carrier Listing tab.

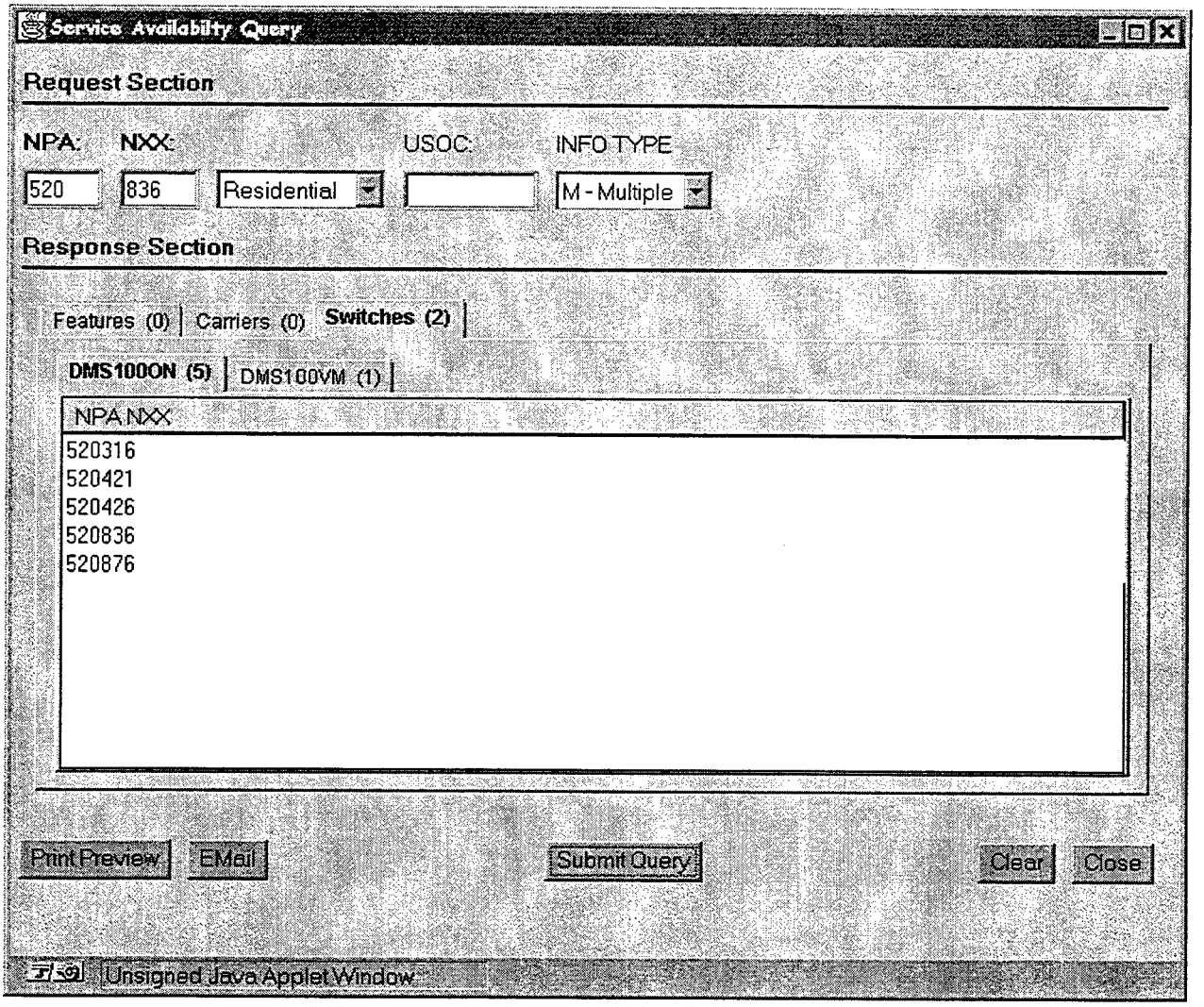
Response Section

Features (554) **Carriers (179)** | Switches (0) |

Carrier ID	Service Offering	Carrier Name
0009	Inter & Intra	EQUALNET CORPORATION
0026	Inter & Intra	TELSAVER OF NEW MEXICO
0048	Inter & Intra	ETSC
0056	Inter & Intra	QWEST COMMCTNS CORP
0063	Inter & Intra	COAST INTL TELECOM
0070	Inter & Intra	# U S LONG DISTANCE
0071	Inter & Intra	ECLIPSE TELECOMM-IXC-LD
0085	Inter & Intra	WESTEL INC
0088	Intra	MCI TELECOMMUNICATIONS
0096	Inter & Intra	CITIZENS TELECOM LD
0192	Inter & Intra	AMERINET INTRTNL INC
0200	Inter & Intra	U S WATS, INC. REQ ONLY
0210	Inter & Intra	NOS COMMUNICATIONS
0211	Inter & Intra	# FRONTIER

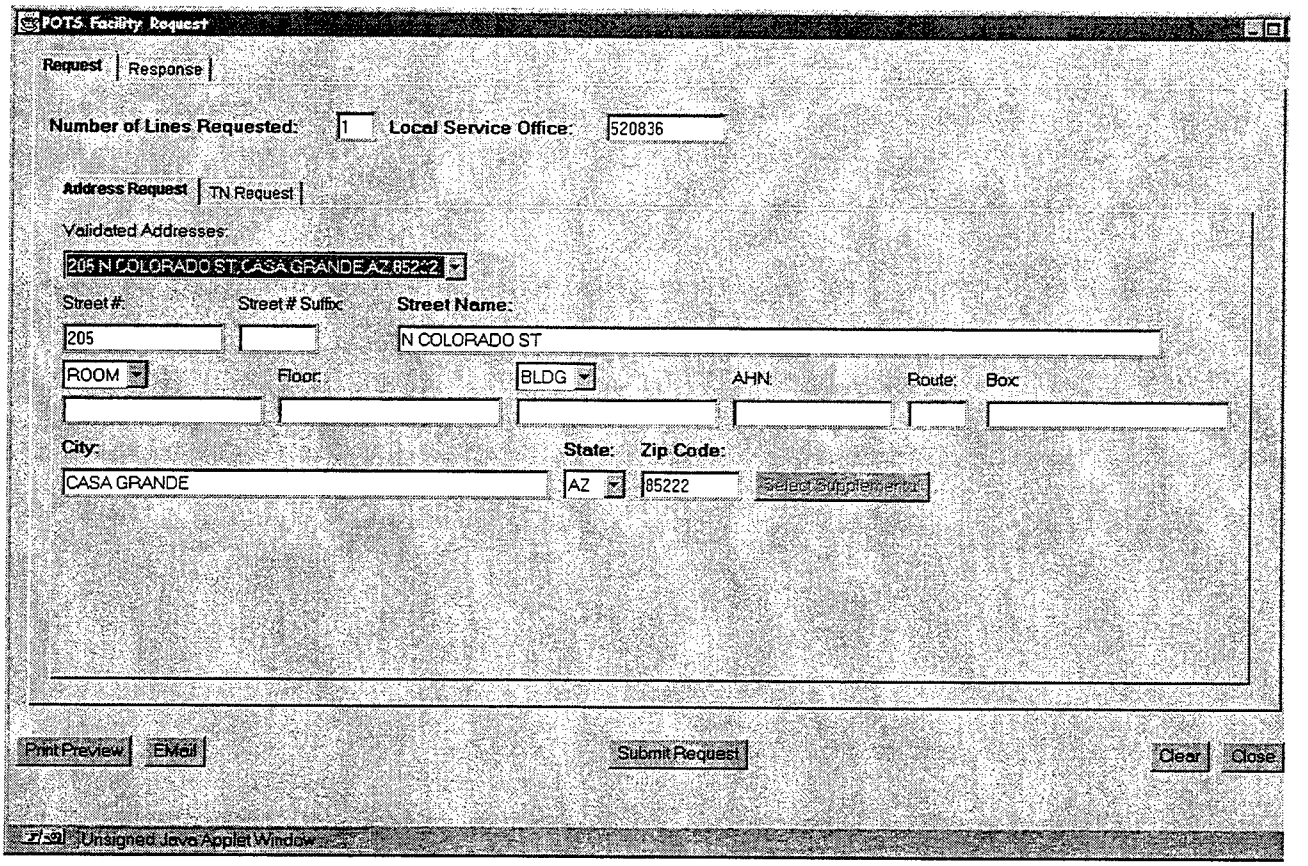
Sample Order – Resale POTS New Connect

Service Availability Response screen. Also, if 'Multiple' is selected as the 'Info Type', the Service Availability query displays information regarding the switches at the Local Serving Office (LSO).



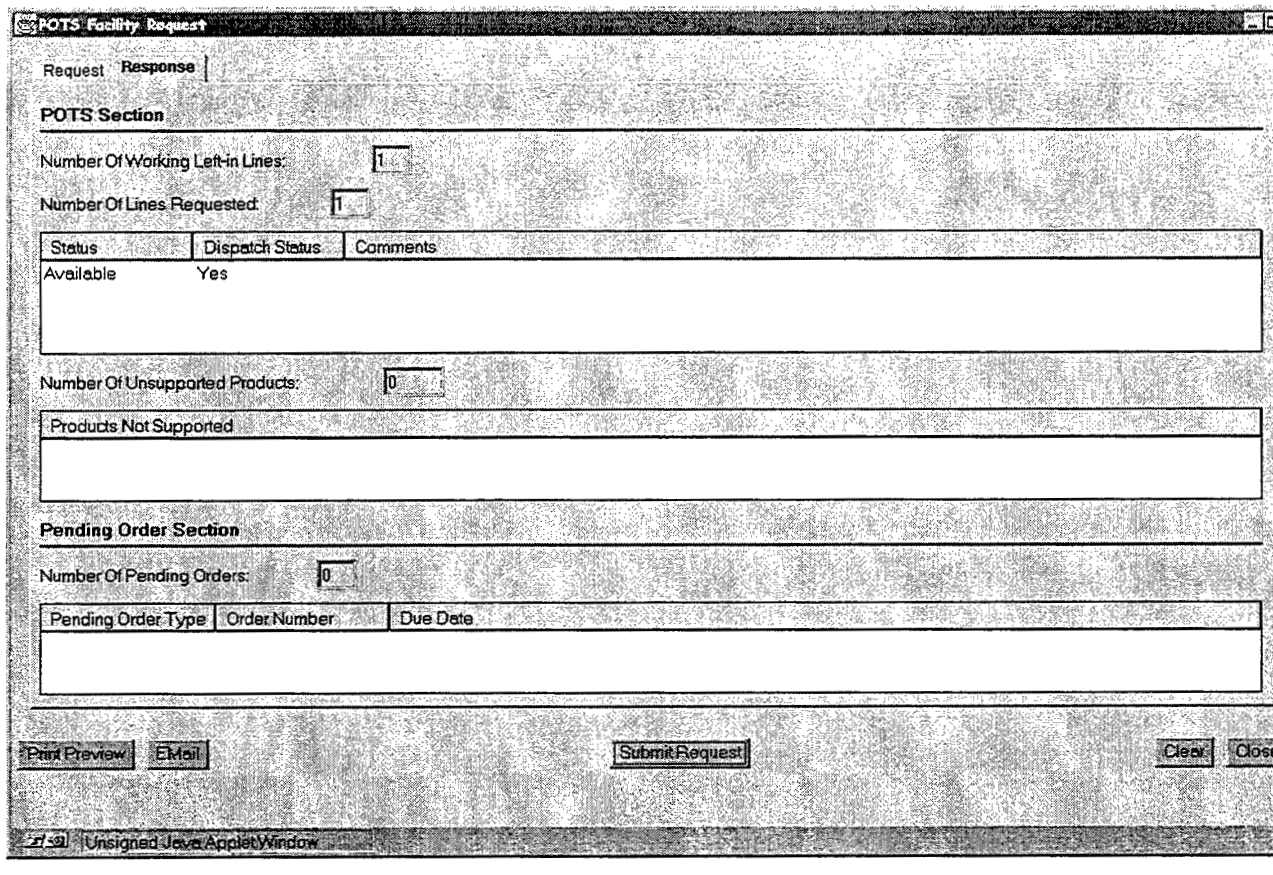
Sample Order – Resale POTS New Connect

Facility Availability Query screen. This screen is opened from the 'Pre-order' pull-down menu. The POTS Facility Availability query provides information regarding whether POTS facilities are currently available at the end-user address.



Sample Order – Resale POTS New Connect

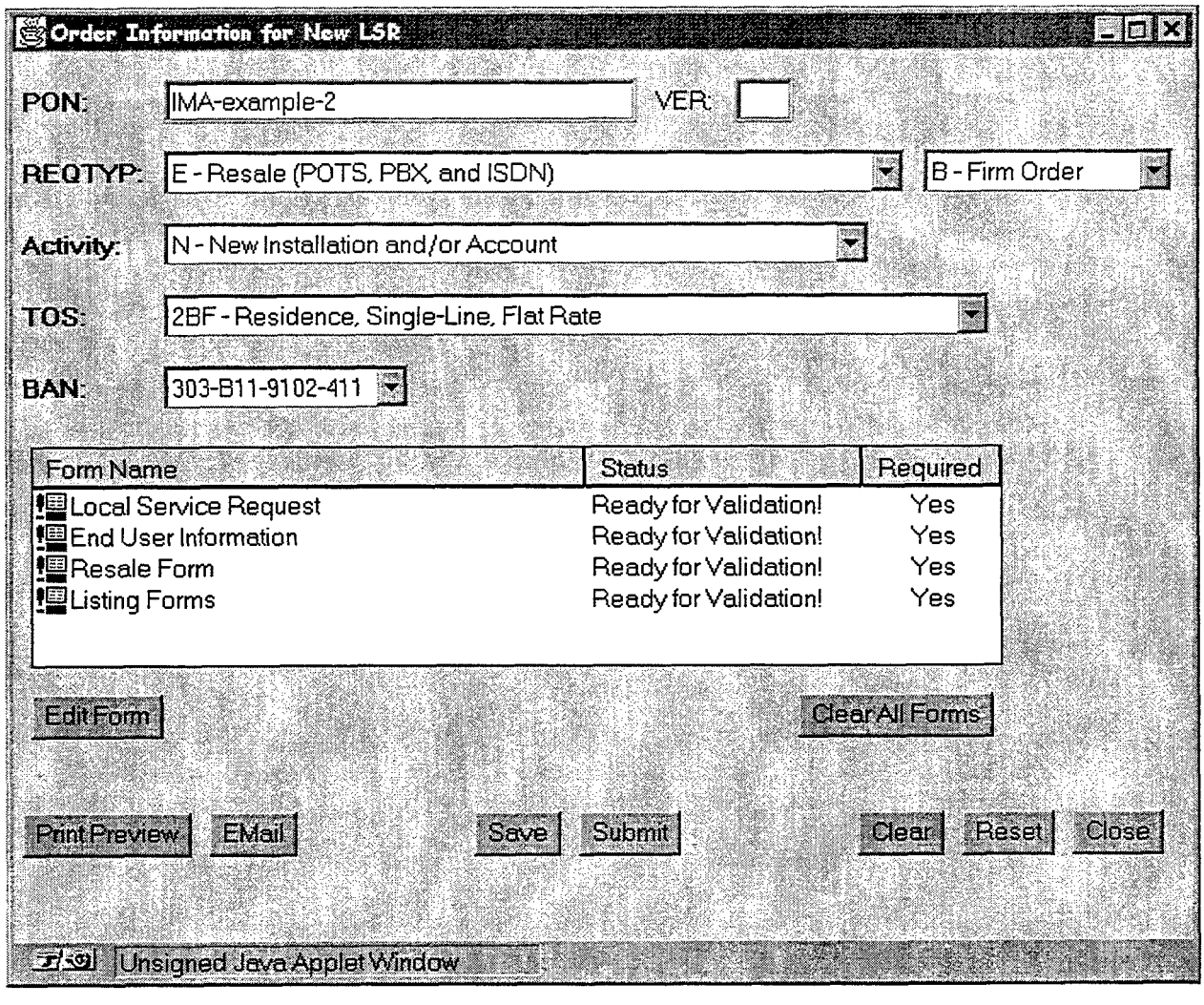
Facility Availability Response screen.



Sample Order – Resale POTS New Connect

Order Information for Local Service Request (LSR) screen. The CLEC representative selects 'New LSR' from the 'Order' pull-down menu. The initial order screen is displayed.

After selecting the appropriate field items, the required LSR forms are listed on the screen. The required forms are filled out one at a time by selecting the form name, and clicking on the 'Edit Form' button.



Sample Order – Resale POTS New Connect

LSR Form screen. Contains general information for the order.

Local Service Request

Administrative Section

CCNA: M02 | PON: IMA-example-2 | VER: | LSR NO: | SC: USWD | PORTTYP: | PG_OF:

D/T SENT: 199901271607 | DDD: 1999/02/03 | DDDO: / / | APPTIME: | DFDT: | PROJECT: | CHC: | REQTYP: EB

ACT: N | SUP: | EXP: | AFO: | RTR: C-Confirmation | CC: | AENG: | ALBR: | SCA:

AGAUTH: Y-Yes | DATED: 1998/12/12 | AUTHNM: Diane Vogel | ACTL: | AI:

APOT: | LST: | LSO: | TOS: 2BF | SPEC: | IBT: | NC: | NCI: | SECNCI:

RPON: | RORD:

LSP AUTH: | LSP AUTH DATE: / / | LSP AUTH NAME: | CIC:

CUST:

Bill Section

BIL: | BAN1: 303-B11-9102-411 | BAPC: 01B | BI2: | BAN2: - - - | ACNA: | EBD: / /

BILLNM: MCimetro | SBILLNM: | TE: G | EBP:

STREET: 1234 Bellview | FLOOR: | ROOM: | CITY: Englewood | STATE: CO

ZIP CODE: 80134 | BILLCON: | TEL NO: - - - | VTA:

Contact Section

INIT: Wendy Teepe | TEL NO: 303-896-4102- | EMAIL: wteepe@uswest.com

FAX NO: 303-965-1908 | STREET: 1005 17th

FLOOR: 16 | ROOM/MAIL STOP: 1690 | CITY: Denver | STATE: CO | ZIP CODE: 80202

IMPCON: | TEL NO: - - - | PAGER:

ALT IMPCON: | TEL NO: - - - | PAGER:

DSGCON: | DRC: | TEL NO: - - - | FAX NO: - -

EMAIL: | STREET:

FLOOR: | ROOM/MAIL STOP: | CITY: | STATE: | ZIP CODE:

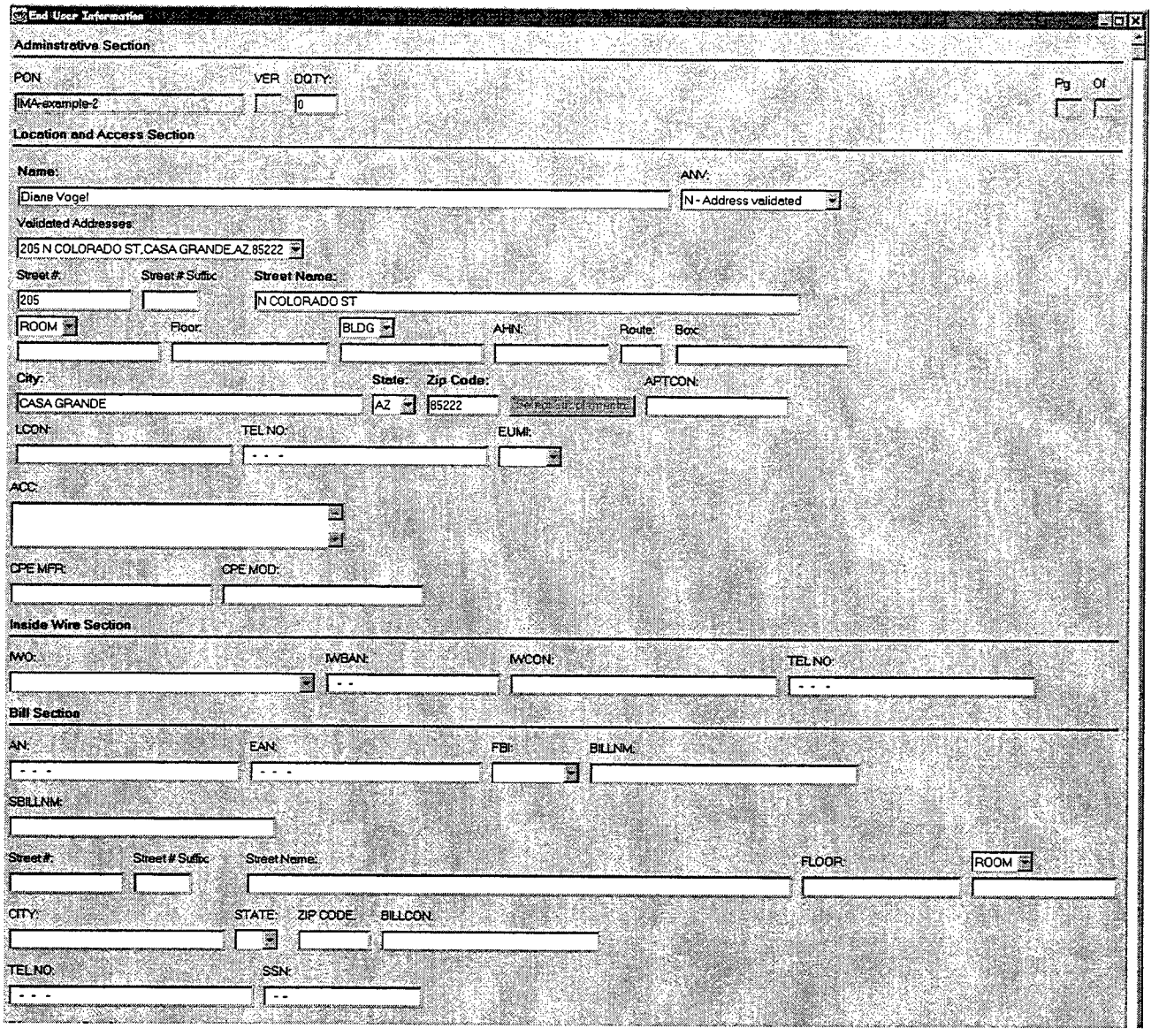
Remarks Section

REMARKS:

OK | Print Preview | EMail | OK | Print Preview | EMail | Clear | Reset | Cancel

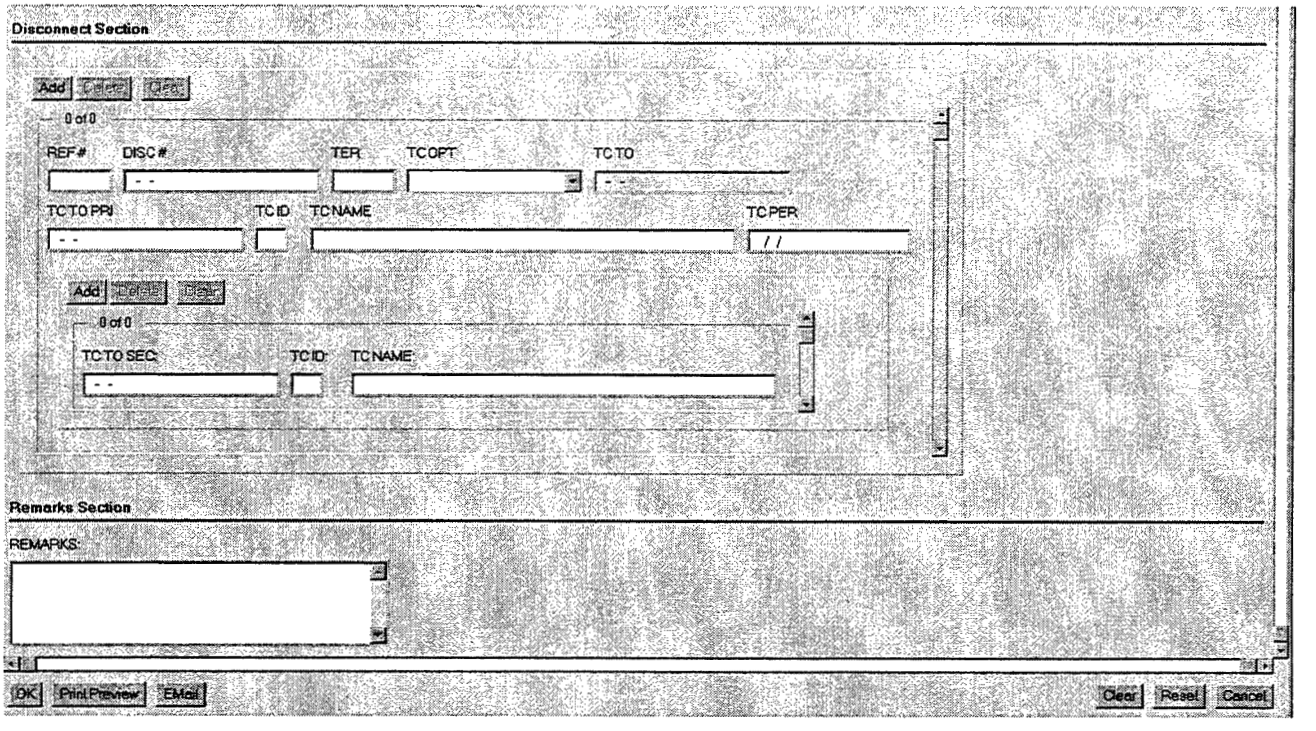
Sample Order – Resale POTS New Connect

End User Information (EUI) form screen. Contains information about the end user.



Sample Order – Resale POTS New Connect

EUI Form screen (continued).



Sample Order – Resale POTS New Connect

Resale Form screen. Contains service details for the order.

Resale Form

Adminstrative Section

PON: IMA-example-2 | VER: | RSOTY: 1 | ORD: | Pg: | Of:

Hunting Section

Add | Delete | Clear

0 of 0

REF NUM: | HA: | HID: | TLI: - - | HNTYP:

HUNT SEQ:

Service Details Section

Add | Delete | Clear

1 of 1

REF NUM: 0001 | LNA: N - New | TN List | TN: 520-316-9501 | TER: | OTN: - - | ISPID: 11-11

TSP: - | SAN: | PTKTYP: | PTKCON: | PTLI:

CKP: | MATN: | SDI:

ECCKT: | FPI: | PIC: 123 | LPIC: | TC OPT:

TC TO: - - | TC TO PR: - - | TC ID: | TC NAME: | TC PER: / /

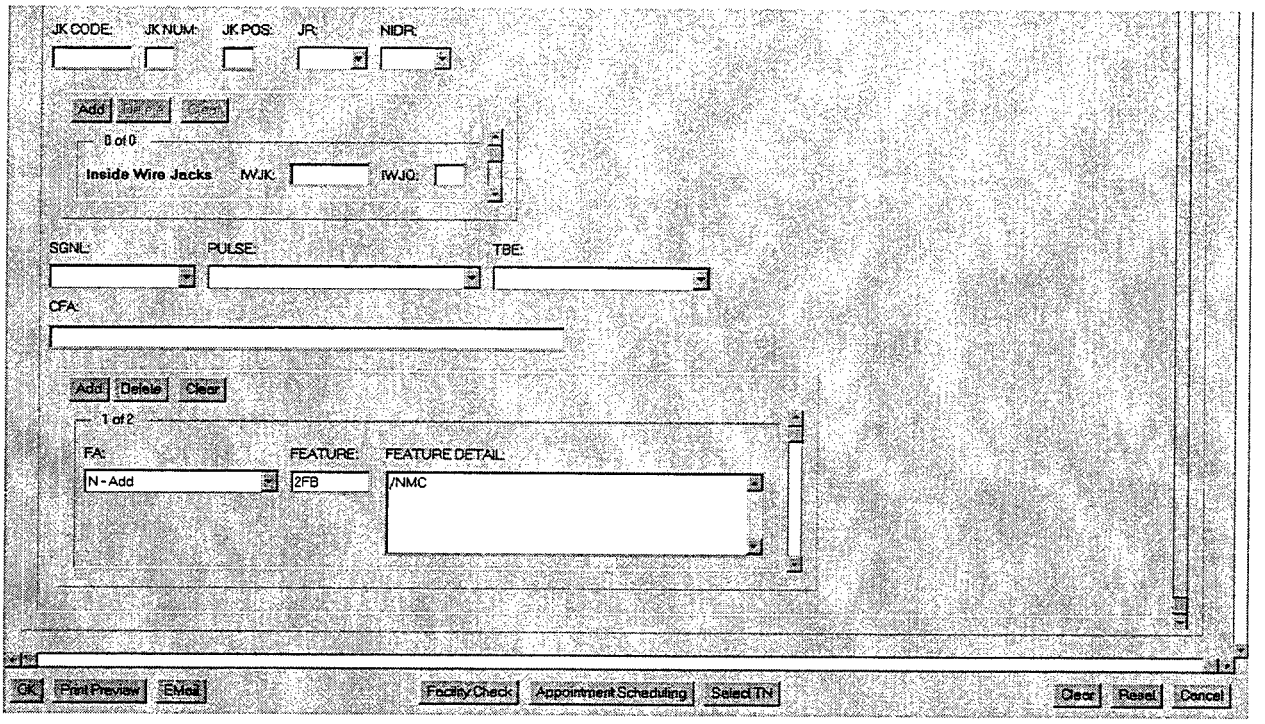
Add | Delete | Clear

0 of 0

TC TO SEQ: - - | TC ID: | TC NAME:

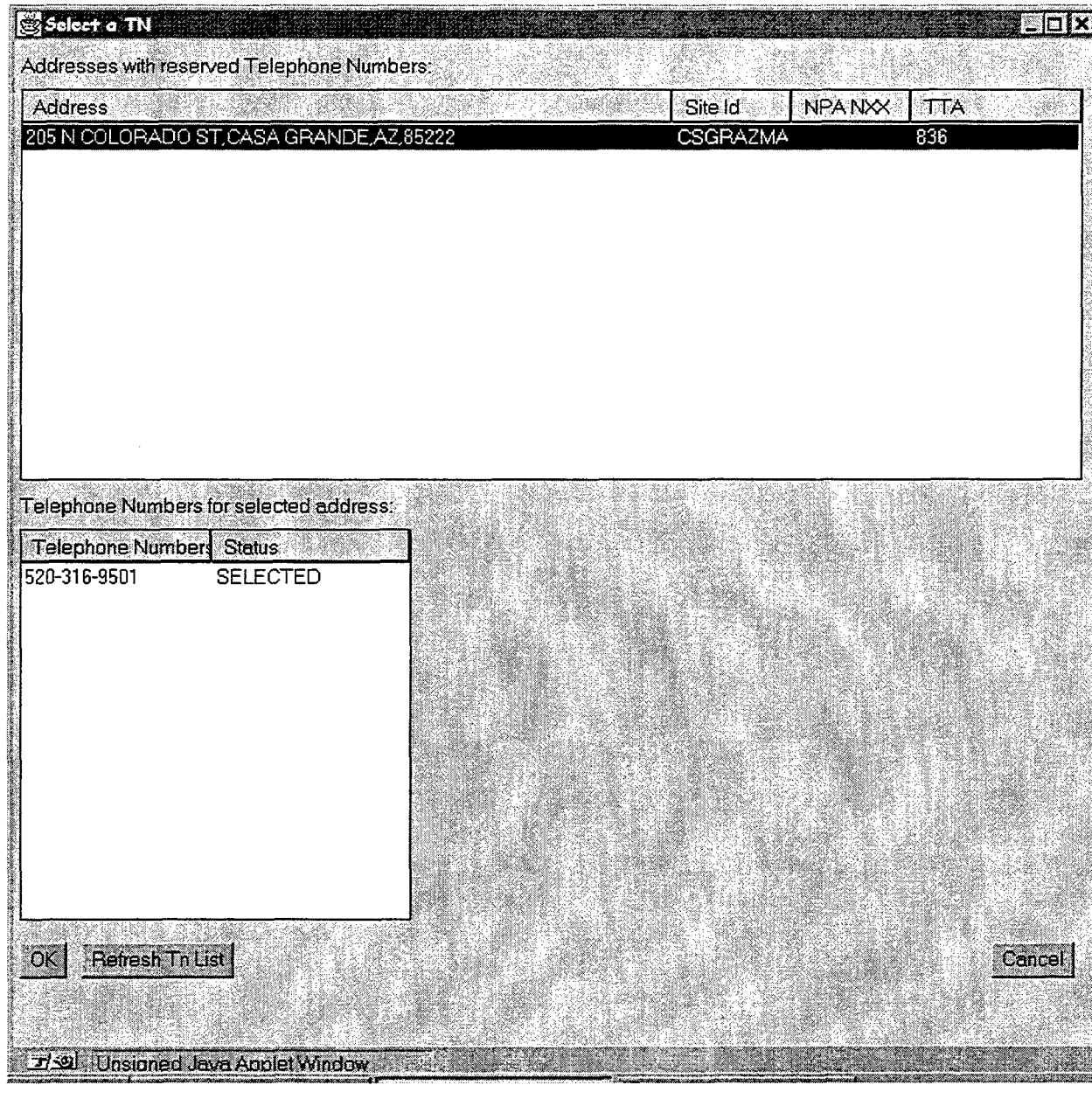
Sample Order – Resale POTS New Connect

Resale Form screen (continued).



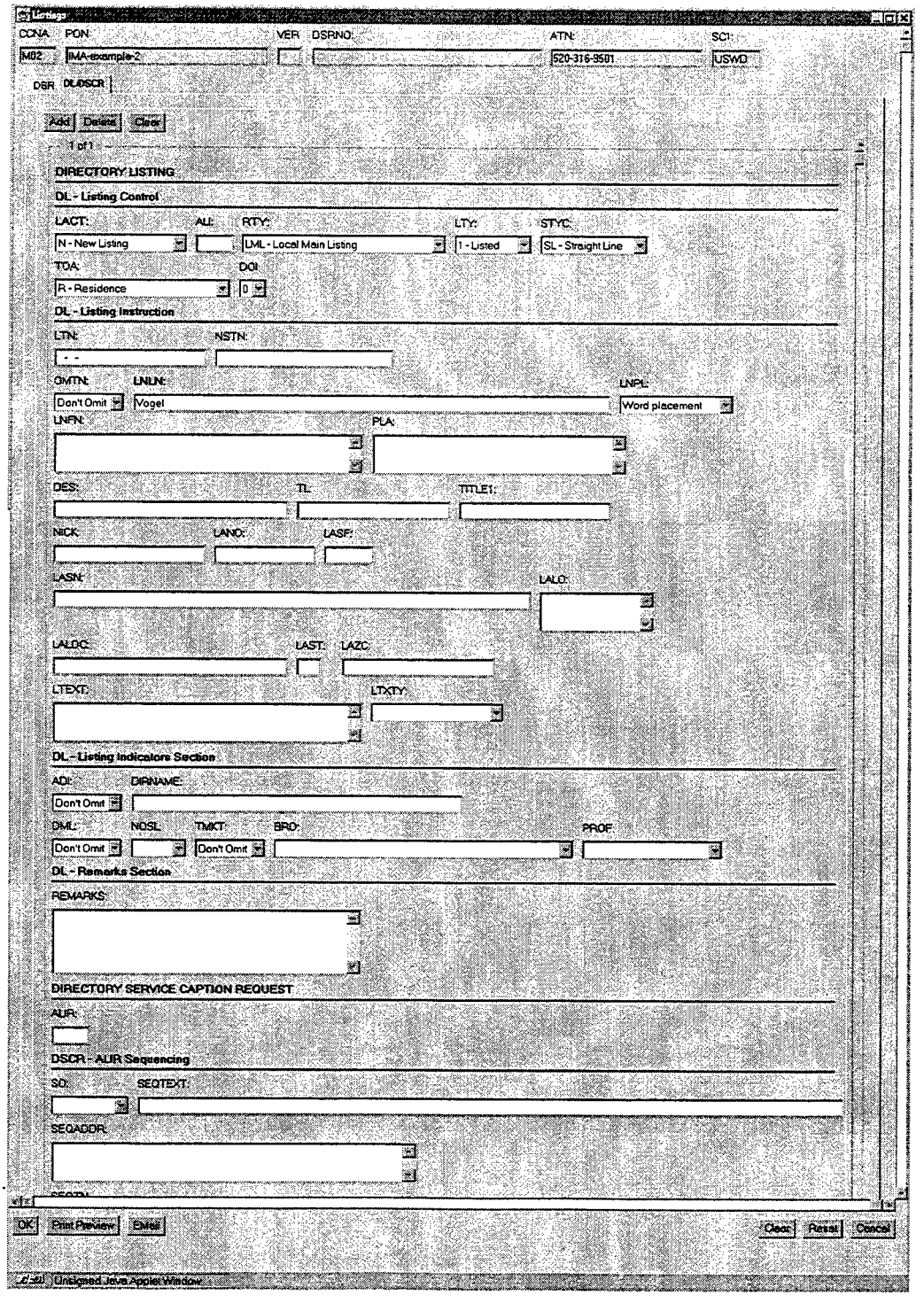
Sample Order – Resale POTS New Connect

TN List Screen screen. The CLEC accesses this screen using the 'TN List' button on the 'resale' form. The screen displays a list of all TN numbers reserved in pre-order and allows the user to select one to use on the order.



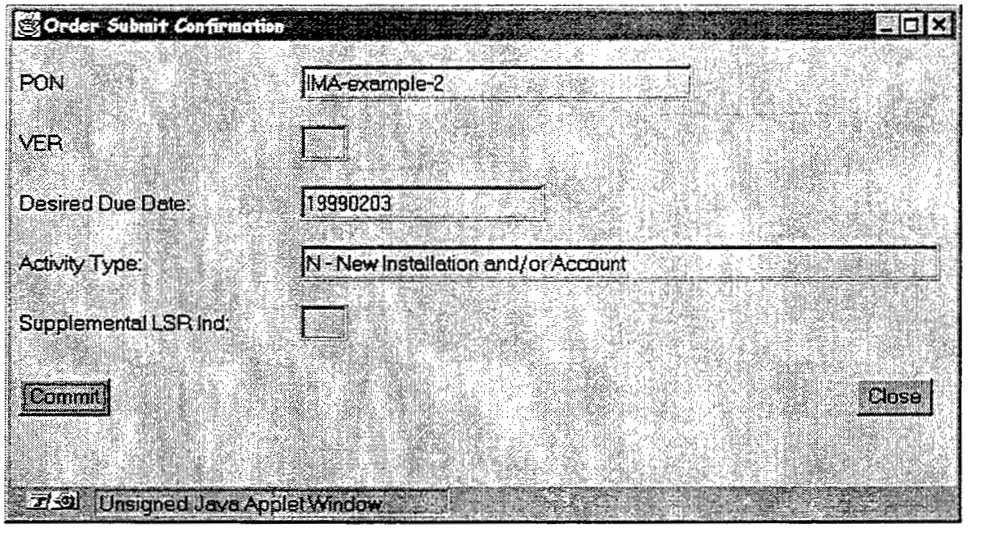
Sample Order – Resale POTS New Connect

Directory Listing Form screen. Contains information about the requested directory listing.

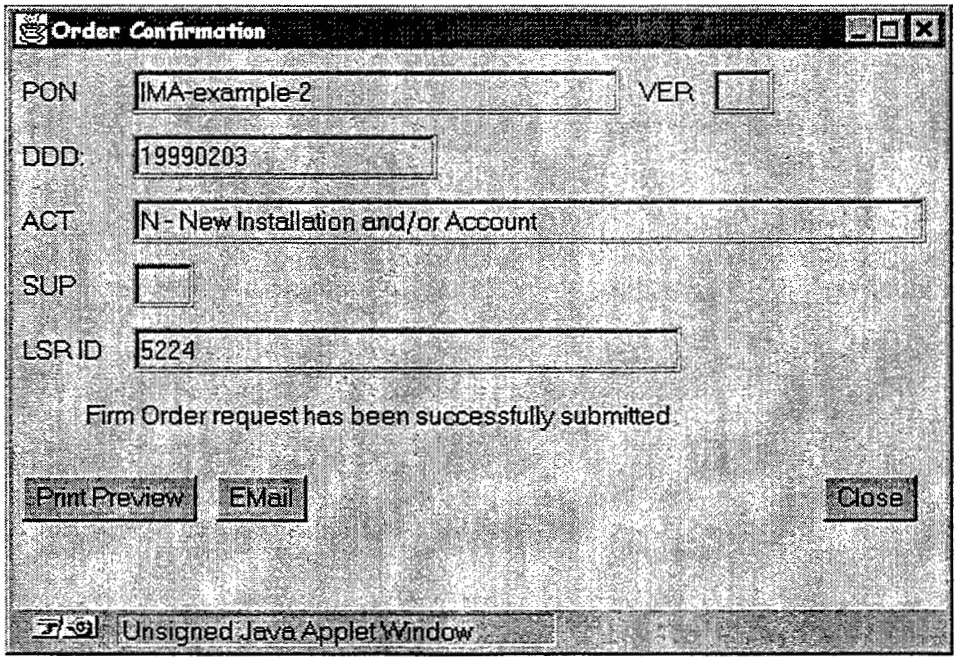


Sample Order – Resale POTS New Connect

Order Submit Confirmation screen. After the required forms are filled out, the CLEC representative presses the 'Submit' button on the Order Information for (LSR) screen. The Order Submit Confirmation screen allows the CLEC user to confirm that they want to submit the order to U S WEST.



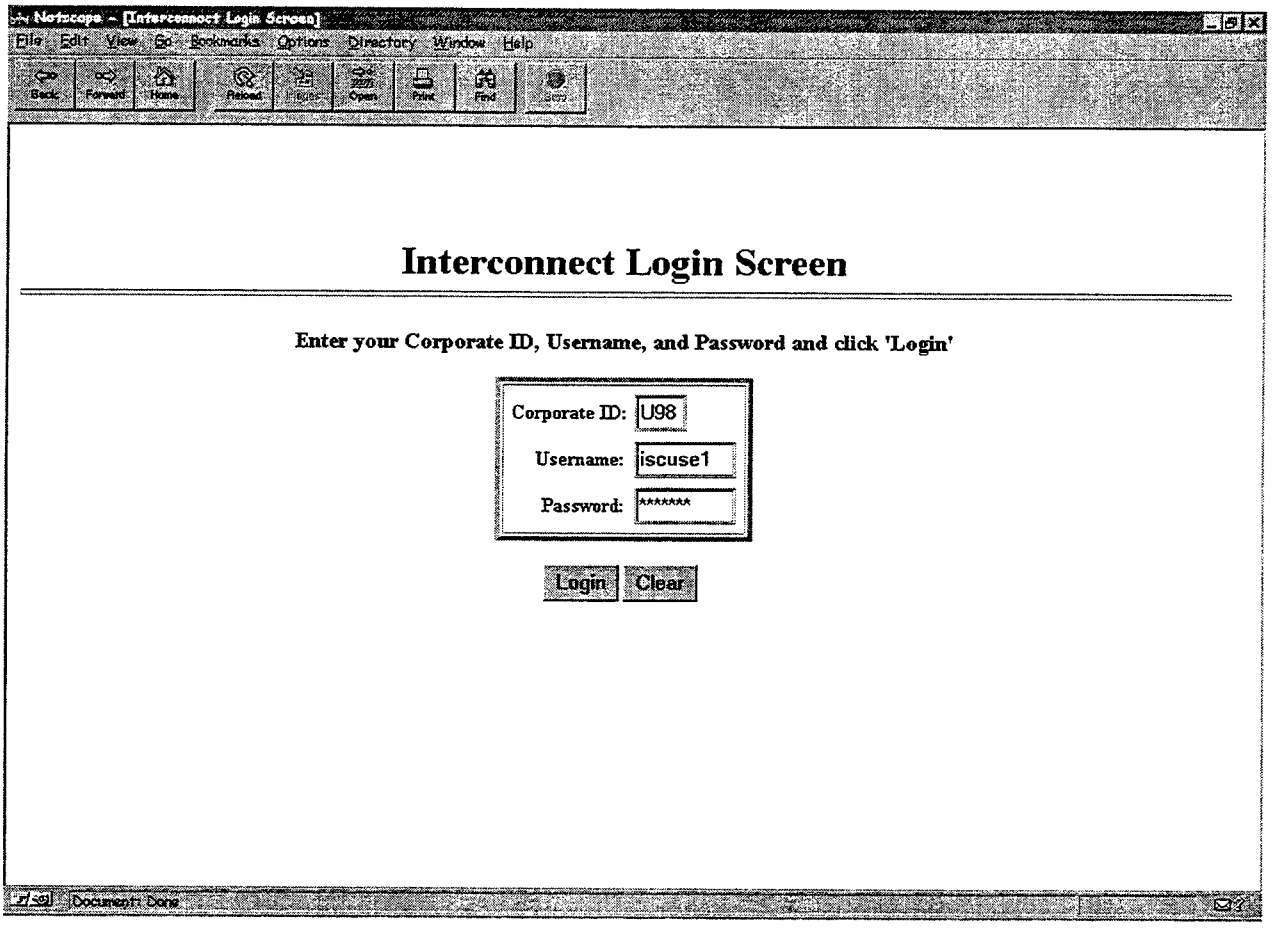
Order Confirmation screen. This screen confirms the submission of the order.



Sample Order – Resale POTS New Connect

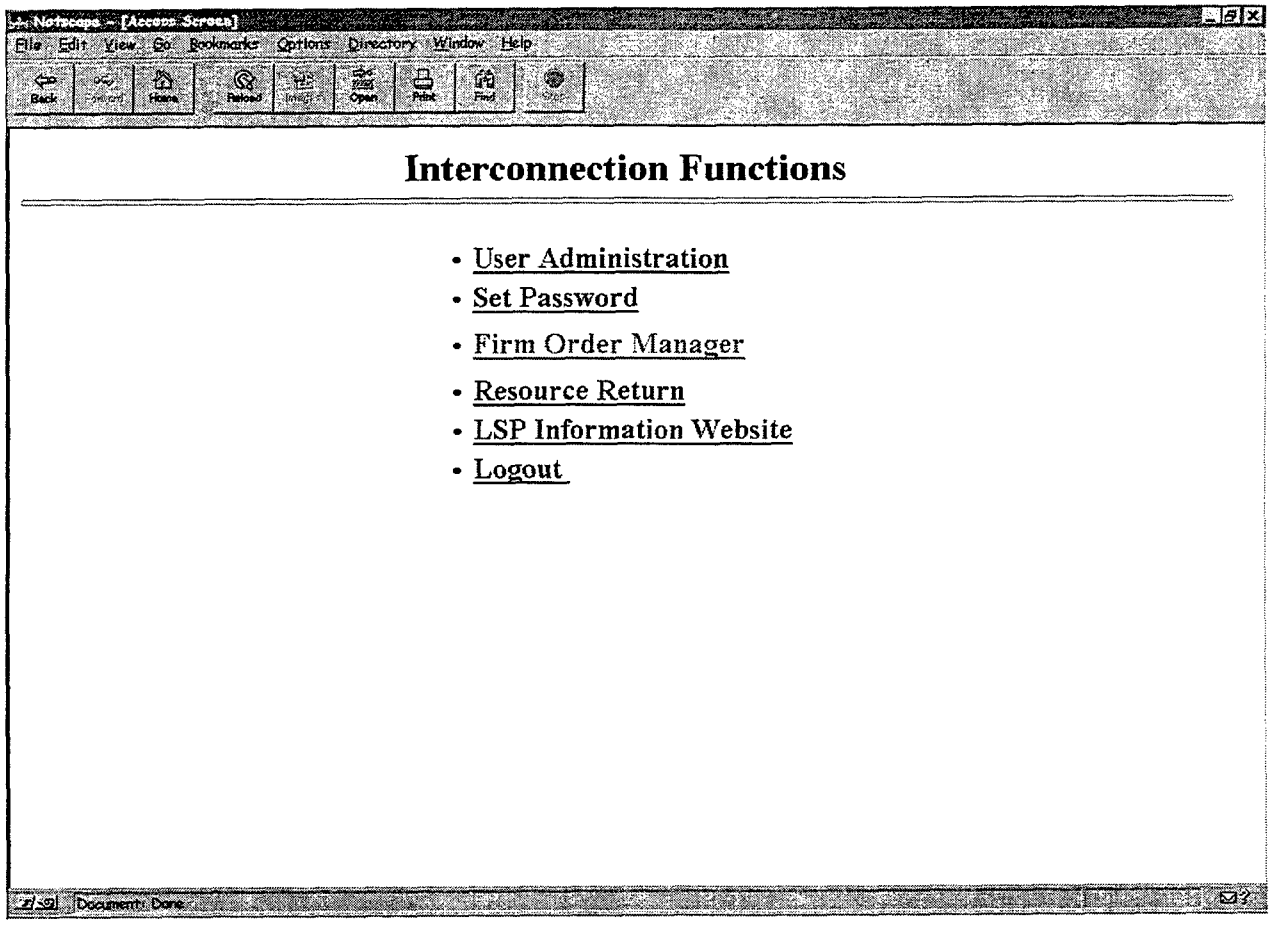
Step 2: A U S WEST representative in the Interconnect Service Center (ISC) accesses the CLEC LSR in the IMA Firm Order Manager (FOM) and creates a service order in the U S WEST OSS systems.

IMA Entry Screen.



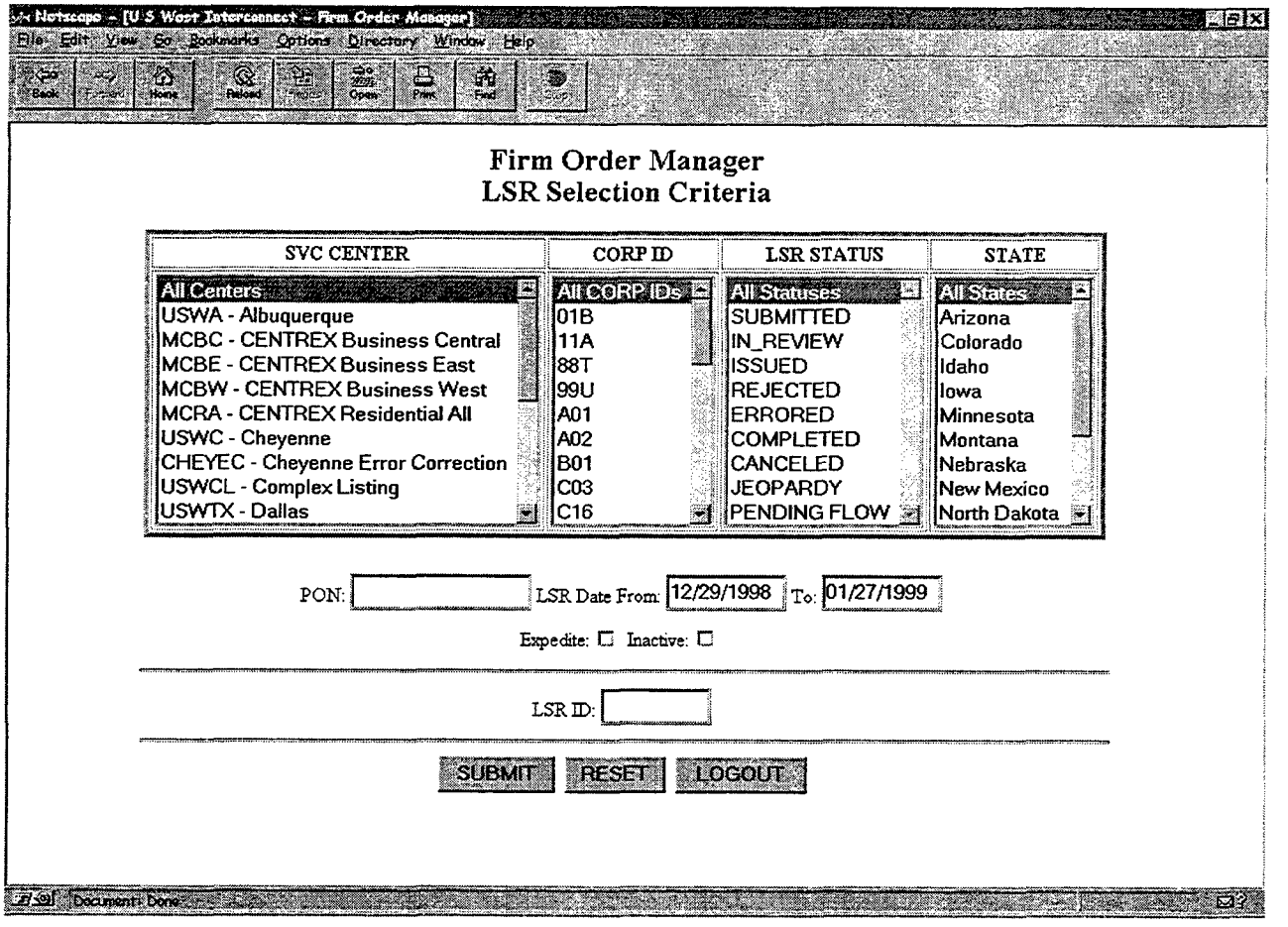
Sample Order – Resale POTS New Connect

ISC IMA main menu:



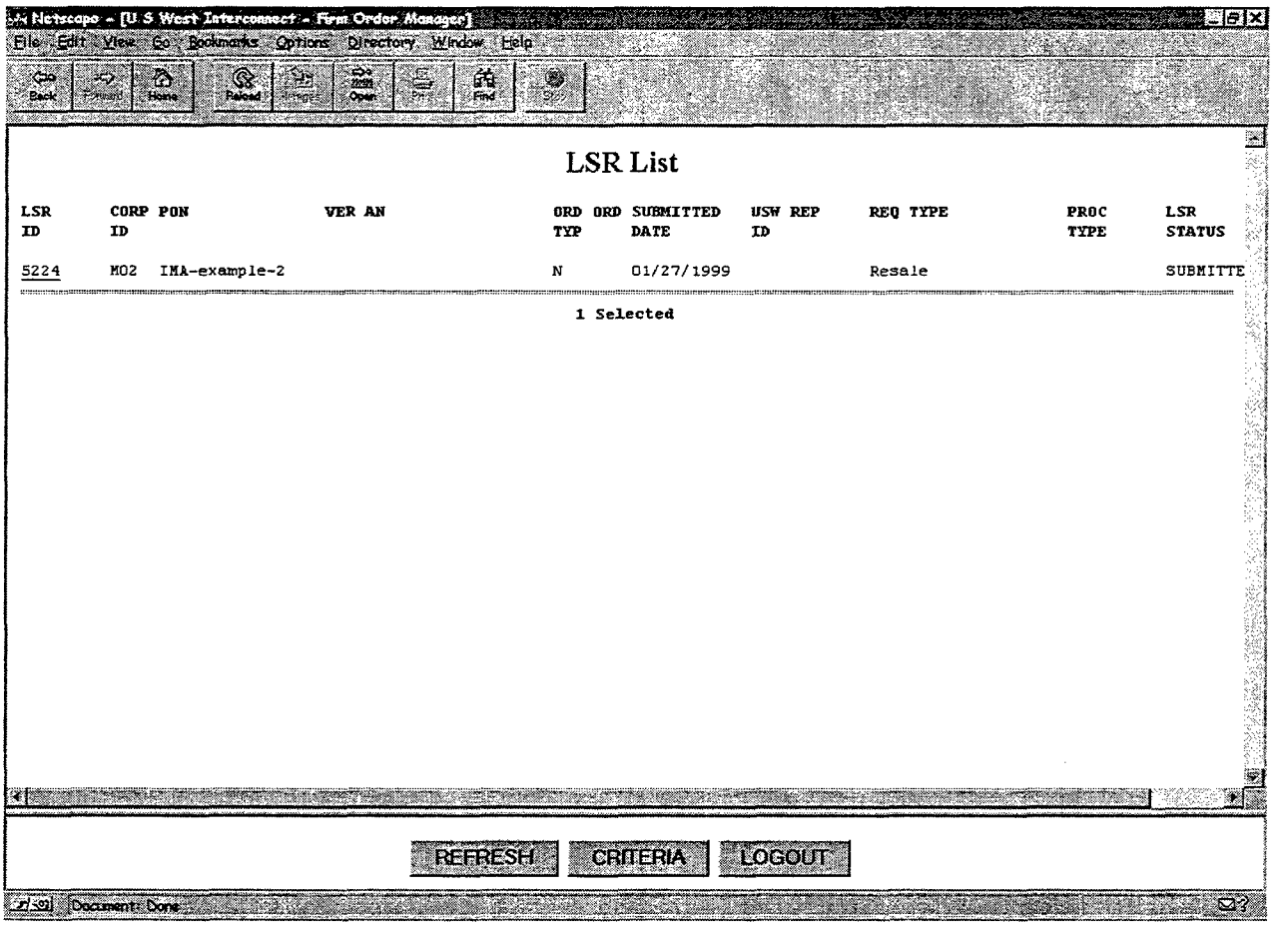
Sample Order – Resale POTS New Connect

LSR Selection Screen. Allows an ISC representative to query for a set of LSRs.



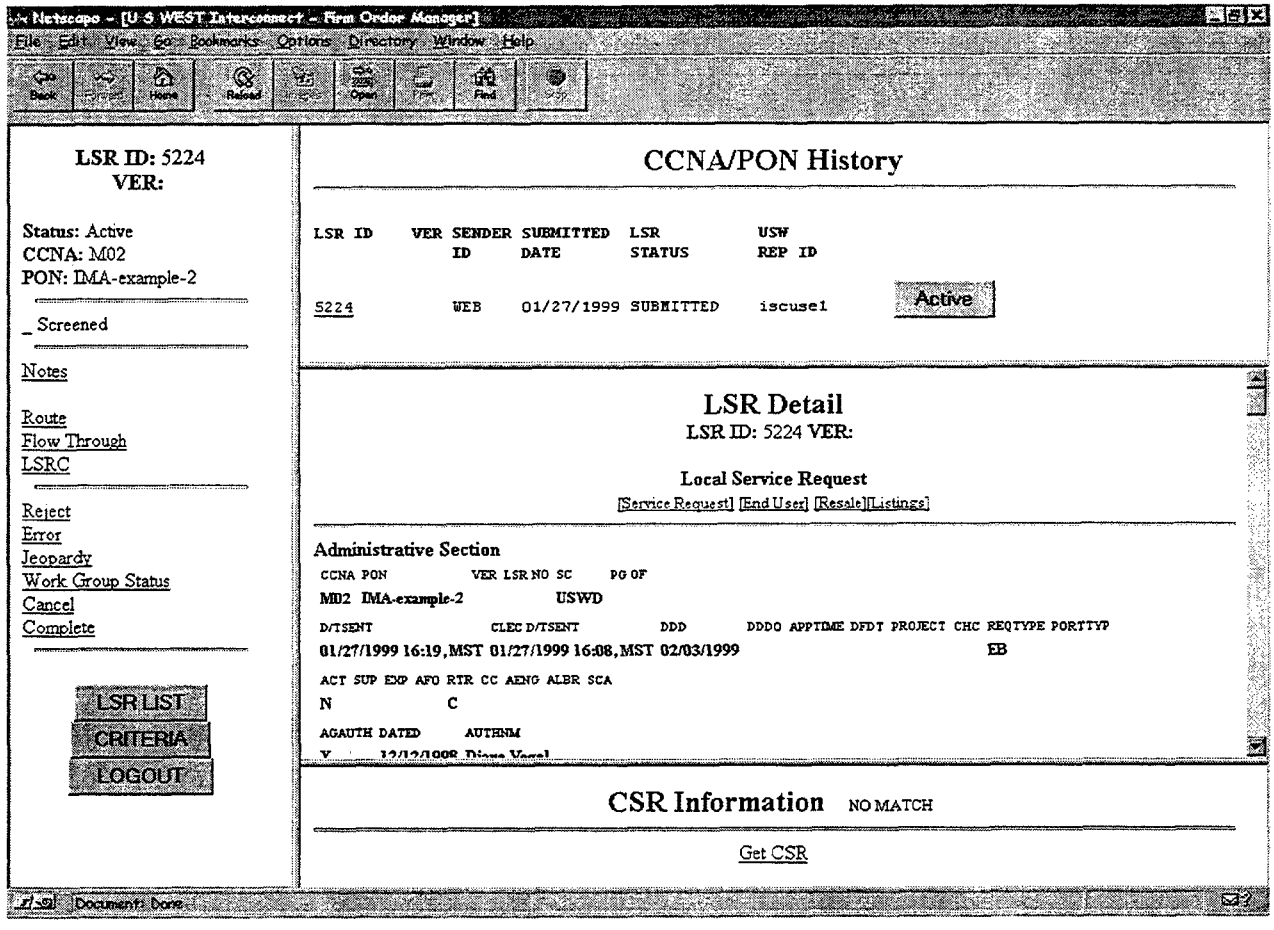
Sample Order – Resale POTS New Connect

LSR List Screen. Displays the list generated based on the criteria entered on the LSR Selection Screen. The representative can view an LSR by clicking on the LSR ID number.



Sample Order – Resale POTS New Connect

LSR View screen. This screen provides a view of the submitted LSR and additional information. The LSR detail shows LSR information as entered into IMA. The left-hand column displays links to other FOM screens. The CCNA/PON history shows a history of the LSR. The CSR information frame allows the ISC representative to pull up the CSR for the account.



Sample Order – Resale POTS New Connect

LSR Detail Frame. Displays the submitted LSR.

Netscape - [U S WEST Interconnect - Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

LSR ID: 5224
VER:

Status: Active
CCNA: M02
PON: IMA-example-2

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

LSR Detail

LSR ID: 5224 VER:

Local Service Request

[Service Request] [End User] [Resale][Listings]

Administrative Section

CCNA PON VER LSR NO SC PG OF
M02 IMA-example-2 USWD

D/TSENT CLEC D/TSENT DDD DDDO APPTIME DFDT PROJECT CHC REQTYPE PORTTYP
01/27/1999 16:19, MST 01/27/1999 16:08, MST 02/03/1999 EB

ACT SUP EXP AFO RTR CC AENG ALBR SCA
N C

AGAUTH DATED AUTHNM
Y 12/12/1998 Diane Vogel

ACTL AI APOT LST LSO TOS SPEC
2BF

NC NCI SEC NCI IBT RPON RORD

LSP AUTH LSP AUTH DATE LSP AUTH NAME CIC

CUST

Bill Section

BI1 BAN1 BI2 BAN2 BAPC ACNA EBD
303-B11-9102-411 01B

BILLNM SBILLNM TE
MCImetro G

STREET FLOOR ROOM CITY STATE
1234 Bellview Englewood CO

ZIP CODE BILLCON TEL NO VTA
80134

Contact Section

INIT TEL NO EMAIL FAX NO
Wendy Teepe 303-896-4102 wteepe@uswest.com 303-965-1908

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE
1005 17th 16 1690 Denver CO 80202

IMPCON TEL NO PAGER

ALT IMPCON TEL NO PAGER

DSGCON DRC TEL NO FAX NO EMAIL

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE

Remarks Section

REMARKS

Sample Order – Resale POTS New Connect

LSR Detail Frame (continued).

LSR ID: 5224
VER:

Status: Active
CCNA: M02
PON: IMA-example-2

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

End User Information

[Service Request] [End User] [Resale][Listings]

Administrative Section

PON	VER	DQTY
IMA-example-2		0

Location and Access

NAME
Diane Vogel

ANV
N

STREET
205 N COLORADO ST

FLOOR ROOM BLDG AHN ROUTE BOX CITY STATE ZIP CODE
CASA GRANDE AZ 85222

LCON TEL NO APT CON

EUMI ACC

RATE ZONE
01

CPE Section

CPE MFR CPE MOD

Inside Wire

IWO IWBAN IWCON TEL NO

Bill Section

AN EAN FBI BILLNM

SBILLNM STREET FLOOR ROOM
205 N COLORADO ST

CITY STATE ZIP CODE
CASA GRANDE AZ 85222

BILLCON TEL NO SSN

Remarks Section

REMARKS

Sample Order – Resale POTS New Connect

LSR Detail Frame (continued).

LSR ID: 5224
VER:

Status: Active
CCNA: M02
PON: IMA-example-2

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

Resale

[Service Request] [End User] [Resale][Listings]

Administrative Section

PON	VER	RSQTY	ORD	CB
IMA-example-2	1			

Hunting Section

HREF NUM HA HN TYP HID TLI HUNT SEQ

Service Details Section

REF NUM	RNEX	LNA	TN	PIC	LPIC
1	N		520-316-9501	123	

MATN TER SDI OTN TSP SAN

CKR ECCKT FPI

IWJK IWJQ

SGNL PULSE TBE CFA SEC CFA

FA	FEATURE	FEATURE DETAIL
N	2FB	/NMC
N	9LM	

Remarks Section

REMARKS

Sample Order – Resale POTS New Connect

LSR Detail Frame (continued).

LSR ID: 5224
VER:

Status: Active
CCNA: M02
PON: IMA-example-2

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

Directory Service Request
[Service Request] [End User] [Resale][Listings]

Administrative Section

CCNA	PON	VER	DSR NO	ATN	SC1	PG OF
M02	IMA-example-2				USWD	

D/TSENT	EDD	EDDO
01/27/1999 16:19, MST	02/03/1999	

PROJECT	REQTYP	ACT	DSUP	DRTR	AGAUTH	AUTH DATE
	EB	N	C	Y		12/12/1998

AUTHNM	TOS	DRPON	DLRORD	LQTY	DDQTY
Diane Vogel	2BF			0	

Bill Section

DBAN1	DTE
303-B11-9102-411	G

DBILLNM	DSTREET	DFLOOR	DROOM
MCImetro	1234 Bellview		

DCITY	DSTATE	DZIP CODE
Englewood	CO	80134

DBILLCON DTEL NO

Contact Section

DINIT	DTEL NO	DEMAIL	DFAXNO
Wendy Teepe	303-896-4102	wteepe@uswest.com	303-965-1908

DSTREET	DFLOOR	DROOM/MAIL STOP
1005 17th	16	1690

DCITY	DSTATE	DZIP CODE
Denver	CO	80202

Advertising Section

EA

Remarks Section

REMARKS

Service Address Section

Delivery Address Section

DREF NUM DDAPR DDANO DDASF DDASD

DDASN DDATH DDASS DDALO

DDALOC DDAST DDAZC DIRANW DIRNEWW

Sample Order – Resale POTS New Connect

LSR Detail Frame (continued).

LSR ID: 5224
VER:

Status: Active
CCNA: M02
PON: IMA-example-2

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

Directory Listings
[Service Request] [End User] [Resale][Listings]

Administrative Section

PON	VER	DSR NO	ATN	SC	PG OF
IMA-example-2				USWD	

Listing Control Section

LACT	ALI	RTY	STYC	TOA	WPP	DOI	LTY	TT
N	LML	SL	R		0	1		

Listing Instruction Section

LTN NSTN OMTN LEX

LNLN
Vogel

LNFN LNPL

PLA

DES TL TITLE1

TITLE2 NICKNAME LAPR LANO LASF LASD

LASN LATH LASS

LALO LALOC

LAST LAZC TNTL

TNTC

TNTR

CR

ITEXT

LTEXT LTXTY YPHV

YPH

Listing Indicator Section

ADI DIRIDL DIRSUB DIRNAME OMSD

LID1 LID2 ADV STR DML NOSL

TMKT DLNM BRO PROF

Remarks Section

REMARKS

LSR ID: COMPARE

Document: Done

Sample Order – Resale POTS New Connect

LSR Confirmation screen. After a service order has been entered into the U S WEST SOP, the ISC representative access the LSR Confirmation screen to add needed information to the Firm Order Confirmation (FOC) that is sent to the CLEC.

Netscape - [U S West Interconnect - Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

Firm Order Manager
LSR Confirmation
LSR ID: 5224
Request Type: Resale

Administration Section

CFLAG ☐
BAN1 303-B11-9102-411
DDD 02/03/1999

Line Information Section

AN	LINE REF NUM	TN	ECCKT	ISPID	TER	HID
520-316-9501-999	1	520-316-9501				

ORDER REF NUM	ORD	DD	APPT TIME	EBD
XX	99999999	02/03/1999		
XX				

Directory Listing Information Section

ORDER REF NUM	ORDER #	DD
XX		
XX		

MORE

REMARKS

SUBMIT LSR RESET ORDERS

Document: Done

Sample Order – Resale POTS New Connect

LSR Confirmation Review. This screen allows the ISC representative to review the LSR Confirmation before sending it to the CLEC.

Netscape - [U S West Interconnect - Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

Firm Order Manager
LSR Confirmation Review

REP NAME U S WEST Rep

REP TN 888-796-9087

EMAIL ID wteepe@uswest.com

FAX # 303-965-1908

```
LSRC Summary for LSR_ID:  5224

######## Administration Section ##############################################

  CCNA  PON----------  VER  LSR-NO  CFLAG
  M02   IMA-example-2              N

  INIT-------  CD/TSENT
  Wendy Teepe

  IBT  CN-TYP  CHC  DFDT  DDD-------
       C                  02/03/1999

  BAN1------------
  303-B11-9102-411

######## Line Information Section ############################################

  REF-NUM  TN----------  AN--------------
  1        520-316-9501  520-316-9501-999

  SAN  HID  RNEX  ECCKT


  MATN  CKR  ISPID


  SDI  CFA


  SEC-CFA  CFTN  TER


######## ORDER SECTION FOR LINE REF NUM: 1   ################################

  ORDER-REF-NUM  ORD------  DD--------  APPT-TIME  EBD
  1              N99999999  02/03/1999

######## REMARKS SECTION #####################################################

REMARKS
```

E-MAIL | FAX | E-MAIL and FAX | PREVIOUS | LSR

Document: Done

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

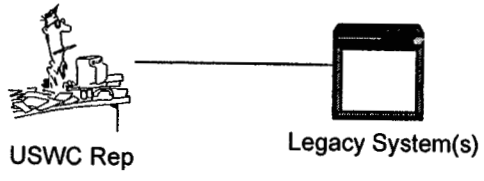
Description/Title of Information: Sample Order Resale POTS New Connect

Confidential/Proprietary Designation Rationale:

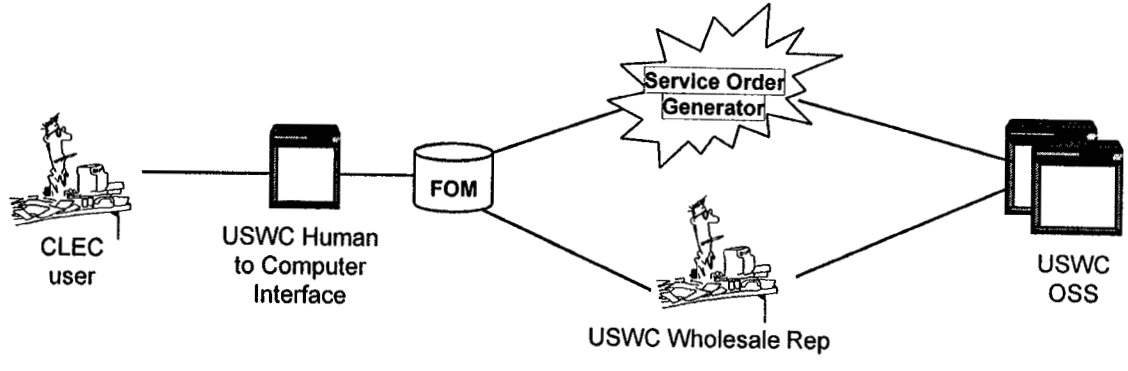
These pages are screen prints from the internal service order processor. This information is considered proprietary because it denotes how U S WEST's internal systems are accessed and this information is not disclosed outside of U S WEST.

Types of Electronic Interfaces

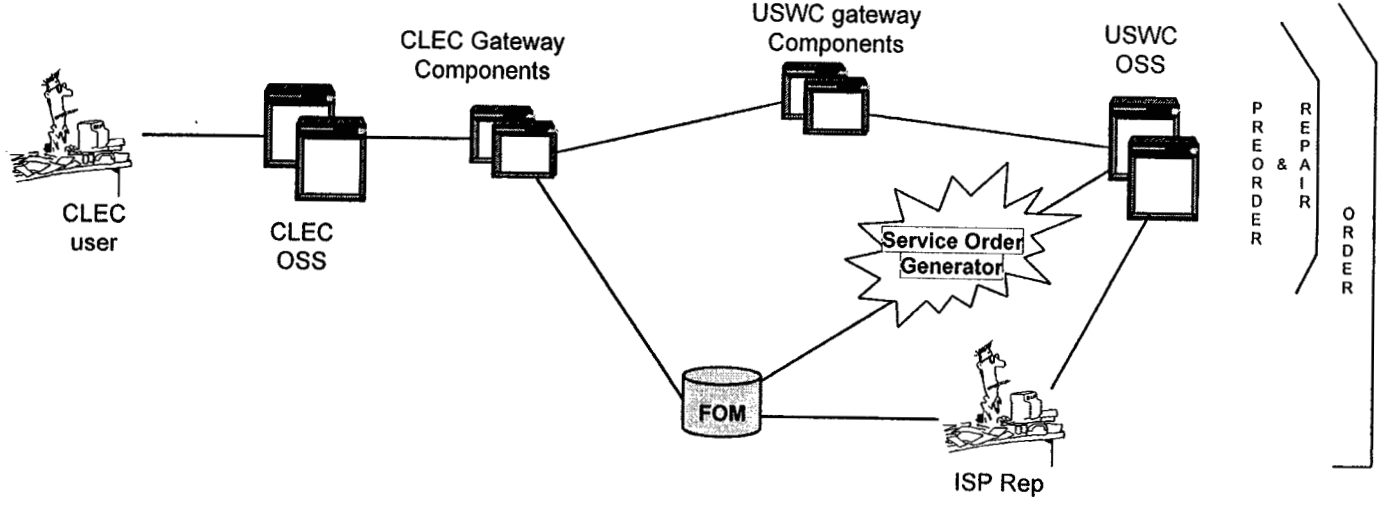
Direct Access



Mediated Access - Human-to-Computer



Mediated Access – Computer-to-Computer



Sample Order – Resale POTS Conversion As Is

Step 1: The Competitive Local Exchange Carrier (CLEC) enters the order into Interconnect Mediated Access (IMA).

The CLEC representative points the browser to the IMA browser address and opens the initial screen:

Sample Order – Resale POTS Conversion As Is

Important or new IMA system information is presented in a pop-up window.

IMA Announcements - Netscape

Welcome to the new "IMA pop-up window"

This will be used to communicate system availability, IMA release implementation updates & schedules, and other periodic NEWS for our customers.

If you have any questions about this, please contact the IMA Help Desk at 1-888-796-9102

Message Announcing IMA Repair Hours

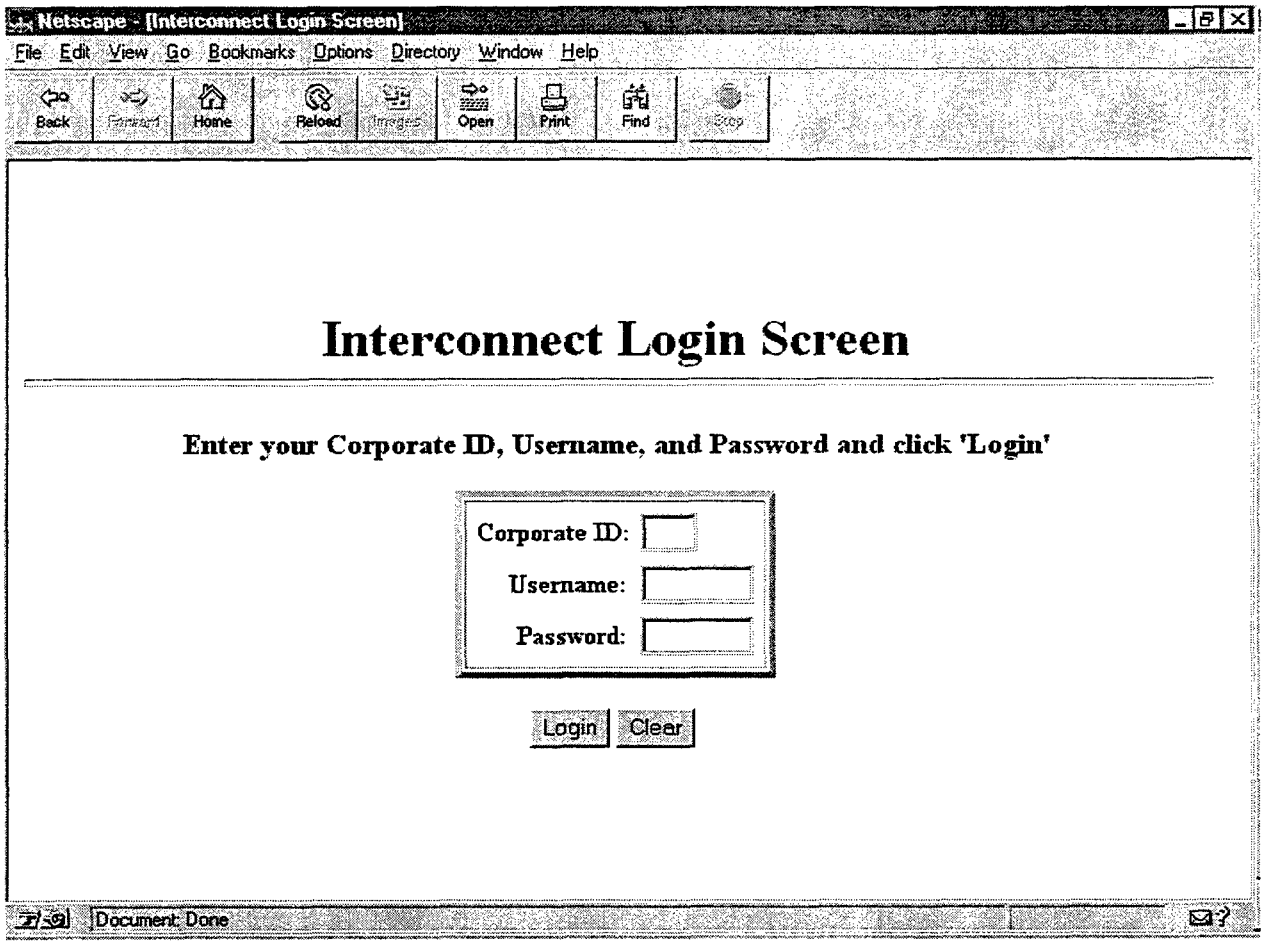
Effective immediately IMA Maintenance and Repair routine downtime has been aligned with normally scheduled Maintenance and Repair Legacy system downtime. This will provide maximum availability for IMA Maintenance and Repair users. Please refer to the schedule below for system availability. All times listed are in Mountain Standard Time unless otherwise stated. IMA pre-order and order supported hours are not affected by this change.

IMA is currently available during normally scheduled hours. Please refer to the schedule below.

	Monday - Friday	Saturday	Sunday
***IMA Maintenance and Repair Hours**	2:15 - 23:15	2:15 - 22:00	7:00 - 23:15

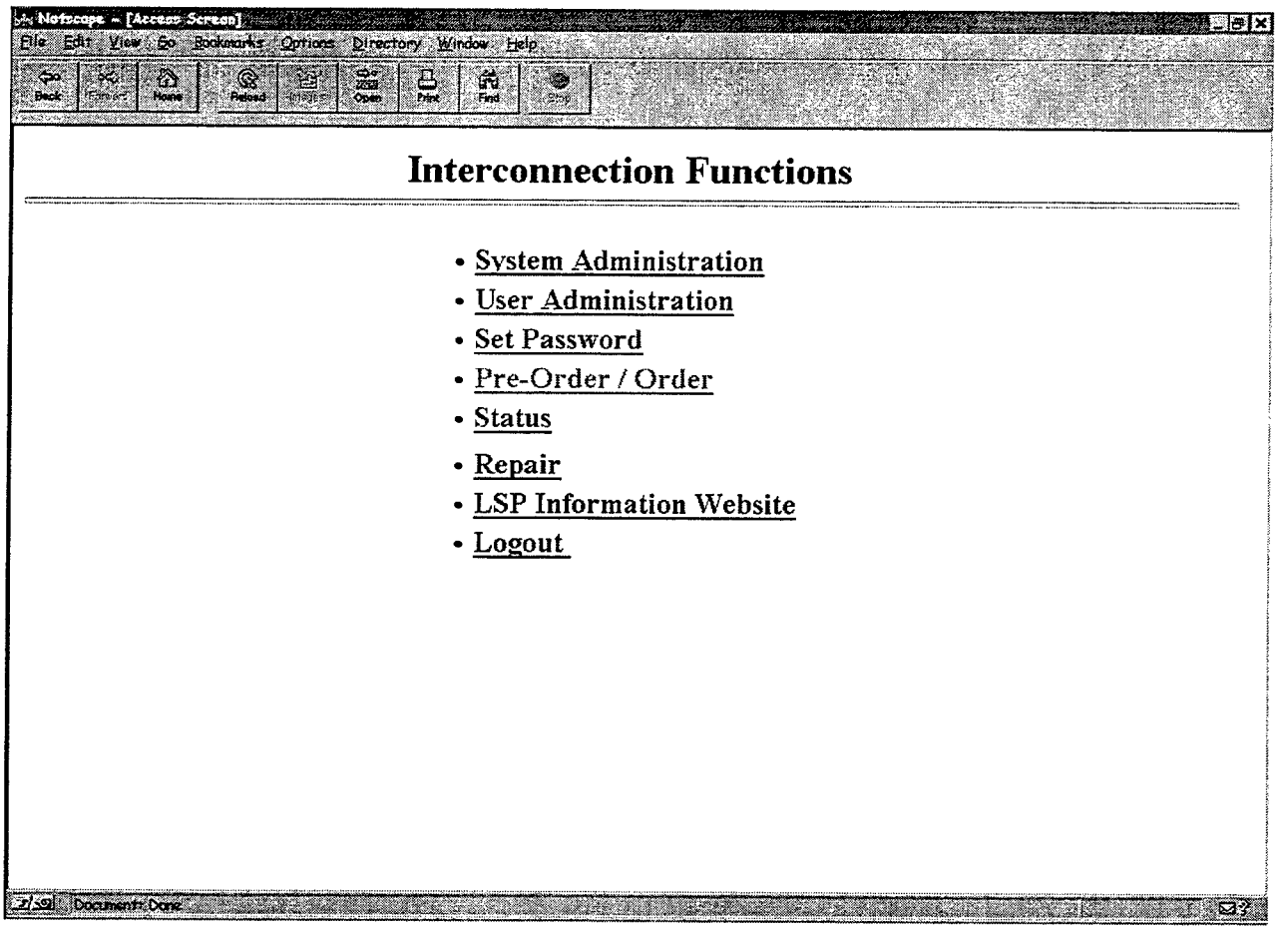
Sample Order – Resale POTS Conversion As Is

After pressing the start button on the IMA initial screen, the CLEC representative logs into IMA.



Sample Order – Resale POTS Conversion As Is

The Pre-Order/Order function is selected on the main menu.

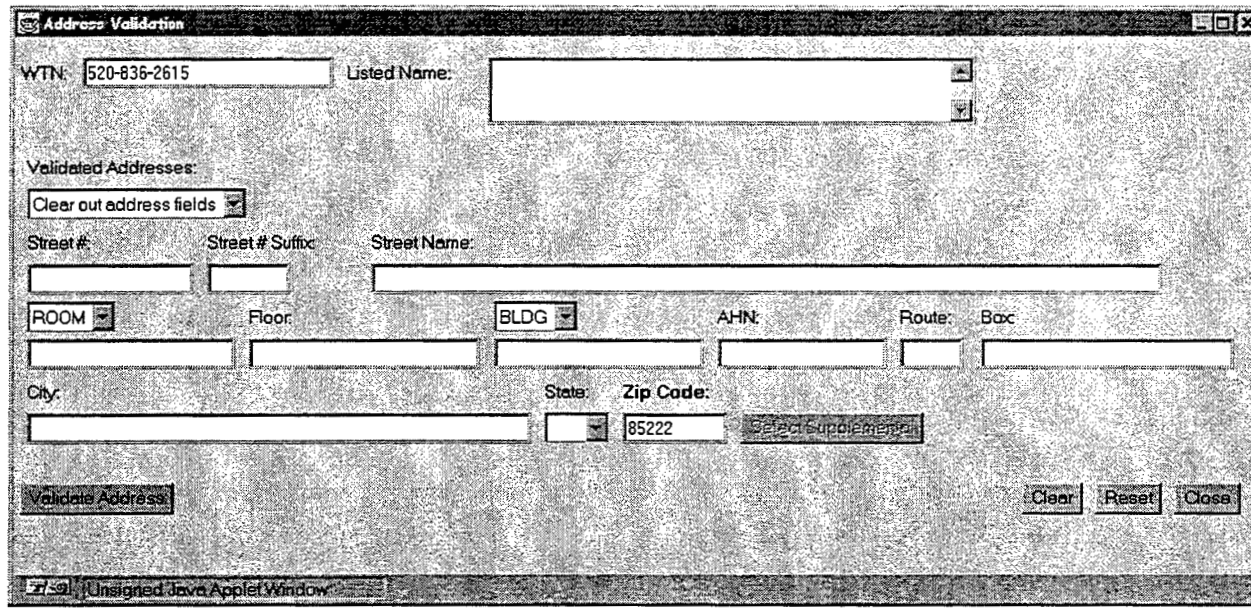


Sample Order – Resale POTS Conversion As Is

The IMA Pre-order / Order screen is displayed:

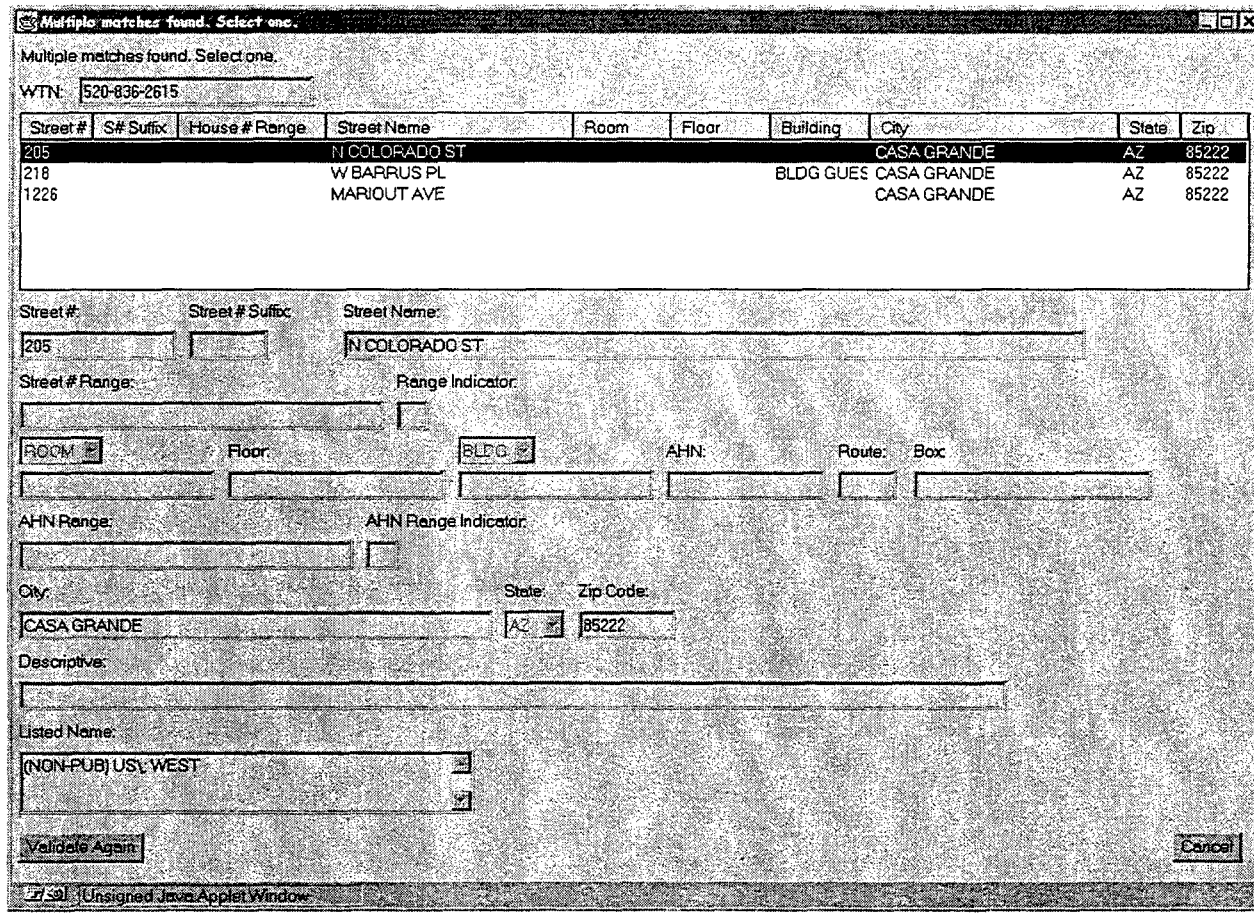
Sample Order – Resale POTS Conversion As Is

The Address Validation Request screen is opened from the 'Pre-order' pull-down menu.



Sample Order – Resale POTS Conversion As Is

Address Validation Multiple Match Response screen. This screen is displayed when the phone number requested is listed at multiple addresses within PREMIS.



Sample Order – Resale POTS Conversion As Is

Address Validation Response screen. The address is validated.

Address Validation Response

WTN: 520-836-2615

Listed Name:

Validated Addresses: 205 N COLORADO ST,CASA GRANDE,AZ,85222

Street #: 205

Street # Suffix:

Street Name: N COLORADO ST

ROOM

Floor:

BLDG

AHN:

Route:

Box:

City: CASA GRANDE

State: AZ

Zip Code: 85222

Select Supplements

Descriptive:

Alternate Street:

Switch Info | PNA Remarks | SL Remarks

LSO: 520836

Rate Zone: 01

Site ID: CSGRAZMA

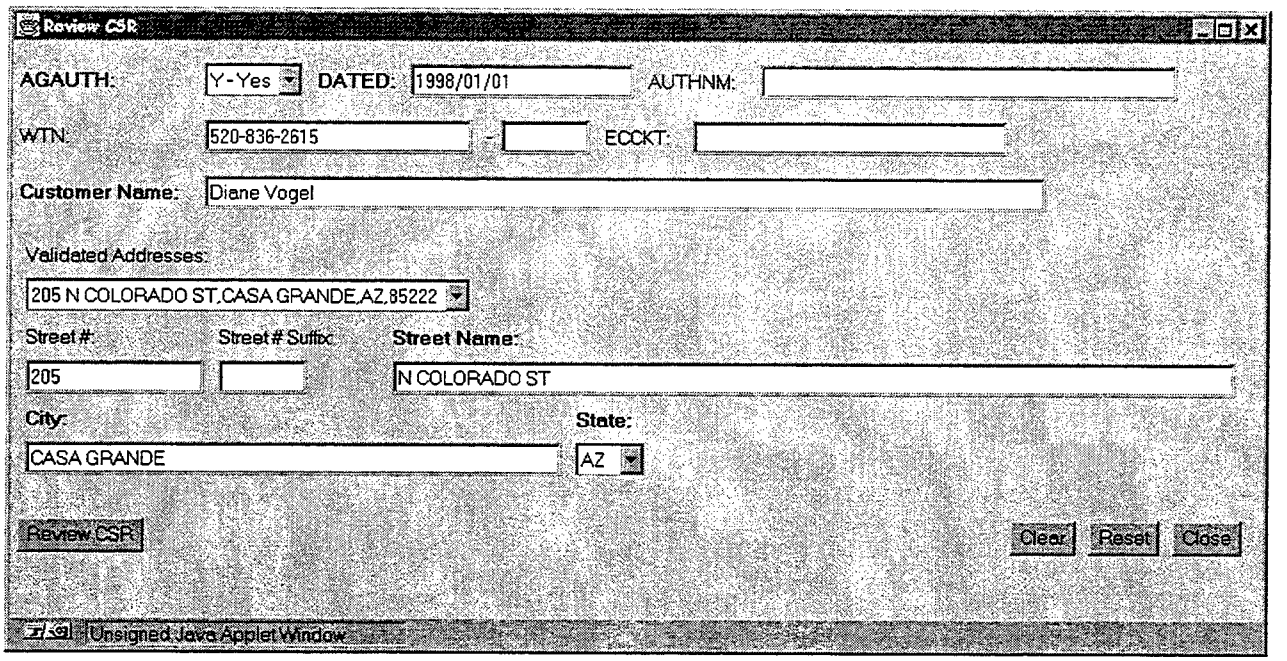
TTA: 836

Switch Types: D100

Print Preview | EMail | Close

Sample Order – Resale POTS Conversion As Is

Customer Service Record (CSR) Request screen. The review CSR screen is opened from the Pre-order pull-down menu.



Sample Order – Resale POTS Conversion As Is

CSR Response screen.

Review CSR – Response

AN: 520-836-2615 Cust Code: 803

Name: Diane Vogel

ECCKT:

Summary Billing Number: Class Of Svc: 1FR

Orig. Svc. Established: 19980602 Reseller ID:

Complete Customer Record displayed

Listing | Billing | Service & Equipment

NP (NON-PUB) US WEST
LA 205 N COLORADO ST, CASA GRANDE

Print Preview | EMail | Close

Unsigned Java Applet Window

Listing | **Billing** | Service & Equipment

BA1 1005 17 ST
BA2 ROOM 1690
PO 80202 DENVER CO
/TAR AJ

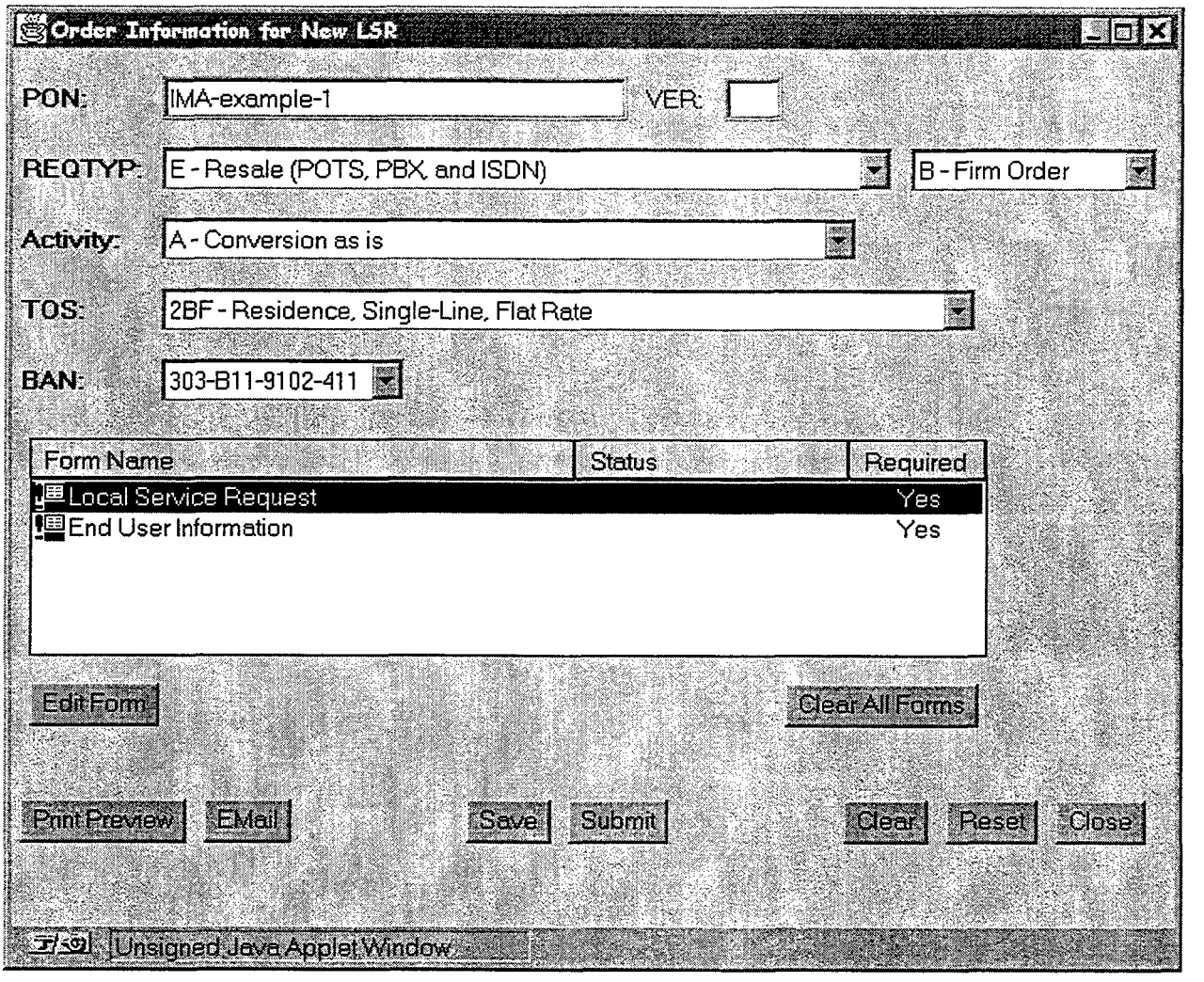
Listing | Billing | **Service & Equipment**

1 1FR
/PICX NONE
/LPIC 5123
/NMC
1 9LM

Sample Order – Resale POTS Conversion As Is

Order Information for Local Service Request (LSR) screen. The CLEC representative selects 'New LSR' from the 'Order' pull-down menu. The initial order screen is displayed.

After selecting the appropriate field items, the required LSR forms are listed on the screen. The required forms are filled out one at a time by selecting the form name, and clicking on the 'Edit Form' button.



Sample Order – Resale POTS Conversion As Is

LSR form screen. Contains general information for the order.

Local Service Request

Administrative Section

CCNA: M02 | PON: IMA-example-1 | VER: | LSR NO: | SC: USWD | PORTTYP: | PG_OF:

D/T SENT: 199901261412 | DDD: 1999/02/15 | ODDO: / / | APPTIME: | DFDT: | PROJECT: | CHC: | REQTYP: EB

ACT: A | SUP: | EXP: | AFO: | RTR: C - Confirmation | CC: | AENG: | ALBR: | SCA:

AGAUTH: Y - Yes | DATED: 1998/01/01 | AUTHNM: Diane Vogel | ACTL: | AI:

APOT: | LST: | LSO: | TOS: 2BF | SPEC: | IBT: | NC: | NCI: | SECNCI:

RPON: | RORD:

LSP AUTH: | LSP AUTH DATE: / / | LSP AUTH NAME: | CIC:

CUST:

Bill Section

BI1: | BAN1: 303-B11-9102-411 | BAPC: 01B | BI2: | BAN2: - - - | ACNA: | EBC: / /

BILLNM: MCImetro | SBILLNM: | TE: G | EBP:

STREET: 1234 Bellview | FLOOR: | ROOM: | CITY: Englewood | STATE: CO

ZIP CODE: 80134 | BILLCON: | TEL NO: - - - | VTA:

Contact Section

INIT: Wendy Teepe | TEL NO: 303-999-9999- | EMAIL: wteep@uswest.com

FAX NO: 303-965-1908 | STREET: 1005 17th

FLOOR: 16 | ROOM/MAIL STOP: 1690 | CITY: Denver | STATE: CO | ZIP CODE: 80202

IMPCON: Diane Vogel | TEL NO: 303-999-9999- | PAGER:

ALT IMPCON: | TEL NO: - - - | PAGER:

DSGCON: | DRC: | TEL NO: - - - | FAX NO: - -

EMAIL: | STREET:

FLOOR: | ROOM/MAIL STOP: | CITY: | STATE: | ZIP CODE:

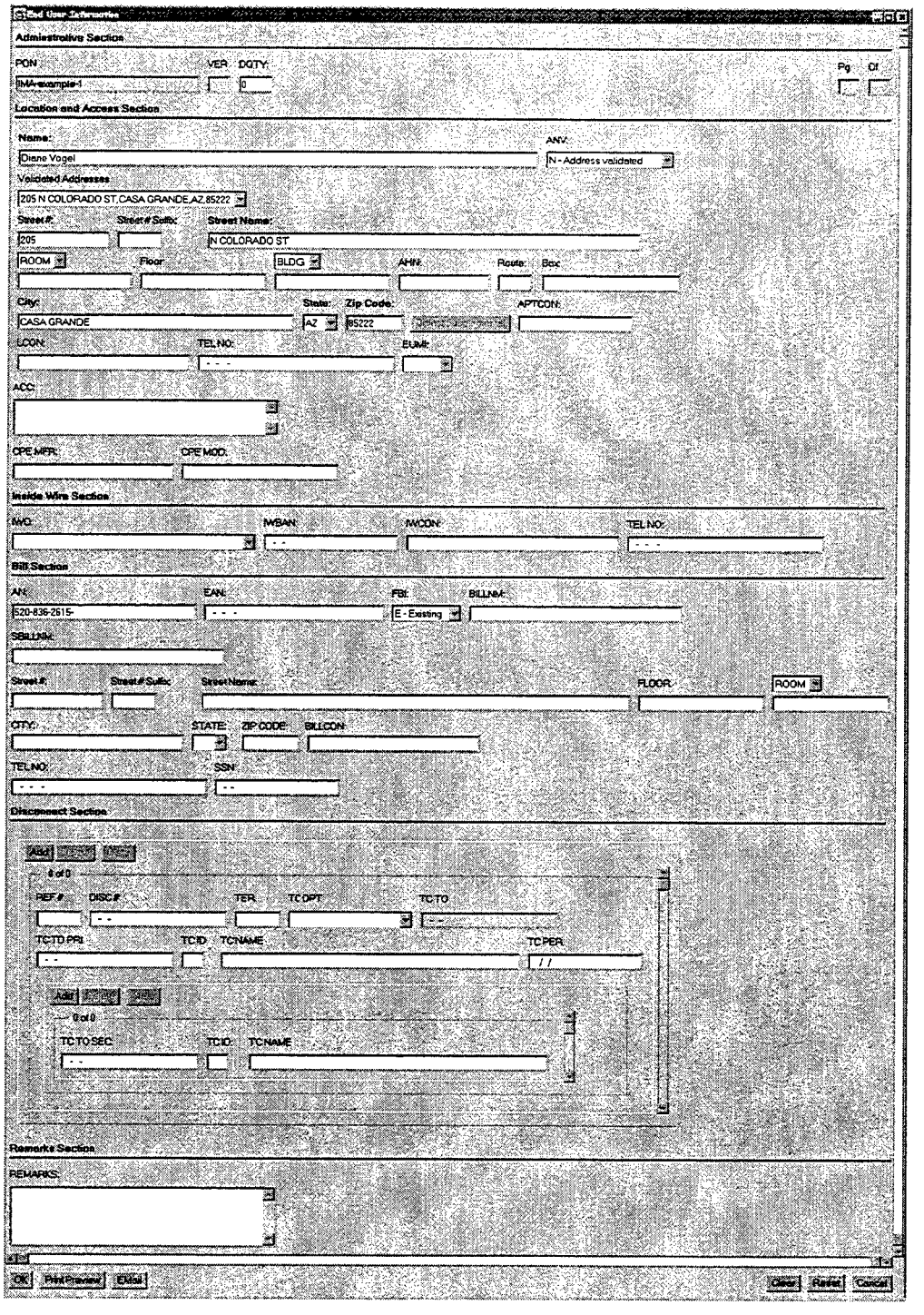
Remarks Section

REMARKS:

OK | Print Preview | E-Mail | Clear | Reset | Cancel

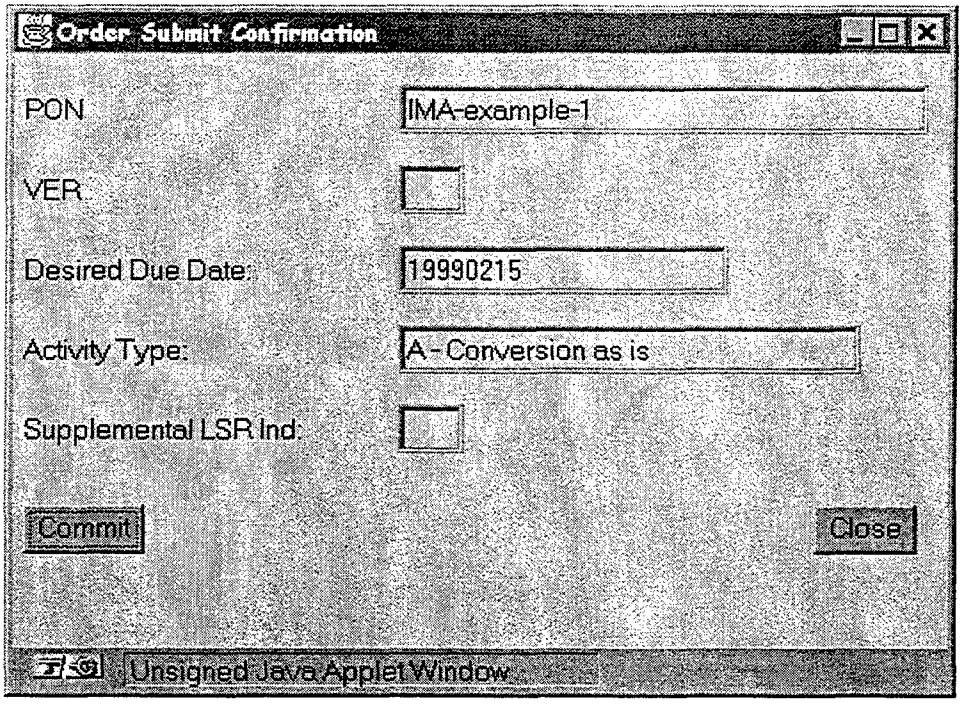
Sample Order – Resale POTS Conversion As Is

End User Information (EUI) form screen. Contains information about the end user.



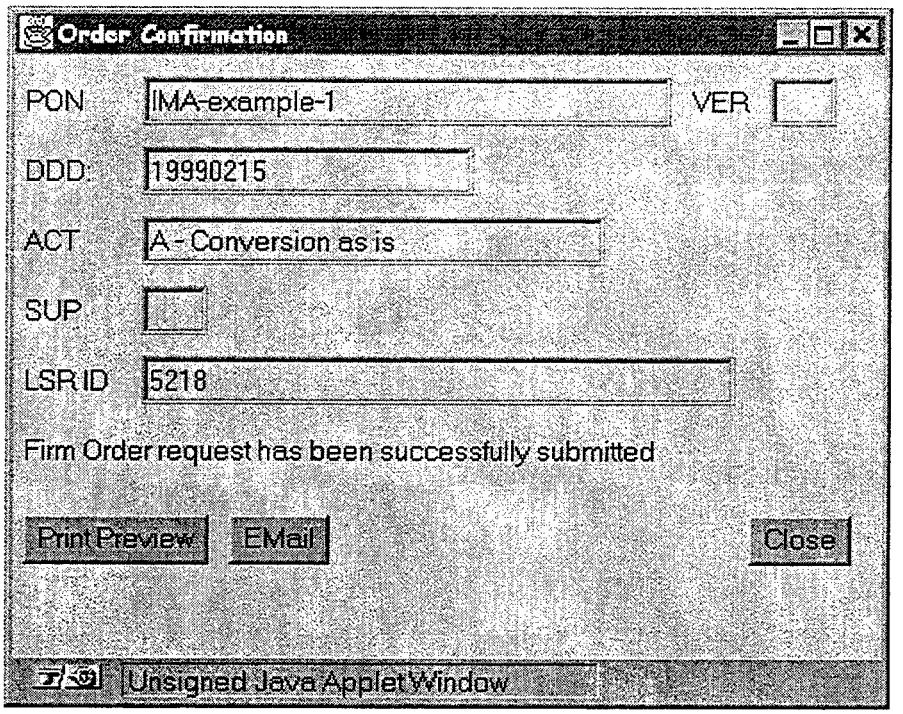
Sample Order – Resale POTS Conversion As Is

Order Submit Confirmation screen. After the required forms are filled out, the CLEC representative presses the 'Submit' button on the Order Information for (LSR) screen. The Order Submit Confirmation screen allows the CLEC user to confirm that they want to submit the order to U S WEST.



Sample Order – Resale POTS Conversion As Is

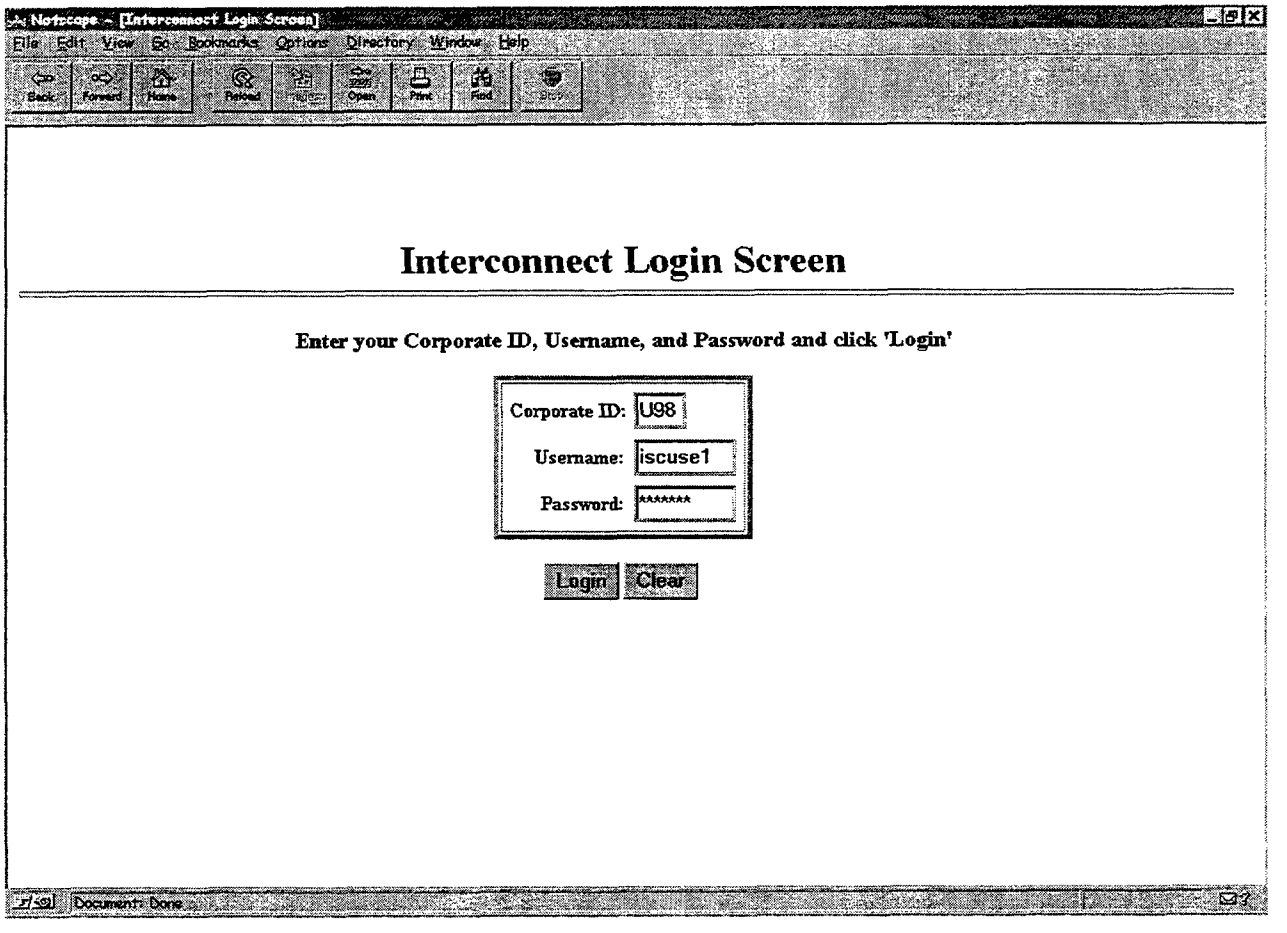
Order Confirmation screen. This screen confirms the submission of the order.



Sample Order – Resale POTS Conversion As Is

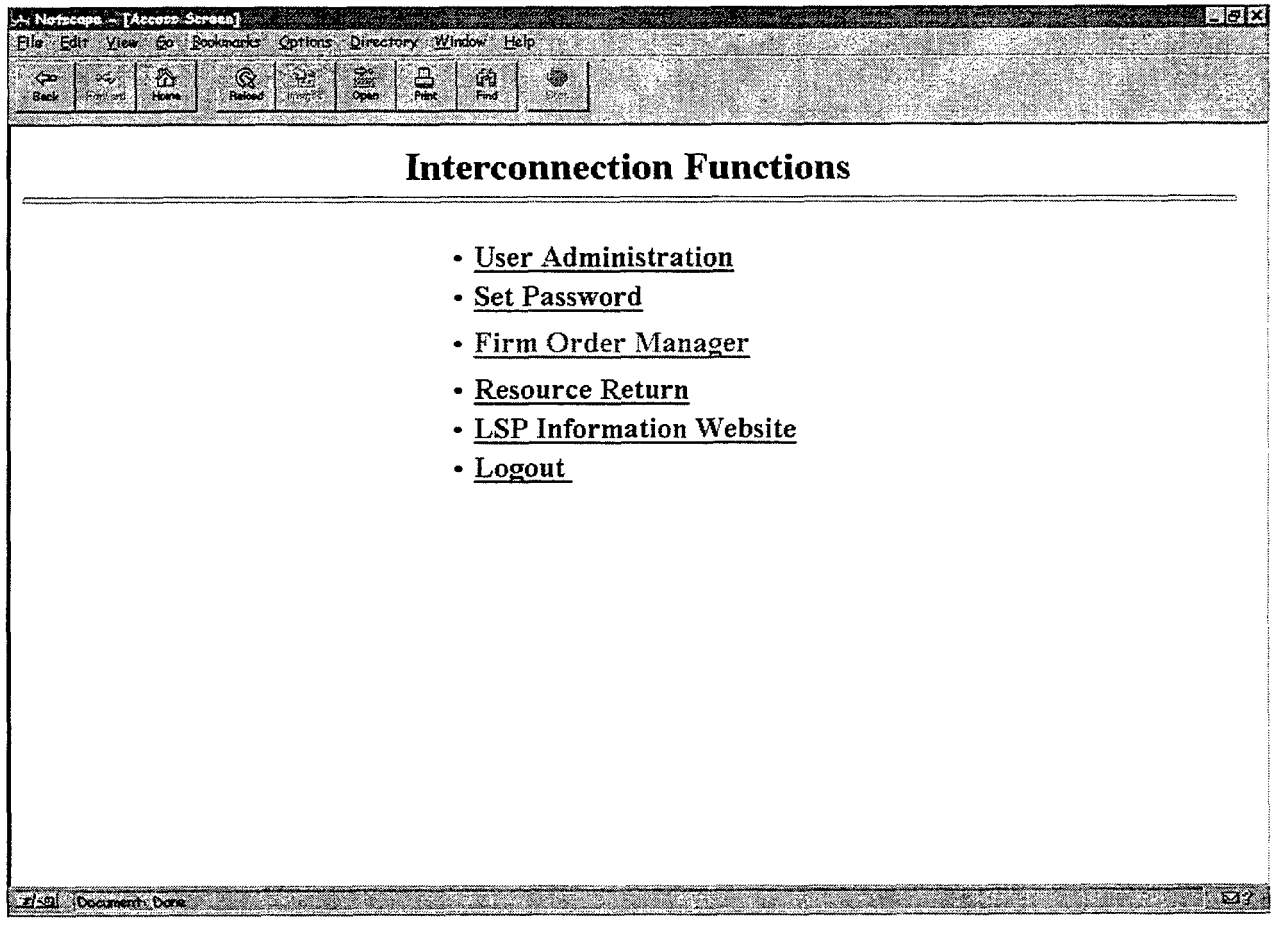
Step 2: A U S WEST representative in the Interconnect Service Center (ISC) accesses the CLEC LSR in the IMA Firm Order Manager (FOM) and creates a service order in the U S WEST OSS systems.

IMA Entry Screen.



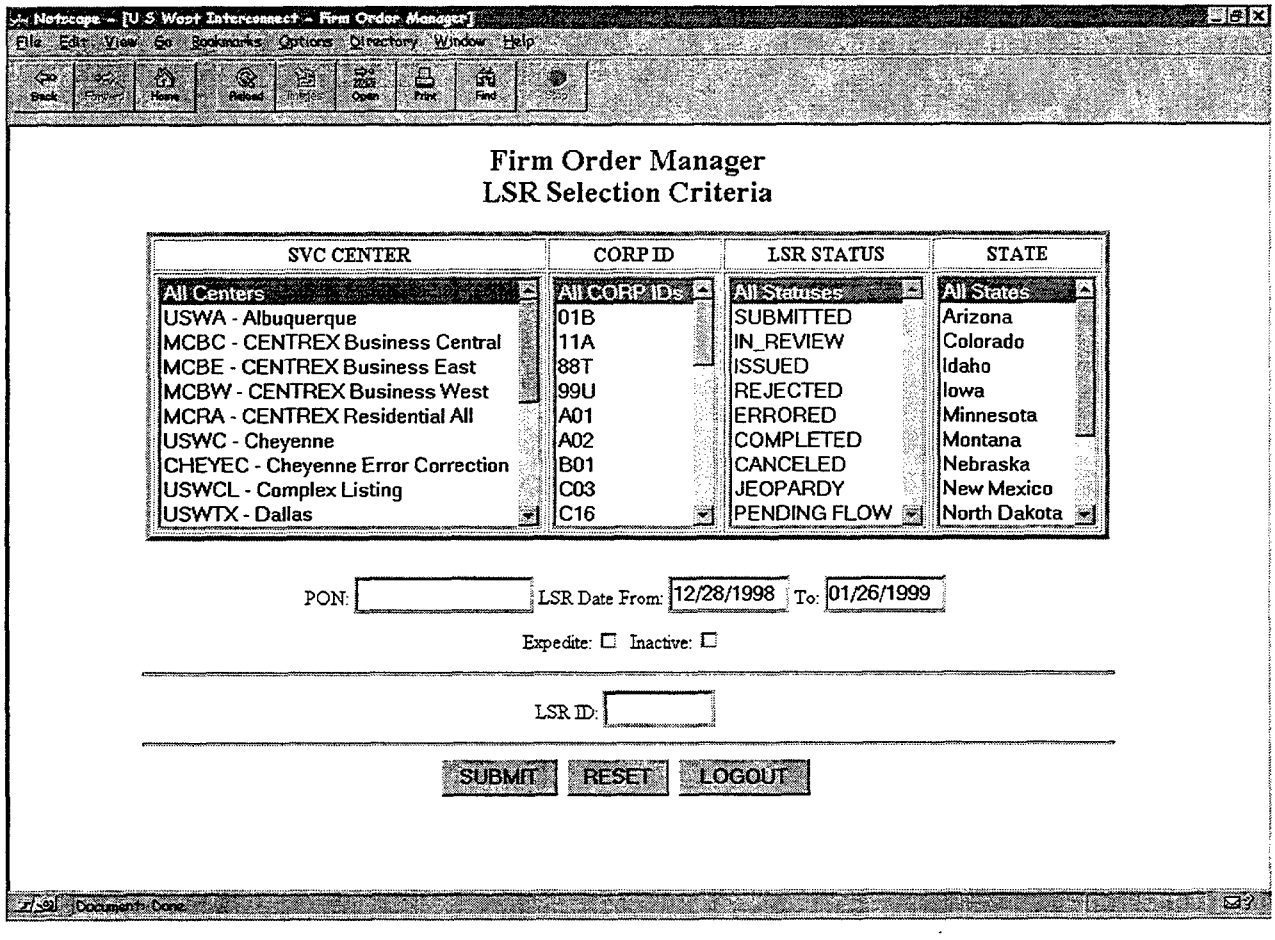
Sample Order – Resale POTS Conversion As Is

ISC IMA main menu:



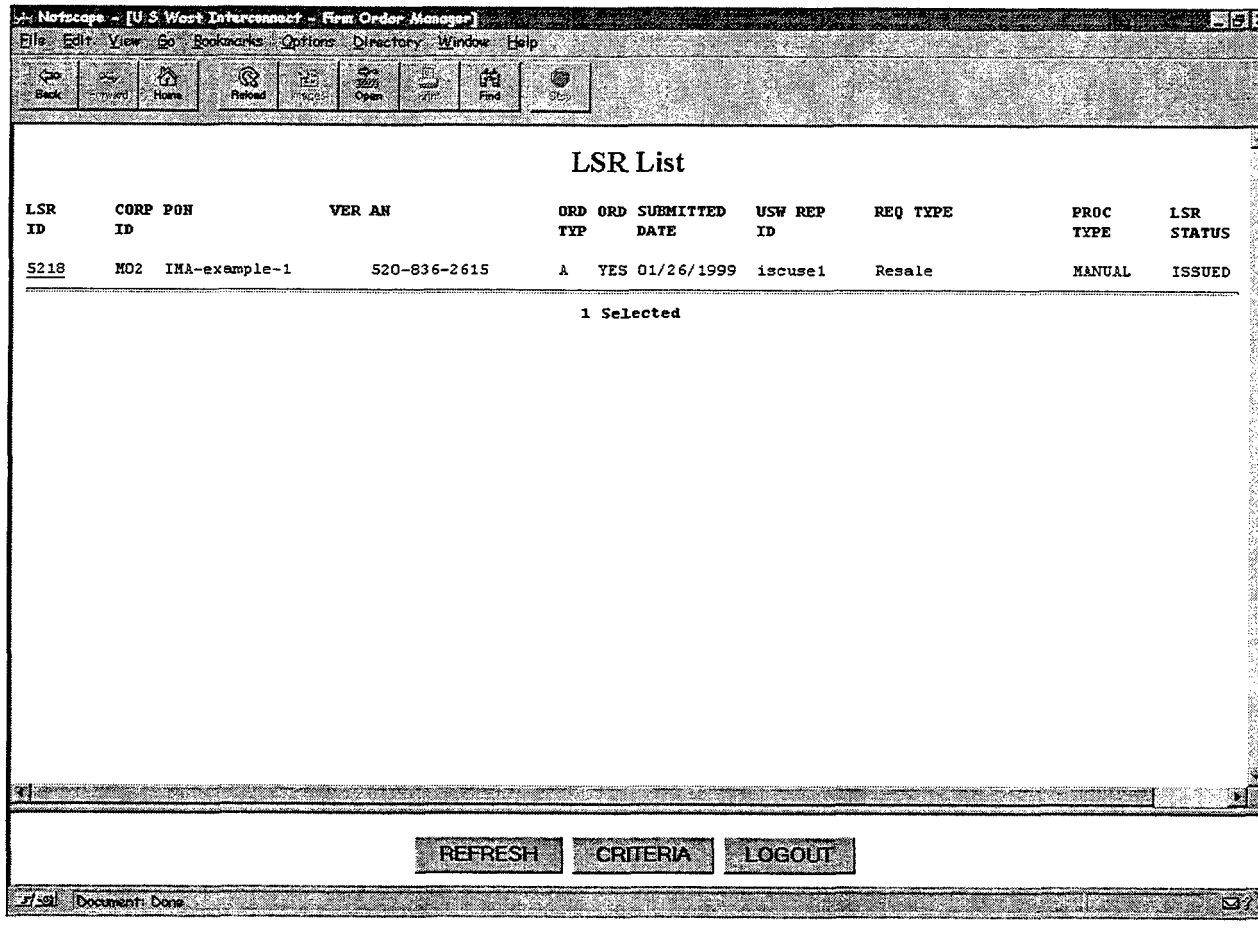
Sample Order – Resale POTS Conversion As Is

LSR Selection screen. Allows an ISC representative to query for a set of LSRs.



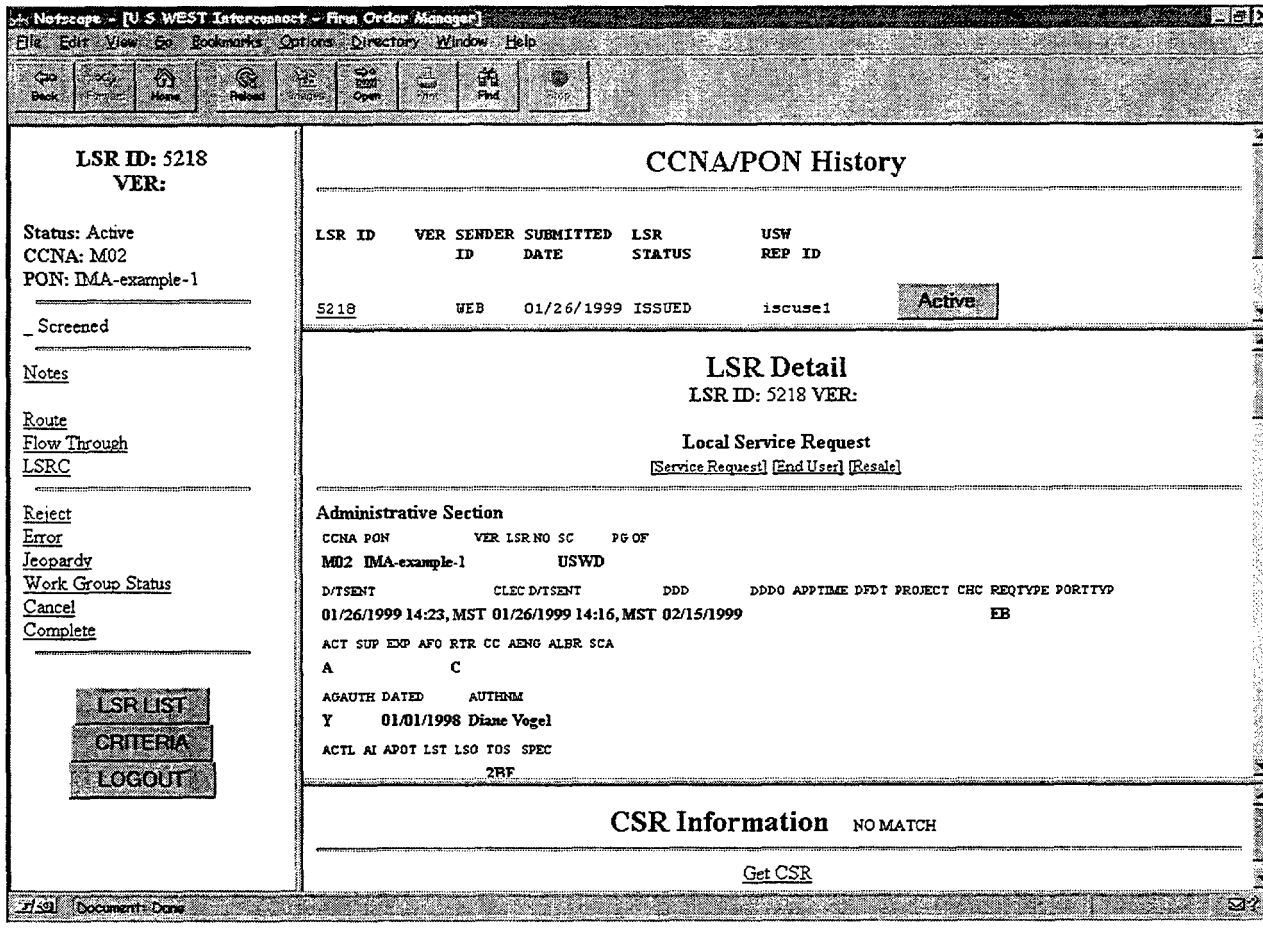
Sample Order – Resale POTS Conversion As Is

LSR List screen. Displays the list generated based on the criteria entered on the LSR Selection Screen. The representative can view an LSR by clicking on the LSR ID number.



Sample Order – Resale POTS Conversion As Is

LSR View screen. This screen provides a view of the submitted LSR and additional information. The LSR detail shows LSR information as entered into IMA. The left-hand column displays links to other FOM screens. The CCNA/PON history shows a history of the LSR. The CSR information frame allows the ISC representative to pull up the CSR for the account.



Sample Order – Resale POTS Conversion As Is

LSR Detail Frame. Displays the submitted LSR.

Netscape - [U S WEST Interconnect - Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

LSR Detail

LSR ID: 5218 VER:

Local Service Request

[Service Request] [End User] [Resale]

Administrative Section

CCNA PON VER LSR NO SC PG OF
M02 IMA-example-1 USWD

D/TSENT CLEC D/TSENT DDD DDDO APPTIME DFDT PROJECT CHC REQTYPE PORTTYP
01/26/1999 14:23, MST 01/26/1999 14:16, MST 02/15/1999 EB

ACT SUP EXP AFO RTR CC AENG ALBR SCA
A C

AGAUTH DATED AUTHNM
Y 01/01/1998 Diane Vogel

ACTL AI APOT LST LSO TOS SPEC
2BF

NC NCI SEC NCI IBT RPON RORD

LSP AUTH LSP AUTH DATE LSP AUTH NAME CIC

CUST

Bill Section

BI1 BAN1 BI2 BAN2 BAPC ACNA EBD
303-B11-9102-411 01B

BILLNM SBILLNM TE
MCImetro G

STREET FLOOR ROOM CITY STATE
1234 Bellview Englewood CO

ZIP CODE BILLCON TEL NO VTA
80134

Contact Section

INIT TEL NO EMAIL FAX NO
Wendy Teepe 303-999-9999 wteep@uswest.com 303-965-1908

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE
1005 17th 16 1690 Denver CO 80202

IMPCON TEL NO PAGER
Diane Vogel 303-999-9999

ALT IMPCON TEL NO PAGER

DSGCON DRC TEL NO FAX NO EMAIL

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE

Remarks Section

REMARKS

Sample Order – Resale POTS Conversion As Is

LSR Detail Frame (continued).

End User Information

[Service Request] [End User] [Resale]

Administrative Section

PON VER DQTY
IMA-example-1 0

Location and Access

NAME
Diane Vogel

ANV
N

STREET
205 N COLORADO ST

FLOOR ROOM BLDG AHN ROUTE BOX CITY STATE ZIP CODE
CASA GRANDE AZ 85222

LCON TEL NO APT CON

EUMI ACC

RATE ZONE
01

CPE Section

CPE MFR CPE MOD

Inside Wire

IWO IWBAN IWCON TEL NO

Bill Section

AN EAN FBI BILLNM
520-836-2615 E

SBILLNM STREET FLOOR ROOM
205 N COLORADO ST

CITY STATE ZIP CODE
CASA GRANDE AZ 85222

BILLCON TEL NO SSN

Remarks Section

REMARKS

Resale

[Service Request] [End User] [Resale]

Administrative Section

PON VER RSQTY ORD CB
IMA-example-1 0

Hunting Section

HREF NUM HA HN TYP HID TLI HUNT SEQ

Remarks Section

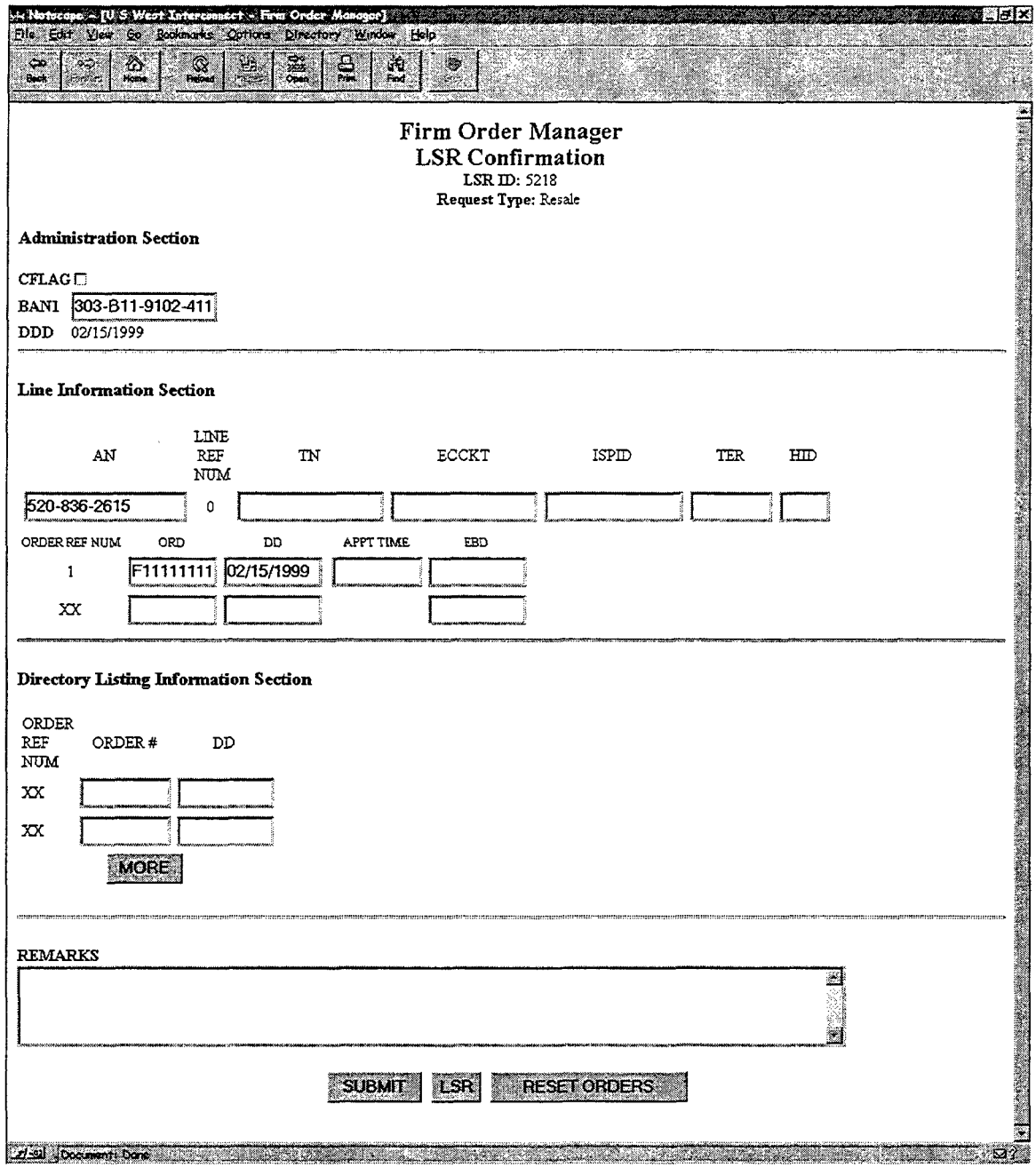
REMARKS

LSR ID: COMPARE

Document: Done

Sample Order – Resale POTS Conversion As Is

LSR Confirmation screen. After a service order has been entered into the U S WEST SOP, the ISC representative access the LSR Confirmation screen to add needed information to the Firm Order Confirmation (FOC) that is sent to the CLEC.



Firm Order Manager
LSR Confirmation
LSR ID: 5218
Request Type: Resale

Administration Section

CFLAG ☐
BAN1 303-B11-9102-411
DDD 02/15/1999

Line Information Section

AN	LINE REF NUM	TN	ECCKT	ISPID	TER	HID
520-836-2615	0					

ORDER REF NUM	ORD	DD	APPT TIME	EBD
1	F11111111	02/15/1999		
XX				

Directory Listing Information Section

ORDER REF NUM	ORDER #	DD
XX		
XX		

MORE

REMARKS

SUBMIT LSR RESET ORDERS

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: Sample Order Resale POTS Conversion As Is

Confidential/Proprietary Designation Rationale:

These pages are screen prints from the internal service order processor. This information is considered proprietary because it denotes how U S WEST's internal systems are accessed and this information is not disclosed outside of U S WEST.

Below is a table that provide common scenarios that illustrate the number of service orders generated by the receipt of an LSR or ASR for various products. U S WEST's Service Order Processors (SOPs) have limitations that affect the number of service orders required for the provisioning of a product. For example, service orders, whether a service order for new service, a disconnect, or a change, that have telephone numbers (TN Account) are limited to 20 lines per service order. For accounts that have only circuit IDs (Circuit Account), one service order is required for each circuit. This limitation applies to CLECs' and U S WEST's service orders equally.

Number of Service Orders Required for Product/Service Request

Product/Service (Request Type)	Quantity Requested on LSR/ASR	U S WEST Account Service Order Activity (Outward Activity)	Co-Provider Account Service Order Activity (Inward Activity)	Total (Outward & Inward) Service Orders Required
Unbundled (LSR)				
New Unbundled Loop	1 or more loop(s)	NA	1 order per loop	1
Loop Conversion to Co-Provider (TN Account)	1 line	1 order per 1-20 lines	1 order per loop	2
	20 lines	1	20	21
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	30	32
Loop Conversion to Co-Provider (Circuit Account)	1or more circuit(s)	1 order per circuit	1 order per circuit	2
Loop Conversion to Co-Provider with INP (TN Account)	1 line	1 order per 1-20 lines	2 orders (1 order for loop and 1 order for INP)	3
	20 lines	1	21 orders (20 orders for loop and 1 order for INP [1 order per 1-20 INP])	22
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	32 (30 orders for loop and 2 orders for INP)	34
New Unbundled Switch	1 port	NA	1 order per 1-20 ports	1
	20 ports	NA	1	1
	30 ports	NA	2 (1 order for first 20 ports and 1 order for remaining 10)	2
Convert Existing Service to Unbundled Switch (same switch)	1 port	1 order per 1-20 lines being converted to ports	1 order per 1-20 ports	2
	20 ports	1	1	2
	30 ports	2 (1 order for first 20 lines and 1 order for remaining 10 being converted to ports)	2 (1 order for first 20 ports and 1 order for remaining 10)	4
Resale (LSR)				
Resale - New Connect (TN Account)	1 line	NA	1 order per 1-20 lines	1
	20 lines	NA	1 order per 1-20 lines	1
	30 lines	NA	2 (1 order for first 20 lines and 1 order for remaining 10)	2

Resale – Change (TN Account)	1 line	NA	1 order per 1-20 lines	1
	20 lines	NA	1	1
	30 lines	NA	2 (1 order for first 20 ports and 1 order for remaining 10)	1
Resale - New Connect or Change (Circuit Account)	1 or more circuit(s)	NA	1 order per circuit	1
Resale - Full Migration as is	1 or more account(s)	1 order to change responsibility to Co-Provider	NA	1
Resale - Partial Migration (TN Account)	1 line	1 order per 1-20 lines	1 order per 1-20 lines	2
	20 lines	1	1	2
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	2 (1 order for first 20 lines and 1 order for remaining 10)	4
INP/LNP (LSR)				
INP	1 line	1 order per 1-20 lines	1 order per 1-20 lines	2
	20 lines	1	1	2
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	2 (1 order for first 20 lines and 1 order for remaining 10)	4
LNP-Outward	1 line	1 order per 1-20 lines	NA	1
	20 lines	1	NA	1
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	NA	2
Centrex Resale (LSR)				
Centrex - New Connect (TN Account)	1 line	NA	1 order per 1-20 lines	1
	20 lines	NA	1	1
	30 lines	NA	2 (1 order for first 20 lines and 1 order for remaining 10)	2
Centrex - New Connect (Circuit Account)	1 or more circuit(s)	NA	1 order per circuit	1
Centrex - Full Migration as is	1 or more account(s)	1 order to change responsibility to Co-Provider	NA	1
Centrex - Partial Migration (TN Account)	1 line	1 order per 1-20 lines	1 order per 1-20 lines	2
	20 lines	1	1	2
	30 lines	2 (1 order for first 20 lines and 1 order for remaining 10)	2 (1 order for first 20 lines and 1 order for remaining 10)	4
LIS Trunking (ASR)				
LIS Trunks	1 facility 24 trunks	NA	1 order per 1-20 facilities and 1 order per 1-480 trunks	2
	20 facilities 480 trunks	NA	1 order per 1-20 facilities and 1 order per 1-480 trunks	2
	40 facilities 960 trunks	NA	1 orders for facilities and 2 orders for trunks	4
Co-Location				
Co-Location		NA-Currently, Service Order not required	NA	NA

Sample Order – New Unbundled Loop

Step 1: The Competitive Local Exchange Carrier (CLEC) enters the order into Interconnect Mediated Access (IMA).

The CLEC representative points the browser to the IMA browser address and opens the initial screen:

Sample Order – New Unbundled Loop

Important or new IMA system information is presented in a pop-up window.

IMA Announcements - Netscape

Welcome to the new "IMA pop-up window"

This will be used to communicate system availability, IMA release implementation updates & schedules, and other periodic NEWS for our customers.

If you have any questions about this, please contact the IMA Help Desk at 1-888-796-9102

Message Announcing IMA Repair Hours

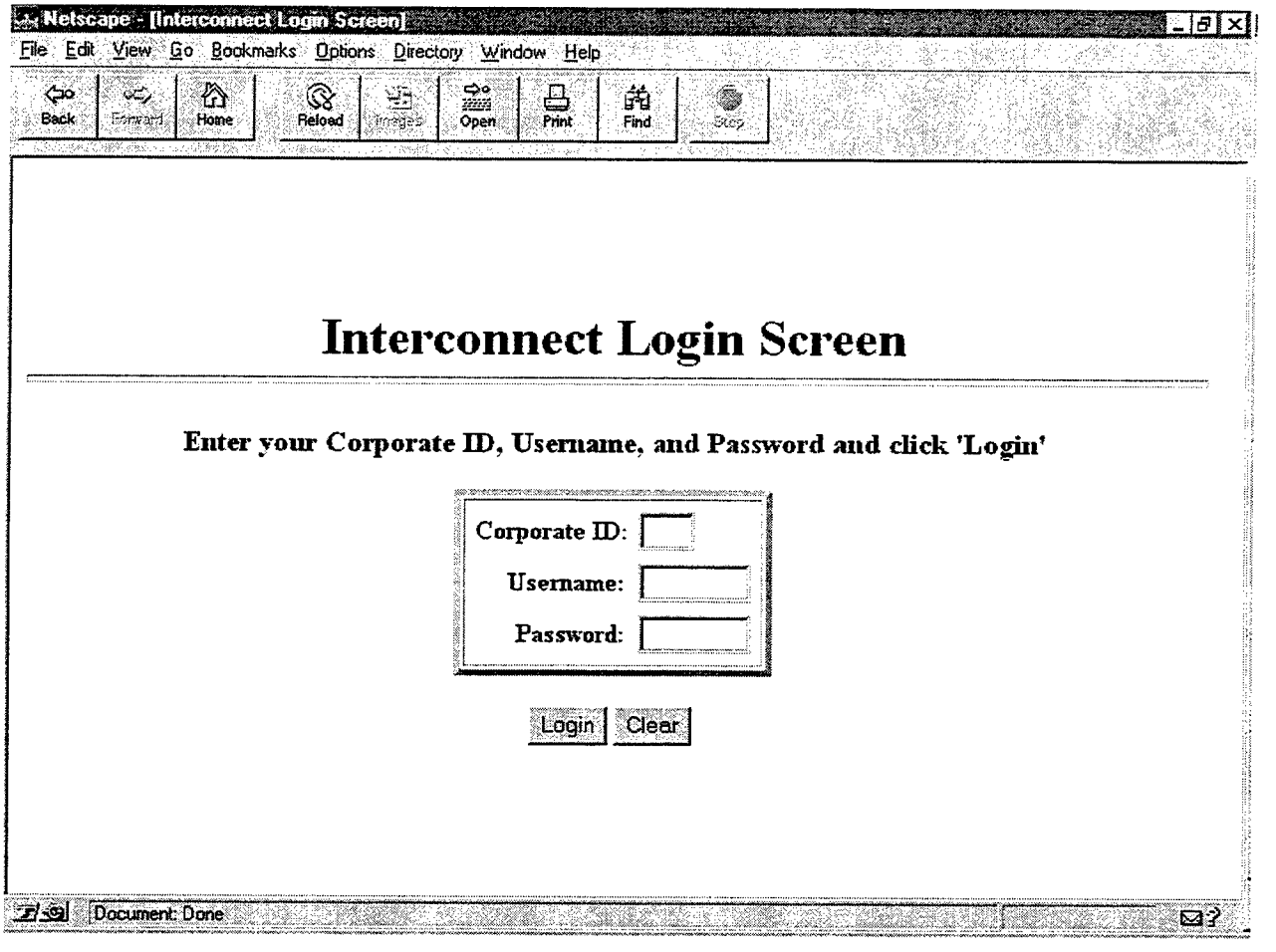
Effective immediately IMA Maintenance and Repair routine downtime has been aligned with normally scheduled Maintenance and Repair Legacy system downtime. This will provide maximum availability for IMA Maintenance and Repair users. Please refer to the schedule below for system availability. All times listed are in Mountain Standard Time unless otherwise stated. IMA pre-order and order supported hours are not affected by this change.

IMA is currently available during normally scheduled hours. Please refer to the schedule below.

	Monday - Friday	Saturday	Sunday
***IMA Maintenance and Repair Hours**	2:15 - 23:15	2:15 - 22:00	7:00 - 23:15

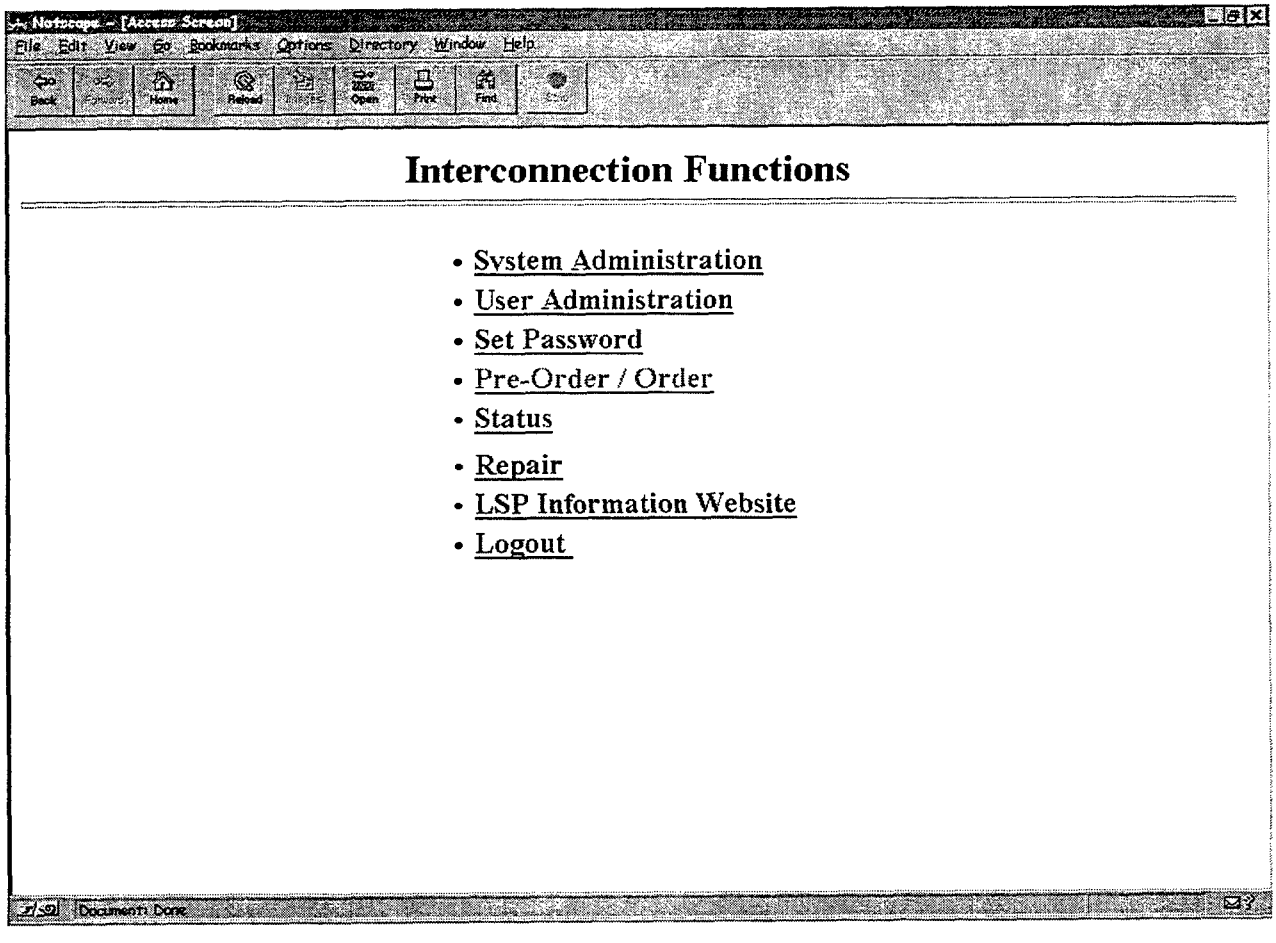
Sample Order – New Unbundled Loop

After pressing the start button on the IMA initial screen, the CLEC representative logs into IMA.



Sample Order – New Unbundled Loop

The Pre-Order/Order function is selected on the main menu.

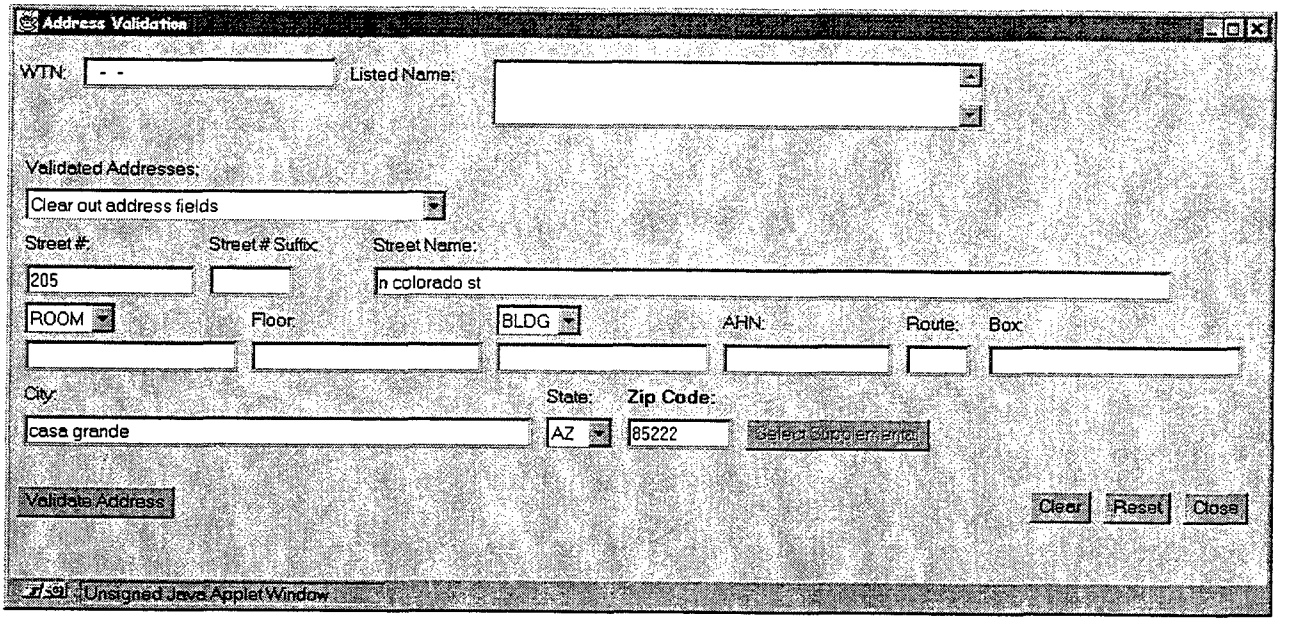


Sample Order – New Unbundled Loop

The IMA Pre-order / Order screen is displayed:

Sample Order – New Unbundled Loop

Address Validation Request screen. This screen is opened from the 'Pre-order' pull-down menu. For a new installation of unbundled loop, the address validation is based on the address, not a telephone number.



Sample Order – New Unbundled Loop

Address Validation Response screen. The address is validated.

Address Validation Response

WTN: 520-836-2615

Listed Name:

Validated Addresses: 205 N COLORADO ST,CASA GRANDE,AZ,85222

Street #: 205

Street # Suffix:

Street Name: N COLORADO ST

ROOM:

Floor:

BLDG:

AHN:

Route:

Box:

City: CASA GRANDE

State: AZ

Zip Code: 85222

Select Supplemental

Descriptive:

Alternate Street:

Switch Info | PNA Remarks | SL Remarks

LSO: 520836

Rate Zone: 01

Site ID: CSGRAZMA

TTA: 836

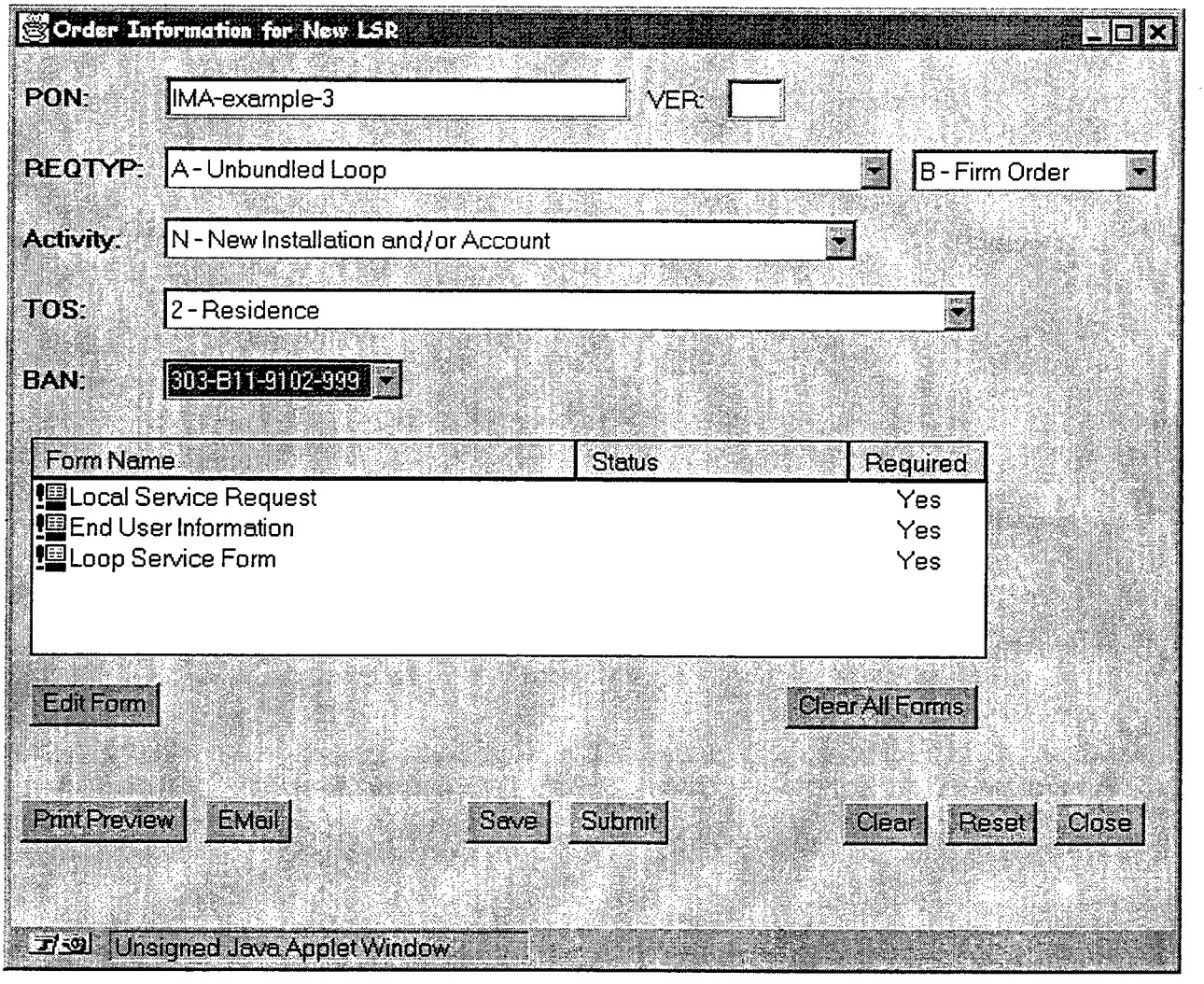
Switch Types: D100

Print Preview | EMail | Close

Sample Order – New Unbundled Loop

Order Information for Local Service Request (LSR) screen. The CLEC representative selects 'New LSR' from the 'Order' pull-down menu. The initial order screen is displayed.

After selecting the appropriate field items, the required LSR forms are listed on the screen. The required forms are filled out one at a time by selecting the form name, and clicking on the 'Edit Form' button.



Sample Order – New Unbundled Loop

LSR Form screen. Contains general information for the order.

Local Service Request

Administrative Section

CCNA: M02 | PON: IMA-example-3 | VER: | LSR NO: | SC: USWD | PORTTYP: | PG_OF:

D/T SENT: 199901271132 | DDD: 1999/02/10 | DDDO: / / | APPTIME: | DFDT: | PROJECT: | CHC: | REQTYP: AB

ACT: N | SUP: | EXP: | AFO: | RTR: D - Confirmation & DLR | CC: | AENG: | ALBR: | SCA:

AGAUTH: Y - Yes | DATED: 1998/12/12 | AUTHNM: Diane Vogel | ACTL: | AI:

APOT: | LST: | LSO: | TOS: 2 | SPEC: | IBT: | NC: LX- | NCI: 02QC3.RVT | SECNCI: 02RV2.0

RPON: | RORD:

LSP AUTH: | LSP AUTH DATE: / / | LSP AUTH NAME: | CIC:

CUST:

Bill Section

BI1: | BAN1: 303-B11-9102-999 | BAPC: 12B | BI2: | BAN2: - - - | ACNA: | EBD: / /

BILLNM: MCI | SBILLNM: | TE: G | EBP:

STREET: 1005 17 St | FLOOR: 16 | ROOM: 1690 | CITY: Denver | STATE: CO

ZIP CODE: 80202 | BILLCON: | TEL NO: - - - | VTA:

Sample Order – New Unbundled Loop

LSR Form screen (continued).

Contact Section

INIT:	TEL NO:	EMAIL:
Wendy Teepe	303-896-4102-	wteepe@uswest.com

FAX NO:	STREET:
303-965-1908	1005 17th

FLOOR:	ROOM/MAIL STOP:	CITY:	STATE:	ZIP CODE:
16	1690	Denver	CO	80202

IMPCON:	TEL NO:	PAGER:
Diane Vogel	303-999-9999-	

ALT IMPCON:	TEL NO:	PAGER:
	- - -	

DSGCON:	DRC:	TEL NO:	FAX NO:
Diane Vogel		303-999-9999-	303-999-9999

EMAIL:	STREET:

FLOOR:	ROOM/MAIL STOP:	CITY:	STATE:	ZIP CODE:

Remarks Section

REMARKS:

OK | Print Preview | EMail | Clear | Reset | Cancel

Sample Order – New Unbundled Loop

End User Information (EUI) form screen. Contains information about the end user.

End User Information

Adminstrative Section

PON: IMA-example-3 VER: DOTY: 0 Pg: Of:

Location and Access Section

Name: Diane Vogel ANV: N - Address validated

Validated Addresses: Clear out address fields

Street #: 205 Street # Suffix: Street Name: N COLORADO ST

ROOM Floor: BLDG AHN: Route: Box:

City: CASA GRANDE State: AZ Zip Code: 85222 Select Supplemental APT.CON:

LCON: TEL NO: - - - EUM:

ACC: Access Instructions

CPE MFR: CPE MOD:

Inside Wire Section

IWO: IWBAN: - - IWCON: TEL NO: - - -

Bill Section

AN: - - - EAN: - - - FBI: BILLNM:

SBILLNM:

Street #: Street # Suffix: Street Name: FLOOR: ROOM

CITY: STATE: ZIP CODE: BILLCON:

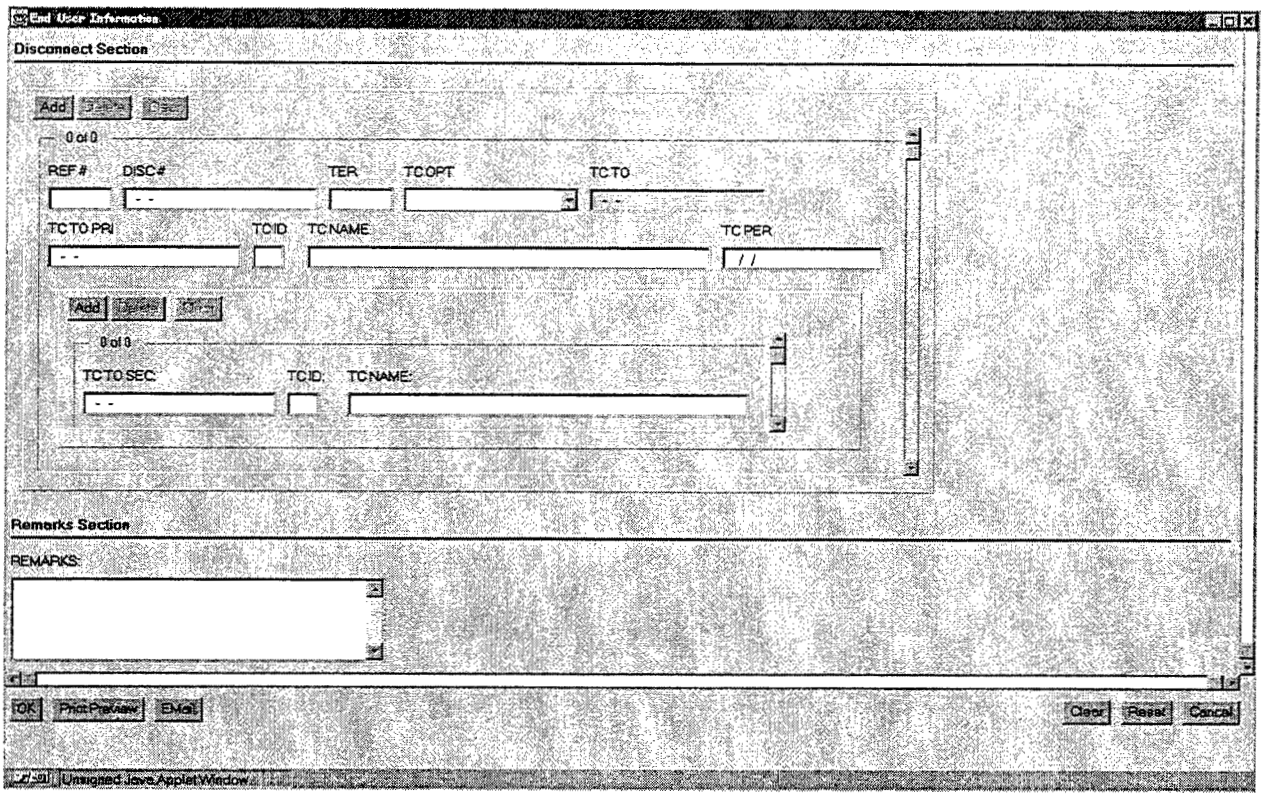
TEL NO: - - - SSN: - -

OK | Print Preview | EMail | Clear | Reset | Cancel

Unsigned Java Applet Window

Sample Order – New Unbundled Loop

End User Information (EUI) form screen (continued).



Sample Order – New Unbundled Loop

Loop Service form screen. The loop service form provides information specific to unbundled loop orders.

Loop Service Form

Administrative Section

PON: IMA-example-3 VER: LQTY: 1 Pg: Of:

Service Details Section

Add Delete Clear

1 of 2

REF NUM: 0001 CKR: LNA: N - New

TSP: - SAN:

ECCKT: CFA: 101 T1 2 CSGRAZMADC0 CSGRAZ08N01 SYSTEM ID: CABLE ID:

SHELF: SLOT: RELAY RACK: CHAN/PAIR: JK CODE: JK NUM: JK POS: JR: NIDP: Y - Yes

Add Delete Clear

0 of 0

Inside Wire Jacks IWJK: IWJQ:

DISC # - - TER: TC OPT: TC TO: - - TC TO PRI: - - TC ID:

TC NAME: TC PER: / /

Add Delete Clear

0 of 0

TC TO SEC: - - TC ID: TC NAME:

Remarks Section

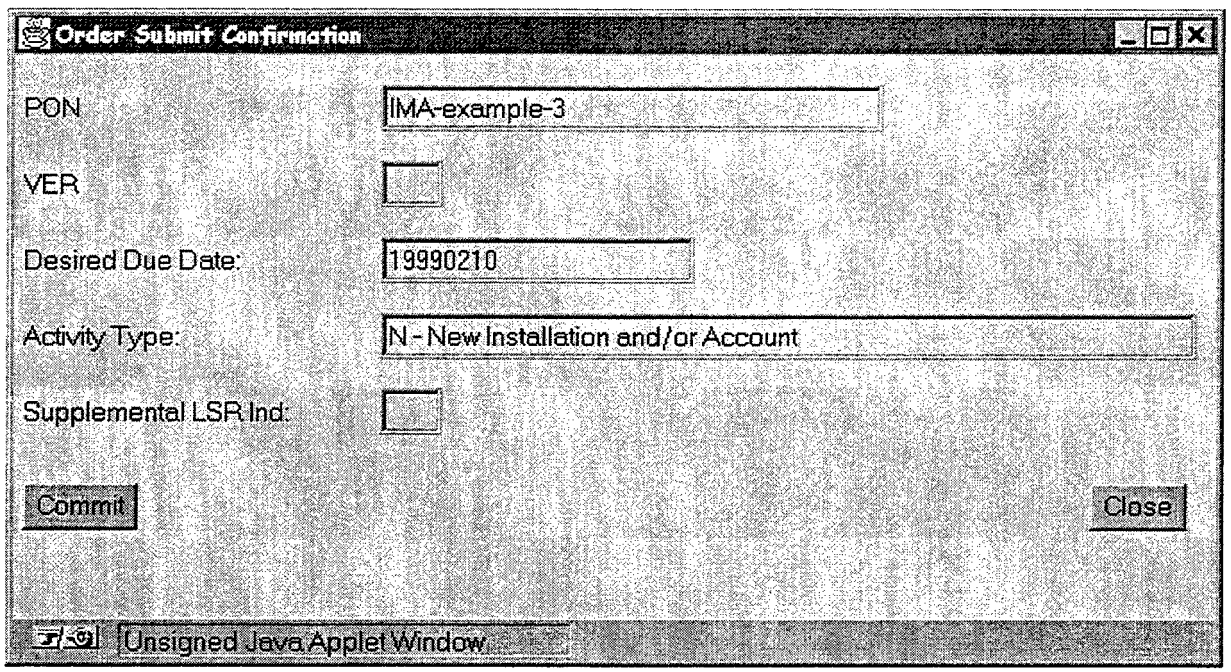
REMARKS:

OK Print Preview EMail OK Print Preview EMail Clear Reset Cancel

Unsigned Java Applet Window

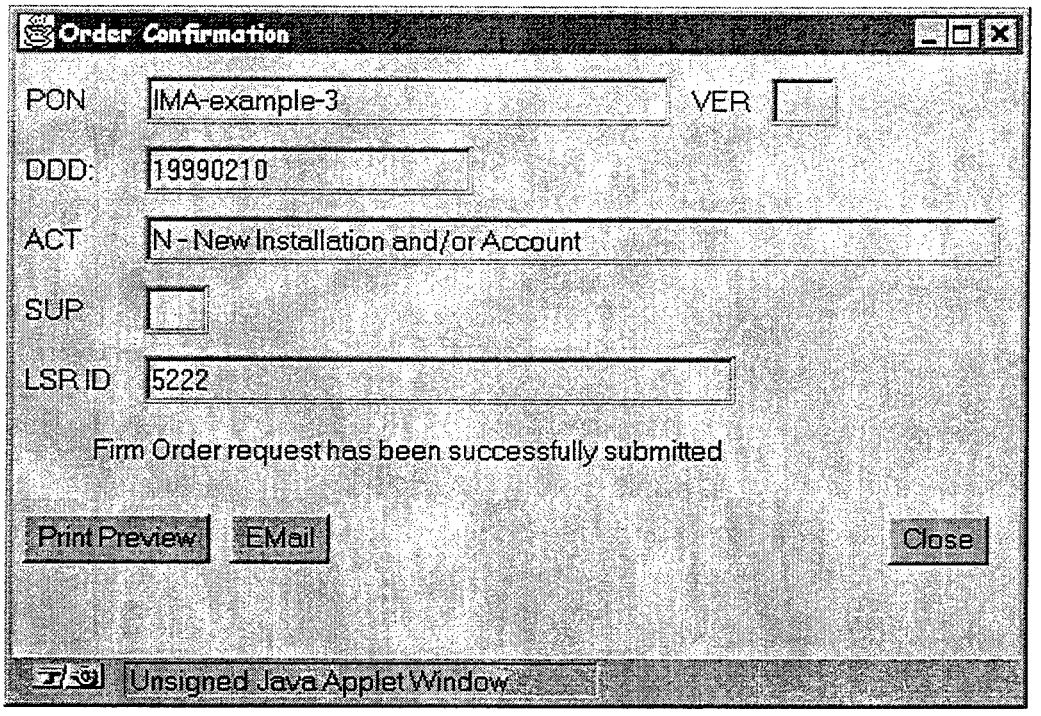
Sample Order – New Unbundled Loop

Order Submit Confirmation screen. After the required forms are filled out, the CLEC representative presses the 'Submit' button on the Order Information for (LSR) screen. The Order Submit Confirmation screen allows the CLEC user to confirm that they want to submit the order to U S WEST.



Sample Order – New Unbundled Loop

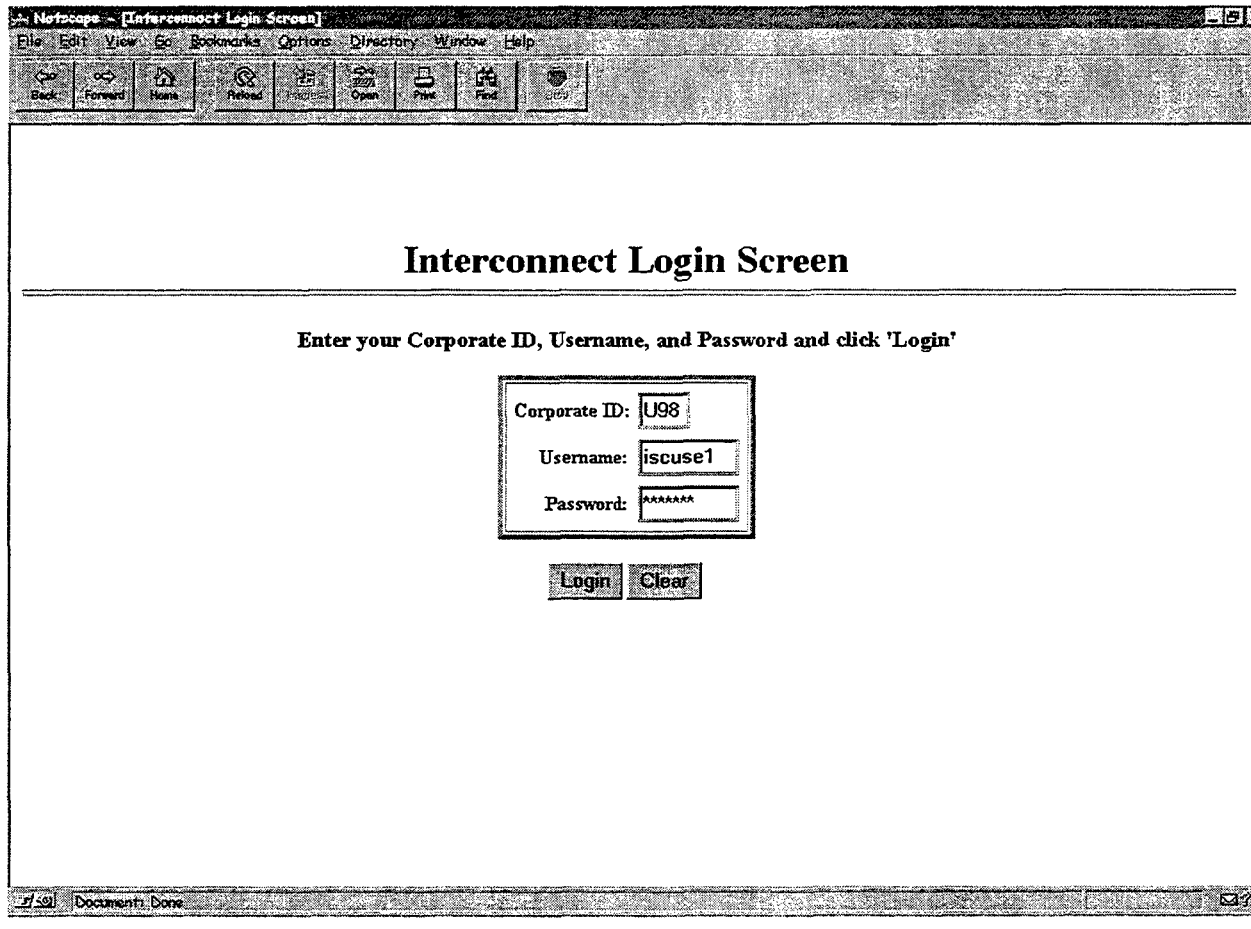
Order Confirmation screen. This screen confirms the submission of the order.



Sample Order – New Unbundled Loop

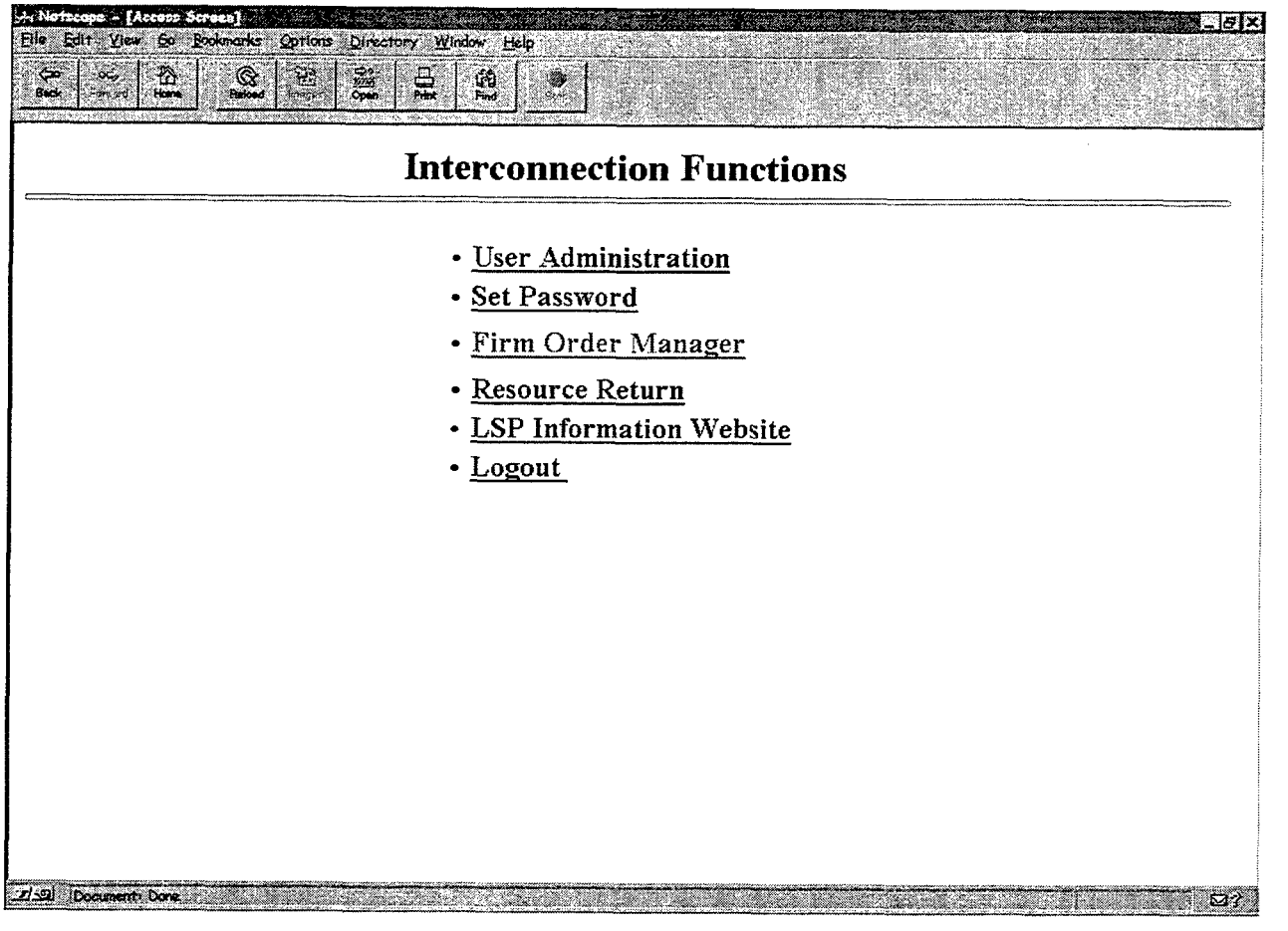
Step 2: A U S WEST representative in the Interconnect Service Center (ISC) accesses the CLEC LSR in the IMA Firm Order Manager (FOM) and creates a service order in the U S WEST OSS systems.

IMA Entry Screen.



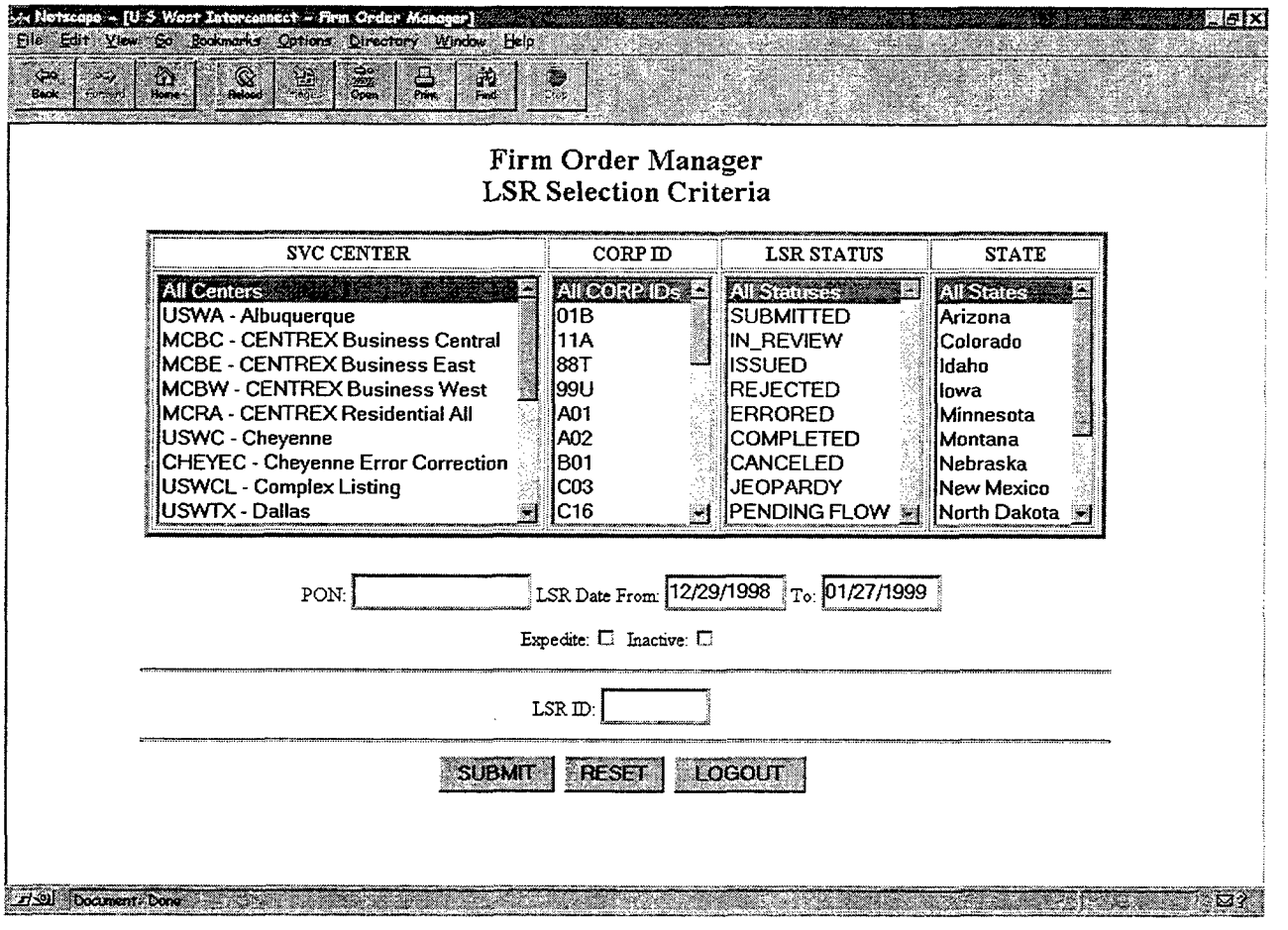
Sample Order – New Unbundled Loop

ISC IMA main menu:



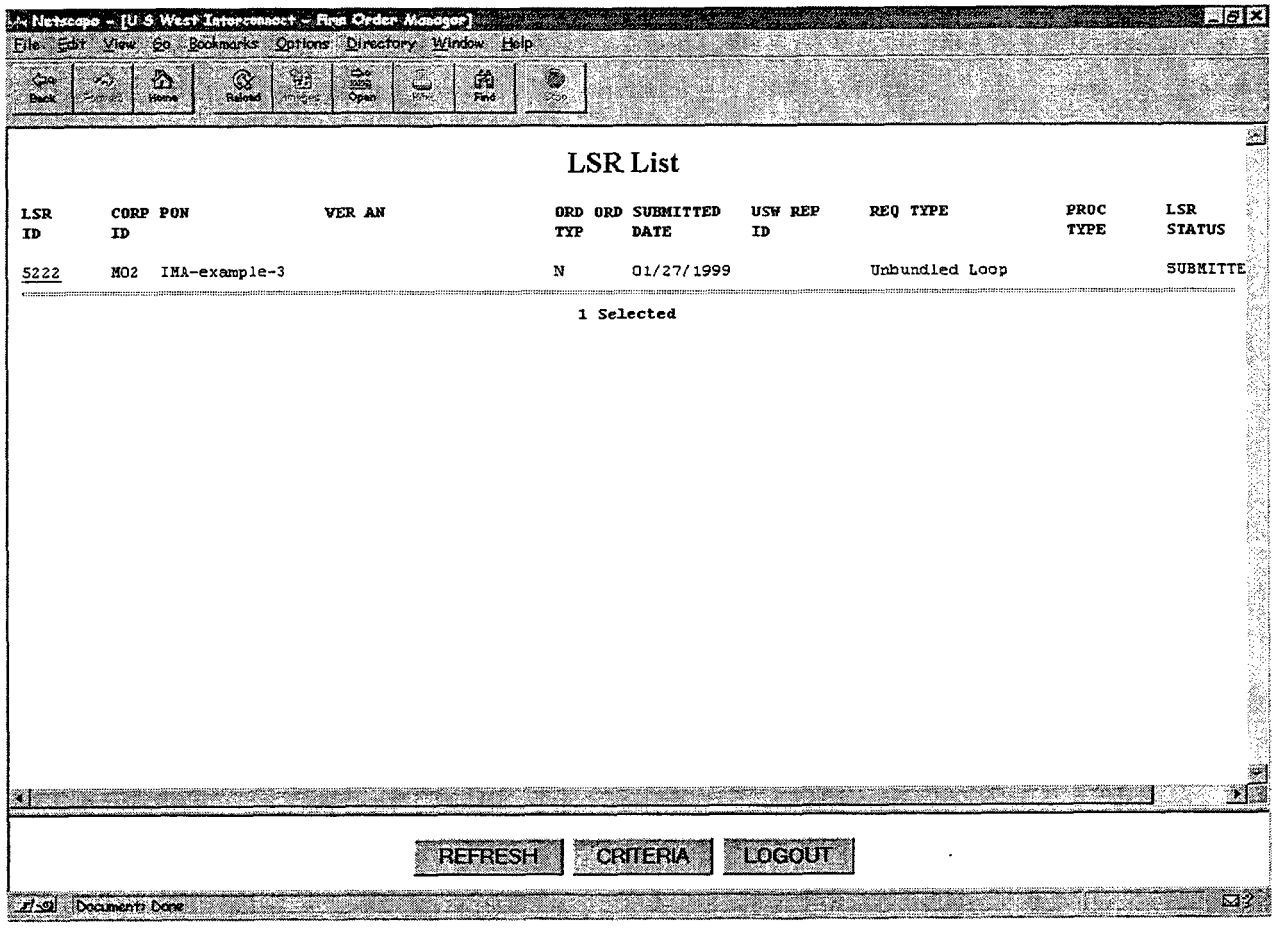
Sample Order – New Unbundled Loop

LSR Selection Screen. Allows an ISC representative to query for a set of LSRs.



Sample Order – New Unbundled Loop

LSR List Screen. Displays the list generated based on the criteria entered on the LSR Selection Screen. The representative can view an LSR by clicking on the LSR ID number.



LSR List

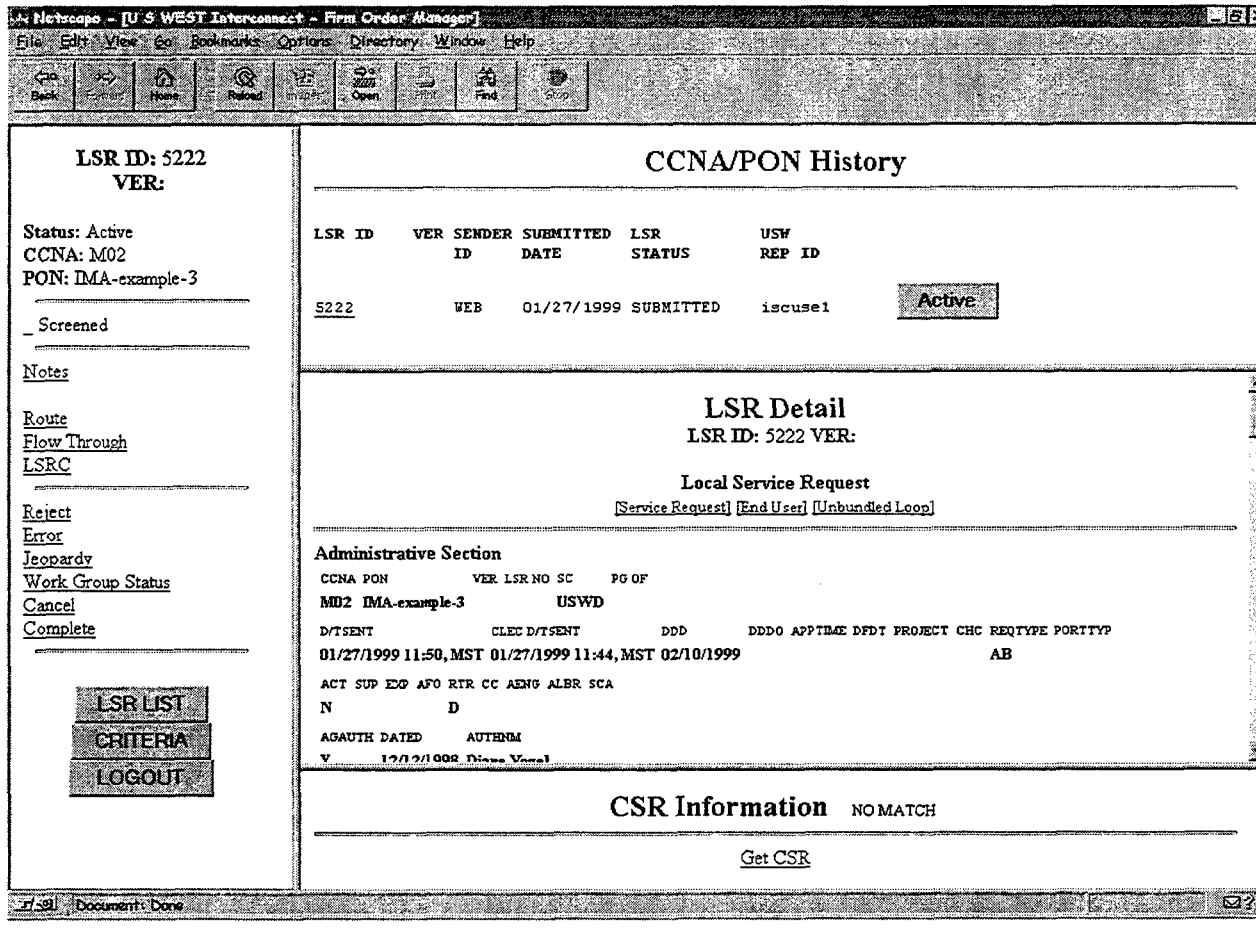
LSR ID	CORP ID	PON	VER	AN	ORD TYP	ORD SUBMITTED DATE	USW REP ID	REQ TYPE	PROC TYPE	LSR STATUS
5222	MO2	IMA-example-3			N	01/27/1999		Unbundled Loop		SUBMITTE

1 Selected

REFRESH CRITERIA LOGOUT

Sample Order – New Unbundled Loop

LSR View screen. This screen provides a view of the submitted LSR and additional information. The LSR detail shows LSR information as entered into IMA. The left-hand column displays links to other FOM screens. The CCNA/PON history shows a history of the LSR. The CSR information frame allows the ISC representative to pull up the CSR for the account.



Sample Order – New Unbundled Loop

LSR Detail screen. Displays the submitted LSR.

Netscape - [U S WEST Interconnect – Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

LSR ID: 5222
VER:

Status: Active
CCNA: M02
PON: IMA-example-3

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

LSR Detail

LSR ID: 5222 VER:

Local Service Request

[Service Request] [End User] [Unbundled Loop]

Administrative Section

CCNA PON VER LSR NO SC PG OF
M02 IMA-example-3 USWD

D/TSENT CLEC D/TSENT DDD DDDO APPTIME DFDT PROJECT CHC REQTYPE PORTTYP
01/27/1999 11:50, MST 01/27/1999 11:44, MST 02/10/1999 AB

ACT SUP EXP AFO RTR CC AENG ALBR SCA
N D

AGAUTH DATED AUTHNM
Y 12/12/1998 Diane Vogel

ACTL AI APOT LST LSO TOS SPEC
2

NC NCI SEC NCI IBT RPON RORD
LX-- 02QC3.RVT 02RV2.O

LSP AUTH LSP AUTH DATE LSP AUTH NAME CIC

CUST

Bill Section

BI1 BAN1 BI2 BAN2 BAPC ACNA EBD
303-B11-9102-999 12B

BILLNM SBILLNM TE
MCI G

STREET FLOOR ROOM CITY STATE
1005 17 St 16 1690 Denver CO

ZIP CODE BILLCON TEL NO VTA
80202

Contact Section

INIT TEL NO EMAIL FAX NO
Wendy Teepe 303-896-4102 wteepe@uswest.com 303-965-1908

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE
1005 17th 16 1690 Denver CO 80202

IMPCON TEL NO PAGER
Diane Vogel 303-999-9999

ALT IMPCON TEL NO PAGER

DSGCON DRC TEL NO FAX NO EMAIL
Diane Vogel 303-999-9999 303-999-9999

STREET FLOOR ROOM/MAIL STOP CITY STATE ZIP CODE

Remarks Section

REMARKS

Sample Order – New Unbundled Loop

LSR Detail screen (continued).

LSR ID: 5222
VER:

Status: Active
CCNA: M02
PON: IMA-example-3

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

End User Information
[Service Request] [End User] [Unbundled Loop]

Administrative Section

PON	VER	DQTY
IMA-example-3		0

Location and Access

NAME
Diane Vogel

ANV
N

STREET
205 N COLORADO ST

FLOOR ROOM BLDG AHN ROUTE BOX CITY STATE ZIP CODE
CASA GRANDE AZ 85222

LCON TEL NO APT CON

EUMI ACC
Access Instructions

RATE ZONE
01

CPE Section

CPE MFR CPE MOD

Inside Wire

IWO IWBAN IWCON TEL NO

Bill Section

AN EAN FBI BILLNM

SBILLNM STREET FLOOR ROOM
205 N COLORADO ST

CITY STATE ZIP CODE
CASA GRANDE AZ 85222

BILLCON TEL NO SSN

Remarks Section

REMARKS

Sample Order – New Unbundled Loop

LSR Detail screen (continued).

LSR ID: 5222
VER:

Status: Active
CCNA: M02
PON: IMA-example-3

_ Screened

Notes

Route
Flow Through
LSRC

Reject
Error
Jeopardy
Work Group Status
Cancel
Complete

LSR LIST
CRITERIA
LOGOUT

Unbundled Loop
[Service Request] [End User] [Unbundled Loop]

Administrative Section

PON	VER	AN	LQTY	ORD	CB
IMA-example-3	1				

Hunting Section

HREF NUM HA HN TYP HID TLI HUNT SEQ

Service Details Section

REF NUM RNEX LNA TN PIC LPIC
1 N

MATN TER SDI OTN TSP SAN

CKR ECCKT FPI

NIDR DISCM
Y

IWJK IWJQ

SGNL PULSE TBE CFA SEC CFA
101 T1 2 CSGRAZMADC0 CSGRAZ08N01

FA FEATURE FEATURE DETAIL

Remarks Section

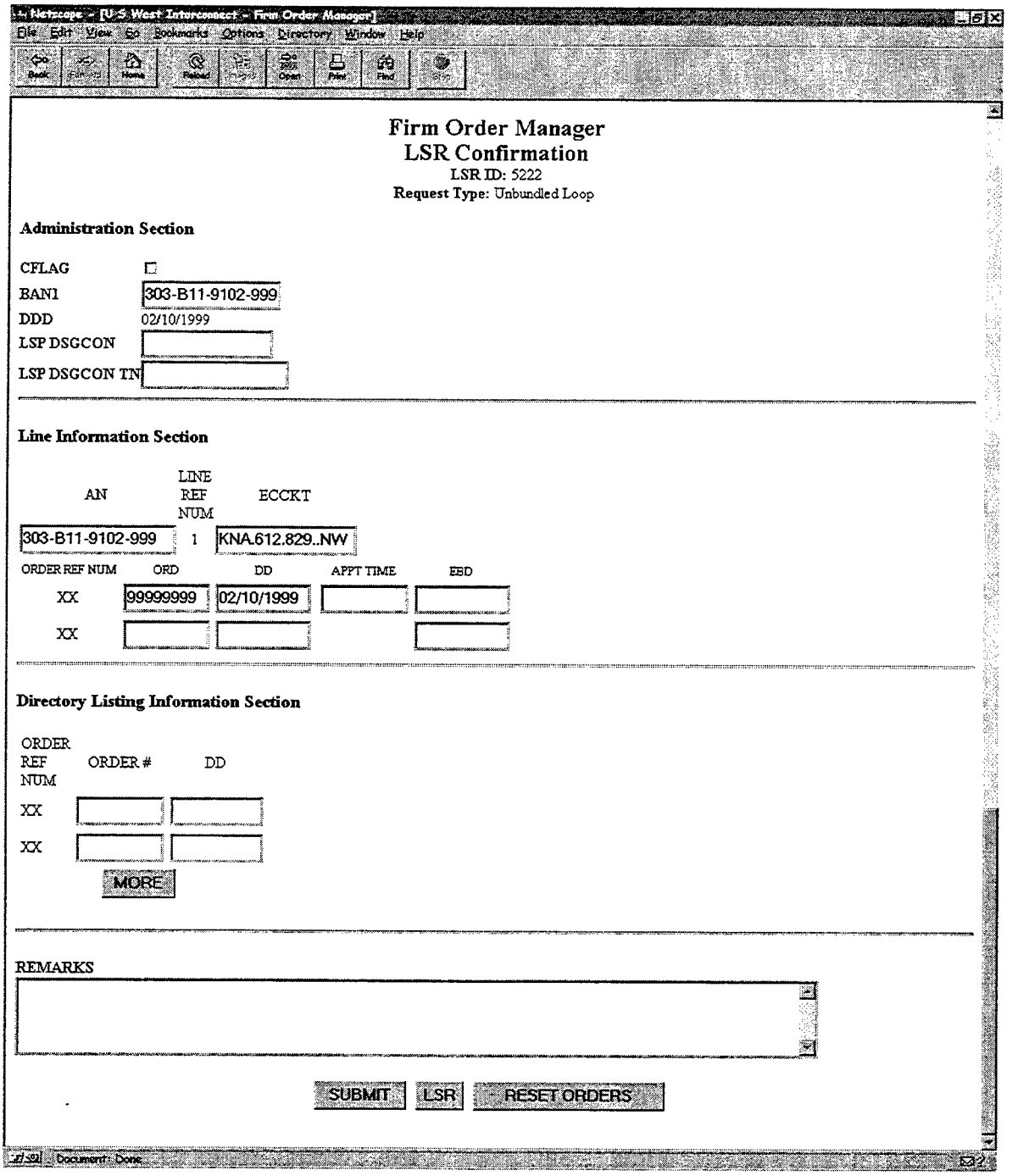
REMARKS

LSR ID: COMPARE

Document: Done

Sample Order – New Unbundled Loop

LSR Confirmation screen. After a service order has been entered into the U S WEST SOP, the ISC representative access the LSR Confirmation screen to add needed information to the Firm Order Confirmation (FOC) that is sent to the CLEC.



Firm Order Manager
LSR Confirmation
LSR ID: 5222
Request Type: Unbundled Loop

Administration Section

CFLAG ☐
BAN1 303-B11-9102-999
DDD 02/10/1999
LSP DSGCON
LSP DSGCON TN

Line Information Section

AN	LINE REF NUM	ECCKT
303-B11-9102-999	1	KNA.612.829..NW

ORDER REF NUM	ORD	DD	APPT TIME	EBD
XX	99999999	02/10/1999		
XX				

Directory Listing Information Section

ORDER REF NUM	ORDER #	DD
XX		
XX		

MORE

REMARKS

SUBMIT LSR RESET ORDERS

Sample Order – New Unbundled Loop

LSR Confirmation Review. This screen allows the ISC representative to review the LSR Confirmation before sending it to the CLEC.

Netscape - [U S West Interconnect - Firm Order Manager]

File Edit View Go Bookmarks Options Directory Window Help

Back Forward Home Reload Images Open Print Find Stop

Firm Order Manager
LSR Confirmation Review

REP NAME U S WEST Rep

REP TN 888-796-9087

EMAIL ID wteepe@uswest.com

FAX # 303-965-1908

```
LSRC Summary for LSR_ID:  S222

######## Administration Section ##############################################

  CCNA  PON----------  VER  LSR-NO  CFLAG
  MO2   IMA-example-3              N

  INIT-------  CD/TSENT
  Wendy Teepe

  IBT  CN-TYP  CHC  FDT  DFDT  DDD-------
       D                       02/10/1999

  BAN1------------  LSP-DSGCON  LSP-TELNO
  303-B11-9102-999

######## Line Information Section ############################################

  REF-NUM  AN--------------  SAN
  1        303-B11-9102-999

  RNEX  ECCKT--------------
        12.TKNA.612.829..NW

  MATN  CKR  ISPID


  SDI  CFA-----------------------------
       101 T1 2 CSGRAZMADCO CSGRAZ08N01

  SEC-CFA  CFTN  TER


######## ORDER SECTION FOR LINE REF NUM: 1   ################################

  ORDER-REF-NUM  ORD------  DD--------  APPT-TIME  EBD
  1              N99999999  02/10/1999

######## REMARKS SECTION #####################################################

REMARKS
```

E-MAIL | FAX | E-MAIL and FAX | PREVIOUS | LSR

Document: Done

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: Sample Order New Unbundled Loop

Confidential/Proprietary Designation Rationale:

These pages are screen prints from the internal service order processor. This information is considered proprietary because it denotes how U S WEST's internal systems are accessed and this information is not disclosed outside of U S WEST.

IMA FUNCTIONAL PROCESS DESCRIPTIONS AND COMPARISONS

1. **PRE-ORDERING**
2. **ORDERING & PROVISIONING**
3. **REPAIR**
4. **BILLING**

1. PRE-ORDERING

In contrast with the Federal Communications Commission's (FCC) definitions of "pre-order" and "order" activities, U S WEST has no separate pre-order and order processes. Pre-ordering activities generally occur in the context of negotiating a service order. However, so as to facilitate a comparison of the FCC required functions provided by Interconnect Mediated Access (IMA) with the functions performed by a U S WEST customer service representative, some U S WEST order functions will be discussed in the pre-order section. The pre-order section has been organized to present descriptions of internal U S WEST functions for both Plain Old Telephone Service (POTS) and non-POTS related services followed by a description of how the same functions and services are supported through the IMA interface. Next, unbundled network elements and miscellaneous products are discussed. Lastly, a comparison analysis of the pre-order process is presented.

The activity referred to as pre-order, for POTS and non-POTS, is comprised of seven major functions: address verification, facility availability, carrier listing, service availability (POTS only), Customer Service Record (CSR) review, telephone number process, and appointment scheduling. Internal U S WEST representatives perform these functions in separate steps using various Operations Support Systems (OSS) and diverse interfaces. IMA allows competitive local exchange carrier (CLEC) representatives to perform these functions using a single interface to access the same OSSs the U S WEST retail representatives use.

PRE-ORDER FUNCTIONS POTS AND NON-POTS PRODUCTS

U S WEST customer service representatives perform seven typical functions, for retail POTS and non-POTS service orders. CLEC representatives can choose to skip any or all of the pre-order functions. If an order that is submitted contains invalid or missing data, the CLEC representative has the opportunity to correct the information and resubmit the order without losing any data previously entered.

The CLEC representative, using IMA, can perform the same pre-order functions that are used by U S WEST retail representatives. These pre-order transactions are as follows:

Address Verification

Before a service order can be created, the U S WEST retail representative must verify the address where service is to be established to ensure that the proper address is located. Valid street addresses are important because address data is contained in several U S WEST systems and is critical for installation, repair, billing and E911. Incorrect addresses will cause an order to error, which can result in manual activity.

For non-POTS, the U S WEST representative accesses PREMIS/CNum directly to obtain address verification.

When service pre-exists at the service location, the CLEC representative using IMA need only enter the Working Telephone Number (WTN) and the zip code of the service location address to request address verification. When adding new service, the CLEC representative enters the service address to request address verification. Using the information provided, IMA determines the appropriate U S WEST OSS system to access (PREMIS/ CNum), validates the address, and saves the

information to pre-populate related fields on other IMA screens. Up to ten addresses are retained at any one time, and are used to pre-populate address-related fields on other IMA pre-order and order screens.

Facility Availability

The U S WEST retail representative determines the availability and characteristics of telephone facilities in the area to provide new or additional service as requested by the customer. For both POTS and non-POTS, a U S WEST representative uses the Facility Check interface to obtain a preliminary indication regarding the availability of the requested facilities at the customer's service address. Facility Check retrieves its information from the U S WEST Loop Facility Assignment Control System (LFACS).

The CLEC representative can choose from five different types of facility availability checks. The five types of facility check are for: (1) design services, (2) high capacity, (3) convert POTS to unbundled loop, (4) POTS, and (5) ISDN loop qualification. These requests return information similar to that given to a U S WEST representative from the Facility Check interface. From the information returned, the CLEC representative can determine the availability and characteristics of services, in the area, as requested by the customer. The information presented for Facility Check by IMA is retrieved from LFACS.

Carrier Listing

A U S WEST representative retrieves the list of available long distance carriers so that the customer can choose a carrier. The randomized available carrier list will depend on the location of the customer's service. The U S WEST representative uses the Facility Check interface to request the carrier list from PREMIS.

The CLEC representative does not need to perform this function as a separate step. As part of the functions performed during the Service Availability step, a list of available long distance carriers is provided.

Service Availability

A U S WEST representative retrieves the list of available services at the customer's service address to ensure that customer-requested POTS-related services can be satisfied. The U S WEST representative types the telephone number on the first SONAR screen and then navigates through various SONAR screens until reaching the screen that displays available services. SONAR returns an available services list comprised of Universal Service Order Codes (USOCs) which will vary dependent on the location of the customer's request for POTS service. All available POTS product codes (USOCs), with a brief product name, and the associated U S WEST retail recurring and non-recurring charge rates are displayed in SONAR. If the U S WEST representative wishes to investigate service availability for another telephone number, he or she must begin again at the first SONAR screen and repeat the process. The Pre-Order process for many non-POTS products does not include the determination of service availability. Instead, the internal U S WEST representative uses a printed job aide to manually determine appropriate USOCs for non-POTS related products.

The CLEC representative can request, via IMA, a list of available resale POTS product codes (USOCs) including a brief description, available long distance carriers, and related servicing switch information. The CLEC representative must type in the desired NPA (Number Plan Area), /NXX (telephone number prefix), and specify whether the customer desires

business or residential service. The response can be bounded, or limited, by entering a filtering mask based on USOCs. A screen with the list of available product codes, descriptions, and non-recurring and recurring rates is returned and may be kept viewable while reviewing the CSR or the LSR forms during order data entry. The list of POTS product codes displayed in IMA is based on the product list made available to internal U S WEST SONAR users. The CLEC representative uses job aides to determine associated USOCs for non-POTS related products.

Customer Service Record Review

For both POTS and non-POTS, the U S WEST retail representative reviews the CSR to determine how an existing customer is listed in the directory, where the customer's bill is directed, and the services currently provided to the customer. For some transactions, such as conversions, a U S WEST representative views limited CSR information using SONAR. For other transactions, a U S WEST representative enters the telephone number to retrieve the CSR from Business Operation Support System (BOSS) for U S WEST's central and eastern region customers, or Customer Account Record System (CARS) for western region customers.

Getting a CSR for the working telephone number (WTN) allows the CLEC representative to immediately review the current directory listing, billing name, billing address, and the services and equipment at the service location(s). The CLEC representative enters basic information, such as WTN, customer name and address, to retrieve the CSR. When a WTN is not applicable to the service, the CLEC representative can enter the circuit ID associated with the service to retrieve the appropriated CSR. IMA accesses and retrieves the CSR from BOSS/CARS. IMA returns the related LSR information to the CLEC in an understandable format.

Telephone Number Process

Telephone number selection is necessary when requesting a new service, a new line on an existing service, change of telephone number, or moving to an area outside of the current local service office. In addition to typical address information, the U S WEST retail representative can also request that available telephone numbers be returned during address verification performed using PREMIS. Optionally, the U S WEST representative can select a telephone number, for POTS orders, using SONAR, during the order entry process. This telephone number should be the number assigned to the finished service when the order is provisioned. The SONAR interface supports reserving this telephone number, in PREMIS, during the order process.

As part of IMA, the telephone number process consists of four functions: telephone number availability, selection, exchange and return. For POTS products, the IMA interface enables a CLEC representative to select a telephone number that will be the number assigned when the service is provisioned. The CLEC representative can choose to reserve the telephone number as part of the pre-order or the order process. The

selected TN(s) has a specific timeframe, 24 business hours, in which to be included on a submitted service request, or the TN(s) is automatically returned and made available. Selection of a telephone number for appropriate non-POTS products is not available using IMA at this time. However, it is not available for U S WEST retail either. The CLEC representative may obtain this type of telephone number by calling the ISC; a process which is similar to that used by a U S WEST representative.

POTS-related functions in IMA enable CLEC representatives to offer alternate telephone numbers if the customer does not like the initial selection. For POTS products, IMA offers up to nine alternates. In SONAR, only one telephone number is presented to the U S WEST service representative. If the customer does not like the telephone number, the U S WEST representative must enter another OSS, PREMIS, to select an alternate telephone number. Three telephone numbers are presented in PREMIS from which the customer may select.

In certain cases, requirements for telephone number selection exceed the automated capabilities of both internal and IMA interfaces. For example, to request vanity telephone number selection, or orders with more than nine lines, both U S WEST retail and IMA users must call the U S WEST department which selects telephone numbers according to customer specifications. SONAR, IFE and IMA interfaces then allow these manually selected telephone numbers to be entered on the order so they can be provisioned for service.

Appointment Scheduling

If a technician needs to be dispatched to the premises, an appointment can be scheduled. For POTS, the U S WEST retail representative

accesses the Appointment Scheduler system either directly or by using SONAR during the order process. This system will return to the representative a calendar of available appointments. Using a printed job aide, the representative calculates the due date based on the type of service being requested. An appointment can then be scheduled either on or after the calculated due date. If the appointment is scheduled after the calculated due date, the actual due date entered on the service order is the same date as the appointment date. The customer chooses an appointment, and the U S WEST representative then enters the agreed-upon date, time and other miscellaneous information in SONAR. For non-POTS services, the U S WEST representative uses the printed job aide in the same way as for POTS service, except that the information is then entered into IFE, not SONAR, and provided to the customer.

The IMA interface also uses the Appointment Scheduler system for POTS orders, in a similar manner as it is accessed internally by SONAR. A reserved appointment time has a specific timeframe, 24 business hours, in which to be included on a submitted service request, or the appointment is automatically returned and made available. If an order is submitted without an appointment, and one is required, the ISC will contact the CLEC to make an appointment. Regardless of whether an appointment is scheduled, the CLEC representative uses the standard intervals published in the Interconnection and Resale Resource Guide (IRRG), to determine the due date and time for completion of orders, which is the same process used by the U S WEST retail representative.

PRE-ORDER FUNCTIONS FOR UNBUNDLED NETWORK ELEMENTS

Because there is no retail analogue for the pre-ordering of unbundled network elements (UNEs), there is no internal U S WEST legacy systems comparable to the IMA system described in this section.

Unbundled Loop

Only two pre-order activities are necessary when ordering an unbundled loop; address verification and facility check. An additional pre-order function that could be performed is a CSR review. The address verification and CSR review functions can be performed, using IMA, in the manner previously described in this section.

Facility Availability

The CLEC representative can also use IMA to obtain an estimate regarding the availability and characteristics of services in the area necessary to provide unbundled loop service as requested by the customer. Either the service address, WTN and zip code or the circuit ID, Local Service Office (LSO) and zip code are entered, using IMA, to determine if a POTS loop can be converted to an unbundled loop. The information presented is retrieved from LFACS.

Unbundled Switch Analog Line Side Port and Unbundled Switch Digital Line-Side Port

The telephone number transactions apply to a request for an unbundled switch port. This is because U S WEST performs the switching function with a switch port. Two other transactions could be used: address verification and CSR review. These functions can be performed, using IMA, in the manner previously described in this section.

Interim and Local Number Portability Products

While no pre-order activities are necessary for ordering interim number portability (INP) or local number portability (LNP), certain pre-order activities may be performed using IMA. The following two functions could be used: address verification and CSR review. These functions can be performed, using IMA, in the manner previously described in this section.

PRE-ORDER COMPARISON

As described, U S WEST provides CLECs with pre-order information equal in quality in substantially the same time and manner at it provides to itself. However a limited number of insignificant differences exist. For example, CLECs must select a billing account number (BAN) at the time they complete the local service request forms (LSRs). The BAN identifies the CLEC's summary bill to which the customer accounts belongs. The Ordering and Billing Forum (OBF) required the BAN as part of the LSR and U S WEST has implemented the BAN consistent with the OBF's definition. In contrast, U S WEST' retail representatives do not have to select the billing cycle; the bill date which defines the start of the billing cycle is defined by the NPA/NXX of the customer's telephone number.

There are also several instances in which the processes used by the CLEC's representative are more user-friendly than that employed by the U S WEST representative. The U S WEST representative must log on to many different systems and perform different activities to get the equivalent information that a CLEC representative can access after logging on to just one system, IMA.

2. ORDERING & PROVISIONING

Three major functions make up the ordering and provisioning process: (1) the receipt of a request for service, generally an LSR; (2) service order generation; and (3) service order processing.

U S WEST and CLEC orders use different interfaces on the front end where the request for local services is generated. However, once a service order has been generated, all orders, regardless of their origin, travel the same path through the U S WEST order processes.

The following section first presents descriptions of internal U S WEST and IMA functions for both POTS and non-POTS related services. Next, network elements and miscellaneous products are discussed. Lastly, an analysis of the order and provisioning process is presented.

The basic course of managing and completing a CLEC order is comparable to managing and completing an internal U S WEST service order. There are ten major functions included in the ordering and provisioning phase: product and service selection, customer listing creation, billing information establishment, summary information review, order storage and retrieval, order submission (which includes rejection notices and FOCs, which are provided only to CLECs), supplemental order submission, order inquiry, order completion and posting to the customer service record.

ORDERING & PROVISIONING FUNCTIONS: POTS AND NON-POTS PRODUCTS

Product and Service Selection

For U S WEST retail orders, based on the customer request, the U S WEST representative uses the SONAR internal interface to select from a list of POTS services and products, including lines, features,

maintenance and other services and equipment. Each service or product has a unique code and an associated fee. The list of products presented to the internal representative includes only those available at the current customer location (based on the central office).

For CLECs, the IMA interface uses the same POTS service and product code information displayed in SONAR to provide the CLEC the ability to enter service and product codes from a list. The list provided also includes only those POTS services and products available for a specific NPA/NXX.

For non-POTS services, both the U S WEST retail representative and the CLEC representative must use manual procedures to determine the product and service code information. Both U S WEST and CLEC representatives are provided with a job aide containing the product and service code information.

Customer Listing Creation

The U S WEST retail representative must specify whether the customer desires to appear in the white page directory and whether the customer desires the telephone number be provided through directory assistance. The customer listing includes specific information on how the customer name should appear. For simple listings, the U S WEST representative enters the customer listing information into SONAR. A complex listing is one that requires special indenting and formatting. For complex listings, the U S WEST representative forwards the information, via facsimile, to the internal Operator Information Services (OIS). A representative from this group then enters the information directly into the Listing Services System (LSS).

The IMA interface enables the CLEC to enter and process both simple and complex customer listing information. The ISC transmits complex listings to the internal Operator Information Services (OIS) group for entry directly into LSS.

Billing Information Establishment

With the entry of a U S WEST order for new service, a billing account must be established. Billing account information includes mailing information to direct the bills for monthly charges to the responsible individual at the correct address. The U S WEST retail representative enters the customer's billing name, service address and mailing address number into SONAR for POTS, or IFE for non-POTS service orders.

Although the establishment of billing information for a U S WEST end-user customer has some similarities with the establishment of billing information for a CLEC, they differ in the data that is actually collected. The U S WEST retail unit must enter end-user billing information, because U S WEST bills the end-user for service. Since the CLEC will maintain end-user billing information in its own system and bill its end-users in a manner it considers appropriate, the CLEC must select previously-defined billing information so U S WEST can bill the CLEC for the service.

Prior to the entry of any CLEC order, a billing account (summary bill account) must have been previously established with U S WEST. The CLEC administrator enters the summary billing account number in the CLEC profile. This summary billing account number is then entered as part of the Local Service Request (LSR) form.

U S WEST produces reports for CLECs to support the administration of their accounts. These reports include information on completed service orders, which confirm for the CLECs when their customers' orders have

been successfully provisioned for service on U S WEST facilities. The completion report also tells the CLEC when it can begin billing the customer as its own. A completion report is provided for both new customers and service changes.

A loss report is provided to the CLEC when a customer terminates service and moves to another CLEC or back to U S WEST. CLECs receive disconnect order information on their completion reports. CLECs use the loss report to tell them to stop billing a customer. (Refer to the Order Completion section for additional completion and loss report details.)

Summary Information Review

The U S WEST retail representative views the negotiated service order and reviews it with the customer to make sure it is accurate. The U S WEST representative uses SONAR, or IFE, to review the order and make necessary modifications. When the customer verifies the order, the U S WEST representative enters a function key to proceed.

The CLEC representative can also review order summary information with the customer to make sure it is accurate. Once LSRs have been transmitted, they can be retrieved and reviewed by the CLEC representative. Even partially entered LSRs can be saved, and later retrieved using IMA.

Order Storage and Retrieval

The U S WEST retail representative has the ability to place an unfinished or finished service order in a held "pending" status instead of submitting the service order. The retail representative can use either the order number or the telephone number on the order to later retrieve the held

order. A "pending" service order can be retrieved, edited, completed, or submitted for 30 calendar days.

When the CLEC representative has begun to enter the LSR and chooses to save the partially entered order for retrieval at a later time, the LSR is placed in a pending state (IMA status "pending"). The LSR can be reviewed, edited, re-saved, submitted, or purged from the system for 30 calendar days.

Order Submission

When the customer accepts the order, the U S WEST retail representative submits the order for processing. The submitted service order is sent from SONAR to the Service Order Processor (SOP) for further processing and provisioning. In the case of a non-POTS service, the orders are sent from IFE to the SOP. However, SONAR and IFE do not support all products. For POTS, if SONAR does not support the product being offered, the representative sends an email message to the order center where an order typist retypes the information directly into the applicable SOP (creates a service order). For designed services, the representative types the information in the SOP.

At this stage, the CLEC representative submits the LSR for processing. The IMA interface allows the CLEC representative to know that an LSR has been transmitted to U S WEST (IMA status "submitted"). Once the U S WEST ISC representative has reviewed the LSR (IMA status "in review") and successfully translated the LSR into a service order, it is submitted (IMA status "issued") to the SOP. Once issued, the CLEC is sent a Local Service Request Confirmation (LSRC, also known as a Firm Order Confirmation (FOC)). If an order contains errors (IMA status "errored"), the ISC representative attempts to contact the CLEC to correct

the order and meet the scheduled commitment date prior to rejecting the order (IMA status "rejected"). If the due date for a particular order is in jeopardy of being met, the ISC can enter a jeopardy notification into IMA and send the notification to the CLEC (IMA status "jeopardy"). If the order is not corrected in time to meet the commitment date, the ISC will reject the order (IMA status "rejected"). If U S WEST rejects the order, a reject notification is returned detailing the reasons for order rejection. Once the order has been issued, an LSRC can be returned electronically (via E-mail) or by facsimile.

Supplemental Order Submission

The original service order is corrected or canceled by the issuance of a supplemental service order. The U S WEST representative corrects the submitted service order, in the SOP or in SONAR, and a supplemental service order is then generated.

The IMA interface allows the CLEC representative to create supplemental orders, and even recalls the original order when an IMA generated-order needs modification. Only the fields being modified/supplemented need to be completed. Supplemental orders submitted via IMA are processed in the same manner as the original order, including sending the CLEC an LSRC (also known as an FOC). An LSRC is generated and returned to the CLEC upon successful entry of the supplemental order in the SOP. This LSRC is in addition to the LSRC generated from the original service order.

Order Inquiry

A U S WEST retail representative may inquire about the status of a pending service order by retrieving the order and reviewing it with the customer. The representative enters the telephone number or order

number in the SOP and the service order is retrieved. The order can also be viewed and status checked using the Work Force Administration - Dispatch Out (WFA-DO) system. The status available in WFA-DO is the status of the order in the assigned technician work log. In the case of a non-POTS service, the Event Tracker system can also be used to view the service order status.

The CLEC representative can inquire about the status of an order using IMA. As the order progresses through the order submission and order process phases, the order status is updated in the IMA Firm Order Management (FOM) database.

Order Completion

Both U S WEST-generated and IMA-generated service orders are processed in the same manner once the orders enter the SOP. The SOPs and the various provisioning systems receive and process the service order. Upon successful completion of provisioning, the service order is updated and the status is changed to "complete" in a nightly batch run. Service order data is extracted from the SOP and used to generate both the completion and loss reports. Both U S WEST and CLECs receive loss reports. For U S WEST, this report provides information on its customers that transferred to a CLEC or disconnected service with U S WEST. For a CLEC, this report provides information on its customers that transferred service to another CLEC, have returned to U S WEST, or disconnected service with the CLEC. The completion report is produced, for CLECs only, to detail those customers that were successfully transferred to the CLEC or established new service. At the same time, this information is used to update the status of a CLEC order in the IMA FOM database to "complete." U S WEST retail does not receive any

proactive order completion information. Both of these daily reports are transmitted electronically via direct connect Network Data Mover (NDM), dial-up NDM or electronic facsimile.

Posting to Customer Service Record

Once either a CLEC or U S WEST service order is provisioned, its internal status is changed in the SOP to "complete" in a nightly batch run. All completed service orders are sent to the billing system, CRIS. After the billing related information is updated in CRIS, the service order information is sent nightly to the system that presents the customer service record, BOSS/CARS.

ORDERING & PROVISIONING FUNCTIONS FOR UNBUNDLED NETWORK ELEMENTS

Because there is no retail analogue for the ordering and provisioning of unbundled network elements, there is no internal U S WEST legacy systems to compare with the provisioning of UNE LSRs submitted using IMA.

Unbundled Loop

The basic course of managing and completing an unbundled loop is similar to that of non-POTS products however, differences do exist. For example, the processing of an unbundled loop order does not include the selection of a telephone number or the listing of customer information. There are nine major functions included in the ordering of an unbundled loop: billing information establishment, summary information review, order storage and retrieval, order submission, supplemental order submission, order inquiry, order completion, and posting of the CSR.

Billing Information Establishment

Prior to the entry of any CLEC order, billing accounts (summary bill accounts) must have been previously established by U S WEST. The CLEC administrator enters summary billing account numbers in the CLEC profile. The CLEC representative must select previously defined billing information, which is then entered as part of the LSR form.

Summary Information Review

The CLEC representative can also review order summary information with the customer to make sure it is accurate. Once LSRs have been transmitted, they can be retrieved and reviewed by the CLEC representative. Even partially entered LSRs (a pending LSR) can be saved, and later retrieved using IMA.

Order Storage and Retrieval

When the CLEC representative has begun to enter the LSR and chooses to save the partially entered order for retrieval at a later time, the LSR is placed in a pending state (IMA status "pending"). A pending LSR can be reviewed, edited, re-saved, submitted, or purged from the system for a specific timeframe, 30 calendar days.

Order Submission

The IMA interface allows the CLEC representative to know that an LSR has been transmitted to U S WEST (IMA status "submitted"). Once the U S WEST ISC representative has reviewed the LSR (IMA status "in review") and successfully translated it to a service order, which is submitted (IMA status "issued") to the SOP, the CLEC is sent an LSRC (also known as an FOC). If an order contains errors (IMA

status "errored"), the ISC representative attempts to contact the CLEC to correct the order and meet the scheduled commitment date prior to rejecting the order (IMA status "rejected"). If the due date for a particular order is in jeopardy of being met, the ISC can enter a jeopardy notification into IMA and send the notification to the CLEC (IMA status "jeopardy"). If the order is not corrected in time to meet the commitment date, the ISC will reject the order (IMA status "rejected"). If U S WEST rejects the order, a reject notification is returned detailing the reasons for order rejection. Once the order has been issued, an LSRC can be returned electronically (via E-mail) or by facsimile.

Supplemental Order Submission

The IMA interface allows the CLEC representative to create supplemental orders, and even recalls the original order when an IMA generated-order needs modification. Only the fields being modified/supplemented need to be completed. Supplemental orders submitted via IMA are processed in the same manner as the original order, including sending the CLEC an LSRC (also known as an FOC). A LSRC is generated and returned to the CLEC upon successful entry of the supplemental order in the SOP. This LSRC is in addition to the LSRC generated from the original service order.

Order Inquiry

The CLEC representative can inquire about the status of an order using IMA. As the order progresses through the order submission and order process phases, the order status is updated in the IMA Firm Order Management (FOM) database.

Order Completion

Once the service order has been entered into and successfully processed by the SOP, the service order is updated and the status is changed to "complete" in a nightly batch run. The SOP sends the service order information to CRIS.

Posting to Customer Service Record

All completed service orders are sent to the billing system, CRIS. After the billing related information has been updated in CRIS, the service order information is sent nightly to the system that presents the customer service record, BOSS/CARS.

Unbundled Switch Analog Line Side Port and Unbundled Switch Digital Line-Side Port

The basic course of managing and completing an order for an unbundled switch analog line-side port or an unbundled switch digital line-side port, using IMA, is similar to that of a non-POTS product. There are nine major functions included in the ordering of these elements: product and service selection, billing information establishment, summary information review, order storage and retrieval, order submission, supplemental order submission, order query, order completion, and posting of the customer service record. All of these functions are performed in a manner as described in this section for unbundled loop.

Unbundled Dedicated Interoffice Transport (UDIT)

The CLEC representative interfaces with EXACT (EXchange Access Control Tracking) to order this type of service. The ASR (Access Service Request) is created by the CLEC representative and submitted to

U S WEST for review and completion, and then forwarded to the appropriate SOP.

Shared Transport and Customized Routing

Ordering shared transport is accomplished with the ordering of unbundled switch ports: simply, a line class code is included on the request for a line-side switch port. This assures that the CLEC customer traffic will be routed over shared trunks. Customized routing is ordered on the ASR for a trunk-side switch port in conjunction with an order (ASR) for UDIT. These orders are related and the necessary information is included so that U S WEST knows to connect the specific trunk-side switch port with the specified trunk group.

UNE Combinations

U S WEST allows the CLECs to order unbundled network elements individually or for combination. The CLEC can use IMA to order the unbundled loop for combination with the unbundled analog switch port, or the unbundled digital switch port for combination with shared transport, or for combination of all three, by using a related purchase order number (RPON) and the line class code field on the LSR. If the CLEC would prefer unbundled direct interoffice transport to shared transport, another interface (EXACT) is used, but the RPON can still be used.

Interim and Local Number Portability (INP and LNP)

The basic course of managing and completing an order for INP and LNP, using IMA, is similar to that of non-POTS product. There are nine major functions included in the ordering of INP and LNP: product and service selection, billing information establishment, summary information review, order storage and retrieval, order submission, supplemental order

submission, order inquiry, order completion, and posting of the customer service record. All of these functions are performed in a manner described in this section for unbundled loop.

ORDERING & PROVISIONING COMPARISION

As described, U S WEST provides CLECs with order information equal in quality in substantially the same time an manner as it provides to itself. However differences may exist. Functionality that requires manual processing by a CLEC representative generally requires manual processing by the U S WEST representative, as well. Therefore, U S WEST's current infrastructure can support the manual processing required as a result of the additional CLEC volume. Additionally, IMA's design has been based on OBF standards, allowing the CLEC representative some consistency with other Bell Operating Companies (BOCs) employing national standards. U S WEST representatives, on the other hand, perform ordering functions using diverse non-OBF standard interfaces.

3. REPAIR

At U S WEST, the activity referred to as repair is comprised of a set of transactions involving a trouble report. A trouble report or "ticket" is the fundamental unit of all repair activities. A trouble ticket identifies the customer, the service with which he or she is experiencing trouble, a description of the trouble, and the status of the activities taken to resolve the trouble. Each repair transaction involves some action in the life cycle of a trouble report.

Six major repair functions will be described in detail regarding how they are implemented for both U S WEST and CLECs. These major functions are: (1) create and submit a trouble report, (2) maintain a trouble report, (3) inquire on

the current status of a trouble report, (4) receive active notification of status change, (5) cancel a trouble report, and (6) close a trouble report.

There are additional functions in the life-cycle of a trouble ticket that will not be described in detail because they are functions that will always be performed by U S WEST's OSSs and U S WEST personnel, for both U S WEST and CLEC-originated trouble tickets. These are functions such as screening, routing and dispatching tickets. They include direct operations on network elements, such as detailed testing and actual maintenance of network hardware and software. These back-end functions of repair reflect the fact that the facilities in question are owned and operated by U S WEST, whether the end-user customer is serviced by U S WEST or a CLEC. At the facilities level, U S WEST responds to trouble tickets in a non-discriminate manner, regardless of their source.

HOW REPAIR FUNCTIONS VARY FOR DIFFERENT PRODUCTS U S WEST OFFERS (BOTH TO ITS OWN RETAIL CUSTOMERS AND TO CLECS)

Repair functions differ slightly for POTS as opposed to non-POTS offerings. Resale products can be POTS or non-POTS, and, as resale products, they are treated similarly to the internal products to which they correspond. This is because the basic characteristics of the products are very similar, regardless of whether they are sold to a CLEC for resale or sold directly to a U S WEST retail customer. For example, repair functions for resale POTS are conducted similarly to repair functions for POTS sold to U S WEST retail customers. Unbundled network elements, on the other hand, are designed specifically as products which are offered to CLECs, and are not analogous to products which U S WEST offers to its own retail customers. However, unbundled network elements have characteristics that require them to be treated like non-POTS offerings for purposes of repair, so the descriptions

that follow for non-POTS repair apply to repair of unbundled network elements.

INTERFACES AND OSS USED INTERNALLY BY U S WEST TO PERFORM REPAIR FUNCTIONS

U S WEST uses two major OSS for repair functions: Loop Management Operation System (LMOS) and Work Force Administration/Control (WFA/C). POTS repair tickets are processed by LMOS and non-POTS repair tickets are processed by WFA/C. Internally, U S WEST representatives access these OSS using a graphical interface called DELIVER. DELIVER provides slightly different capabilities for accessing POTS repair functions in LMOS from what it does for non-POTS repair functions in WFA/C.

LMOS and WFA/C in turn use additional OSS. All systems that are used by LMOS and WFA/C are used equivalently for U S WEST and CLEC repair functions. These systems perform the functions described above, such as screening, routing and dispatching tickets, testing circuits and resolving trouble. The back-end repair systems, including some of the detailed functions of LMOS, WFA/C and the systems with which they communicate, will not be described in detail for comparison of U S WEST and CLEC capabilities. This is because such systems are not used differently for CLEC- and U S WEST-originated trouble tickets. The comparison in this document will focus on the interfaces and the major OSS functions in the repair transaction life cycle.

INTERFACES AND OSS OFFERED BY CLECS TO PERFORM REPAIR FUNCTIONS

U S WEST offers specially developed interfaces to enable CLECs to access the same OSS functions U S WEST uses internally to handle repair. As

stated earlier, the repair functions needed by CLECs are those that enable them to interact with the front-end of the repair life cycle: the abilities to create, modify, inquire, receive active notification of status changes, cancel, or close a ticket. The interfaces available to CLECs are designed specifically to support these functions.

CLECs can use IMA as a repair interface for both POTS and non-POTS offerings. For POTS repair, CLECs use IMA to access the capabilities of LMOS. For non-POTS repair, including unbundled network elements, CLECs use IMA to access the capabilities of WFA/C. Whether IMA is providing access to LMOS or WFA/C, it uses MEDIated ACCess (MEDIACC) as a gateway to the applicable U S WEST OSS. MEDIACC is an interface to the U S WEST repair systems that was originally developed for interexchange carriers to submit trouble tickets and is fully compliant with national standards. IMA formats repair transactions according to MEDIACC specifications.

REPAIR FUNCTIONS FOR POTS, NON-POTS AND UNBUNDLED NETWORK ELEMENTS

The following sections describe each of the six major repair functions - create, inquire, modify, receive active notification of status changes, cancel, and close a trouble ticket. Within each section (i.e., Create a Trouble Ticket) the first part describes the functionality available to U S WEST representatives for U S WEST retail customers and the second part describes the comparable functionality available to CLEC representatives using IMA to perform repair functions for their retail customers.

All major repair functions are described first for POTS, including a comparison of U S WEST and CLEC access to these functions. Following that, non-POTS repair functions are described and compared. Non-POTS

repair functions are described only where they differ from POTS repair functions. Where POTS and non-POTS repair functions are essentially the same, the description and comparison are not repeated for non-POTS. Non-POTS repair functions are used for both non-POTS resold products and for unbundled network elements.

Create a Repair Ticket

Creating a trouble ticket involves entering sufficient data to describe the trouble and to submit the ticket from the interface to the OSS that creates a record of the ticket and tracks its status. Entering sufficient data requires identifying the customer and describing the trouble as reported. U S WEST retail representatives verify that they have the correct customer by retrieving a line record (information about the line in question) and asking the customer to verify their address and comparing the customer's address with the address on the line record. U S WEST representatives may also perform a feature verification to determine if a customer has called with a mistaken impression of what features they expect to use with their telephone service. To do this, the U S WEST representative retrieves the customer service record and determines what has been ordered for the account. Additionally, an inquiry of the switch is made to determine which features have been recorded at the switch. Creating a ticket is complete when the U S WEST representative submits the ticket from the interface to LMOS for subsequent activity by internal U S WEST repair technicians and representatives. When a trouble ticket is created in LMOS, LMOS automatically initiates a line test that will be performed by the Mechanized Loop Testing (MLT) OSS. High-level test results may give the U S WEST representative basic information about

the status of the line. Detailed data from the test can be used in back-end U S WEST repair functions to diagnose problems with the line.

A CLEC using IMA for POTS repair can perform the functions described above to create a trouble ticket, although in some situations a call by the CLEC to a U S WEST repair center is also required. A CLEC representative can determine which features have been ordered for a line by querying the customer service record. A CLEC representative can call U S WEST to determine what features have actually been requested on the network for a specific line. A U S WEST representative will query a U S WEST network OSS and provide network feature information to the CLEC. When a CLEC representative submits a trouble ticket, LMOS initiates an MLT line test, just as it does for internally generated tickets. The CLEC can be notified of the high level results by facsimile or email, similar to the active notification of status change (active notification will be discussed in a later section). Alternatively, the CLEC representative can learn the high level results of the line test by calling a U S WEST repair center representative. Both the high level and the detailed test results, however, are best used by U S WEST to investigate and resolve the trouble reported on the line and close the ticket.

Inquire / Modify A Trouble Ticket

For U S WEST representatives handling internal POTS trouble tickets, inquiring and modifying are interrelated. Inquire and modify are separate functions, but they will be discussed together to show their interrelationship. Modifications to a trouble ticket are performed by creating and submitting a new record in the LMOS OSS. The modified trouble ticket is called a subsequent report. Inquiring on the status of a trouble ticket requires the creation of a subsequent report, if only to

indicate that an inquiry was performed. Hence, inquiring creates a minor modification to the ticket.

When U S WEST representatives inquire on a trouble ticket, they enter the telephone number (for POTS service) and retrieve the line information, the history and status of the trouble ticket to date and the high level MLT test results. LMOS requires the representative to create a subsequent report even for this inquiry. This is a means of tracking the fact that the status was checked. If the ticket is merely being inquired upon, the subsequent report is recorded as a "Status Only" report.

When U S WEST representatives seek to update a trouble ticket, they retrieve the ticket by the same means as for an inquiry. They create a subsequent report that updates the original ticket with new information, such as a new or additional description of the trouble, or a new commitment time. Modifications to a trouble ticket may also come from U S WEST internal repair technicians who are acting on the ticket. U S WEST repair technicians control some modifications, such as changes to commitment time. Once U S WEST repair technicians begin working on the network to resolve a trouble ticket, the U S WEST representative will be limited in the aspects of the trouble ticket that can change.

CLEC representatives can use IMA to inquire on the status of a trouble ticket. CLEC representatives select a ticket or tickets based on selection criteria they enter into IMA. They obtain a summary list of tickets that match the criteria. The summary shows the most recent status of the ticket and the date and time that status was set. CLEC representatives can select from the summary list to view additional detail for an individual ticket.

CLEC representatives can modify a trouble ticket using IMA. Once U S WEST repair technicians begin working on the network to resolve a trouble ticket, the CLEC representative is limited in the aspects of the trouble ticket that can change. Once the functions of repair have started, updates are screened to coordinate properly with progress already made on the back-end.

One important example of a ticket modification - canceling a ticket - is enabled by a special function in IMA, which is discussed in a separate section below.

Active Status Change Notification

Active notification of status changes is a special capability of the IMA / MEDIACC interface, which CLECs use to submit POTS trouble tickets to LMOS. Internal U S WEST representatives do not receive active notification of status changes for trouble tickets, but must query the repair OSS to obtain the status.

The IMA/MEDIACC interface to POTS repair functions in LMOS supports active notification to CLEC representatives when changes to the status of a trouble ticket occur. When CLEC representatives create a trouble ticket, they indicate whether they want to receive this notification via facsimile, email, or not at all. If they have chosen facsimile or email, they will receive notification via that medium each time the status of the ticket is updated; for example, from a status of "Open/Active" to "Cleared."

Cancel a Trouble Ticket

Trouble tickets can be canceled by submitting a subsequent report that identifies the ticket as a canceled ticket. Using a subsequent report to accomplish this function makes canceling a ticket similar to modifying a

ticket, except that the result is to notify U S WEST representatives and technicians to cease action to resolve the trouble. The canceled ticket remains as a record that the repair activities ended in cancellation rather than closure of the ticket.

The IMA interface enables CLEC representatives to cancel trouble tickets by providing a special button on an IMA screen. Clicking on this button generates the subsequent report, which indicates the ticket is canceled in LMOS. The ticket can only be canceled without charge up to a certain point in the trouble resolution process. For example, if a technician has been dispatched prior to the time the CLEC entered the cancellation of the trouble ticket, the CLEC may still be charged for the repair activities.

Close a Trouble Ticket

For both U S WEST- and CLEC-generated POTS trouble tickets the tickets are closed by technicians once they have addressed the problems defined on the ticket.

Non-Pots Repair Functions Only As They Differ From Pots Repair Functions

There are two major differences in handling trouble tickets for non-POTS products as compared to POTS products: (1) non-POTS tickets contain slightly different information on the ticket, and (2) non-POTS tickets are not closed internally by technicians, but have an authorization step built into the closure function.

Create a Non-POTS Ticket

An important example of the different information required to create and submit a non-POTS trouble ticket as compared to a POTS trouble ticket, is the inclusion of the circuit ID. A telephone number identifies

POTS tickets. The telephone number is used to identify the trouble ticket at each step in the repair life cycle. The corresponding element in a non-POTS ticket is the circuit ID. The IMA function to create a non-POTS trouble ticket requires the CLEC representative to enter a circuit ID to track the service being investigated on the ticket. A non-POTS service, such as a T1 line, has a circuit ID. An unbundled loop also has a circuit ID by which non-POTS repair activities are tracked.

Other types of information required to create a non-POTS ticket, in contrast to a POTS ticket, include special times when circuits will be available for testing and monitoring, and a contact person.

Close a Non-POTS Ticket

The closure process for non-POTS trouble tickets adds a step to request verification or authorization to close the ticket. This enables the user of the service to verify whether the problem is resolved and then either confirm the closure of the ticket or leave it open for further investigation. The user of the service for U S WEST internal customers is the U S WEST retail customer. The user of the service for CLECs is the CLEC representative, working on behalf of the CLEC's end-user customer. U S WEST offers the same authorization step to CLEC users through IMA, as U S WEST users have through internal interfaces.

REPAIR COMPARISON

Repair functions generally involve U S WEST network facilities, and, therefore, rely on U S WEST representatives and technicians to interact with U S WEST's OSSs and network facilities on behalf of the end-user. Whether the end-user is a U S WEST retail customer or a CLEC's end-user customer, once the repair report reaches U S WEST repair personnel, the responsibility

and control for resolution of the issue in U S WEST's network rests with U S WEST. U S WEST's relationship with the end-user relies heavily upon communication between the U S WEST repair technicians and the end-user. U S WEST's IMA interface makes key repair functions and information available to the CLEC, which enable the CLEC to provide its end-user with the same service that U S WEST provides to its own end-users. This arrangement helps make the CLEC efficient and transparent as the intermediary between the end-user's issue and U S WEST's repair functions. Because communication is an important part of supporting CLEC repair issues, U S WEST provides CLECs with active notification of POTS and non-POTS trouble ticket status changes. Active notification is not provided to U S WEST internal repair representatives.

U S WEST supports an additional role for the CLEC, which comes into play when the source of the trouble does not rest within U S WEST's network facilities. At times, trouble can result when customers have either an incorrect understanding of the service they have requested or how to use their service. In this instance, U S WEST supports the CLEC through access to the U S WEST customer service record. By reviewing the customer service record the CLEC can identify whether network activities are at issue thereby saving time and cost.

4. BILLING

In addressing billing interfaces and OSSs, it is necessary to point out that the relationship between U S WEST and a CLEC for billing functions is not the same as their relationship for other OSS functions. For functions such as pre-order, order and repair, U S WEST must enable the CLEC to perform the same functions that U S WEST representatives perform. CLEC representatives and U S WEST representatives both must enter an order, for

example. In the billing function, both U S WEST and the CLEC need to generate a retail bill to their respective customers.

The data that U S WEST provides to support a CLEC's billing includes data pertaining to resold products, unbundled network elements and interconnection between U S WEST and CLEC facilities.

DATA PROVIDED TO SUPPORT CLECS' RETAIL BILLING FUNCTIONS

U S WEST's OSSs generate data that CLECs use to perform their billing function. This is because CLEC services are provided on U S WEST's network facilities or by interconnecting with U S WEST facilities. There are two types of U S WEST-generated data required by CLECs to perform CLEC billing functions: (1) usage data and (2) customer activity data. Optionally, the CLEC may choose to use a third type of data: (3) a monthly wholesale bill. The remainder of the billing section has been organized to first describe how each of these types of data supports CLEC retail billing and how U S WEST provides the data. Lastly, a comparison is presented of the billing process.

Usage Data For Usage-Sensitive Charges

Usage data detail charges that are based on the number, distance and duration of individual calls. The primary example of usage data is call records for intraLATA (toll) calls. A call record exists for each call that will be billed on a usage basis. The call record contains information on the origin, termination, and duration of the call. This information enables a CLEC to apply a formula and determine a price for the call. CLECs will apply their pricing formulas to usage data and generate charges to bill their customers. Usage data from U S WEST's OSSs are an essential input to this CLEC function. The source for usage data, the daily usage feed, is the same for U S WEST as it is for CLECs. This is true whether

those calls are placed by U S WEST retail customers or by a CLEC's end-user customers.

Daily Usage Feed

Usage processing captures recorded usage of the U S WEST telephone network by CLEC customers. U S WEST keeps this data for use in generating a monthly wholesale bill to the CLEC. U S WEST also provides this data to the CLEC, which uses the usage data to prepare a bill for its end-user customer. Usage is provided to the CLEC via a daily usage feed. The daily usage feed is an output of the same usage processing stream that U S WEST uses to capture usage for its own retail customers. It runs every business day. Usage data is gathered via the Automatic Message Accounting (AMA) OSS and then processed in the CRIS OSS.

When usage records are first gathered from AMA, the identity of the local service provider (i.e., U S WEST or a CLEC) is not on the record; therefore, CLEC and U S WEST usage records cannot be distinguished. The first point in usage processing where the customer identity is known is in CRIS. CRIS provides a cross-reference file that determines whether the usage belongs to U S WEST or CLEC customers, based on the calling telephone number on the usage record. At this point, CLEC usage can be separated from U S WEST, and the usage data is extracted for the daily usage feed to the CLEC.

The daily usage feed uses the industry-standard Exchange Message Interface (EMI) record format. The daily usage feed is provided to the CLEC on a business day basis, approximately three days after the data is recorded on the switch. CLECs input the usage data into their billing systems, for use in creating a bill for their local customers.

CLECs can also use the usage data to verify the monthly wholesale bill they receive from U S WEST.

Customer Activity Data To Start And Stop Billing Correctly

CLECs need to know when customers join and leave the CLEC as their local service provider. This information tells the CLEC when to start and stop billing each customer. The completion and loss reports that U S WEST provides to the CLEC give the CLEC the customer activity information needed to support CLEC retail billing.

Completion and Loss Reports

The completion and loss reports inform the CLEC when essential changes in status of the end-user customer occur. These are the same reports described in the Ordering & Provisioning Section, which communicate order activity to CLECs. The completion report gives the CLEC confirmation of specific order completion dates, thereby supporting the CLEC billing process by giving it a start date for its customer. Likewise, the loss report confirms for a CLEC the date to apply as a billing end date.

Monthly Wholesale Bill

In addition to the data sources described above for each data type, U S WEST produces a monthly wholesale bill to the CLEC, so U S WEST can bill and collect for wholesale services rendered. The monthly wholesale bill is a component of the business relationship between U S WEST and the CLEC, and is not directly a tool to support the CLEC's billing functions. However, the CLEC can choose to use information on the monthly wholesale bill to verify its internal management of billing information (i.e., usage- and non-usage-based charges), or the CLEC may use the information in the monthly wholesale bill directly to support its

billing process. For example, the CLEC can use the monthly bill to verify or reconcile charges and other activities that have an impact on its end-user customers.

CRIS produces the monthly billing feed using the industry-standard Electronic Data Interface (EDI) transaction set number 811. The format of this bill is the same as that used by U S WEST to bill its existing large customers. To prepare this bill for a CLEC, U S WEST applies wholesale tariffs appropriate for CLECs and runs CRIS bill-cycle processing, and bills the CLEC at the summary account level. CLECs can negotiate their preferred bill cycle and bill date. The bill information provided to the CLEC includes charges and account balances. Charges are broken down in categories such as recurring charges, usage and taxes.

BILLING COMPARISON

When a CLEC provides a retail service based on U S WEST network facilities, the CLEC has responsibility for billing its customer. However, the CLEC relies heavily on U S WEST to provide information about the customer's use of the network. U S WEST identified the information that is essential for bill processing and makes that information available to CLECs.

Electronic Interface Functionality

	Checklist Item #1 & #2 - Interconnection and Unbundled Network Elements*	
	Unbundled Dedicated Interoffice Transport (UDIT)	LIS Trunk
Function	EXACT	EXACT
■ **Pre-Order**		
Address Verification	N/A	N/A
Facility Availability	N/A	N/A
Carrier List	N/A	N/A
Service Availability	N/A	N/A
Customer Service Record Retrieval	N/A	N/A
Telephone Number Process	N/A	N/A
Appointment Scheduling	N/A	N/A
■ **Order & Provisioning**		
Product and Service Selection	N/A	N/A
Customer Listing Creation	N/A	N/A
Billing Account Number	Y	Y
Summary Information Review	N/A	N/A
Order Storage & Retrieval	N/A	N/A
Order Submission/Receive	Y	Y
Firm Order Confirmation	Y	Y
Supplemental Order Submission	Y	Y
Order Inquiry	N	N
Order Completion	Y	Y
■ **Billing**		
	SOP	**SOP**
Completion and Loss Report	N	N
	IABS	**IABS**
Usage Data	Y	Y
Bill for Non-recurring / Recurring Charges	Y	Y
	EB-TA	**EB-TA**
■ **Maintenance & Repair**		
Create Trouble Report	Y	Y
Modify Trouble Report	Y	Y
Inquire on Trouble Report	Y	Y
Active Notification of Status Change	Y	Y
Cancel Trouble Report	Y	Y
Close Trouble Report	Y	Y
Trouble Report History	Y	Y

N/A = Not applicable

* Shared Transport, Customized Routing and Combinations are included as part of Unbundled Loop and Unbundled Switch sections.
* Human-to-computer interface is not provided by U S WEST. These functions may or may not be supported by the particular human-to-computer interface the CLEC has chosen to use.

Electronic Interface Functionality

	Checklist Item #4 – Unbundled Loop*							
	2 & 4 Wire Voice Grade Analog		2 & 4 Wire Non-Loaded		Basic Rate (BRI) ISDN		DS1 Capable	
Function	IMA	EDI	IMA	EDI	IMA	EDI	IMA	EDI
■ **Pre-Order**								
Address Verification	Y	Y	Y	Y	Y	Y	Y	Y
Facility Availability	Y	Y	Y	Y	Y	Y	Y	Y
Carrier List	Y	Y	Y	Y	Y	Y	Y	Y
Service Availability	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Customer Service Record Retrieval	Y	Y	Y	Y	Y	Y	Y	Y
Telephone Number Process	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Appointment Scheduling	Y	Y	Y	Y	Y	Y	Y	Y
■ **Order & Provisioning**								
Product and Service Selection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Customer Listing Creation[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Billing Number Selection	Y	Y	Y	Y	Y	Y	Y	Y
Summary Information Review	Y	N/A	Y	N/A	Y	N/A	Y	N/A
Order Storage & Retrieval	Y	N/A	Y	N/A	Y	N/A	Y	N/A
Order Submission	Y	Y	Y	Y	Y	Y	Y	Y
Firm Order Confirmation	Y	Y	Y	Y	Y	Y	Y	Y
Supplemental Order Submission	Y	Y	Y	Y	Y	Y	Y	Y
Order Inquiry	Y	Y	Y	Y	Y	Y	Y	Y
Order Completion	Y	Y	Y	Y	Y	Y	Y	Y
■ **Billing**								
	SOP		SOP		SOP		SOP	
Completion and Loss Report	Y		Y		Y		Y	
	CRIS		CRIS		CRIS		CRIS	
Usage Data	Y		Y		Y		Y	
Bill for Non-recurring / Recurring Charges	Y		Y		Y		Y	
	EB-TA		EB-TA		EB-TA		EB-TA	
■ **Maintenance & Repair**								
Create Trouble Report	Y		Y		Y		Y	
Modify Trouble Report	Y		Y		Y		Y	
Inquire on Trouble Report	Y		Y		Y		Y	
Active Notification of Status Change	Y		Y		Y		Y	
Cancel Trouble Report	Y		Y		Y		Y	
Close Trouble Report	Y		Y		Y		Y	
Trouble Report History	Y		Y		Y		Y	

N/A = Not applicable

* Primary Rate (PRI) ISDN and DS3 Capable Services currently not available through IMA nor EDI Interfaces. Can be ordered manually.

* Unbundled Loop available in combination with Unbundled Analog Switch Port services.

[1] Listings are orderable via U S WEST's batch EDI as a stand-alone product.

Electronic Interface Functionality

	Checklist Item #6 – Unbundled Switch*					
	Analog Lineside Port		Digital Lineside Port (BRI – ISDN)		Analog Trunk Port	Digital Trunk Port
Function	IMA	EDI	IMA	EDI	EXACT	EXACT
■ **Pre-Order**						
Address Verification	Y	Y	Y	Y	N/A	N/A
Facility Availability	N/A	N/A	N/A	N/A	N/A	N/A
Carrier List	Y	Y	Y	Y	N/A	N/A
Service Availability	Y	Y	Y	Y	N/A	N/A
Customer Service Record Retrieval	Y	Y	Y	Y	N	N
Telephone Number Process	Y	Y	Y	Y	N/A	N/A
Appointment Scheduling	N/A	N/A	N/A	N/A	N/A	N/A
■ **Order & Provisioning**						
Product and Service Selection	Y	Y	Y	Y	Y	Y
Customer Listing Creation	Y	Y	Y	Y	N/A	N/A
Billing Number Establishment	Y	Y	Y	Y	Y	Y
Summary Information Review	Y	N/A	Y	N/A	Y	Y
Order Storage & Retrieval	Y	N/A	Y	N/A	Y	Y
Order Submission	Y	Y	Y	Y	Y	Y
Firm Order Confirmation	Y	Y	Y	Y	N	N
Supplemental Order Submission	Y	Y	Y	Y	Y	Y
Order Inquiry	Y	Y	Y	Y	Y	Y
Order Completion	Y	Y	Y	Y	Y	Y
■ **Billing**						
	SOP		SOP		SOP	SOP
Completion and Loss Report	Y		Y		Y	Y
	CRIS		CRIS		IABS	IABS
Usage Data	Y		Y		Y	Y
Bill for Non-recurring / Recurring Charges	Y		Y		Y	Y
	EB-TA		EB-TA		EB-TA	EB-TA
■ **Maintenance & Repair**						
Create Trouble Report	Y		Y		Y	Y
Modify Trouble Report	Y		Y		Y	Y
Inquire on Trouble Report	Y		Y		Y	Y
Active Notification of Status Change	Y		Y		Y	Y
Cancel Trouble Report	Y		Y		Y	Y
Close Trouble Report	Y		Y		Y	Y
Trouble Report History	Y		Y		Y	Y

N/A = Not applicable

* Shared Transport available in combination with Unbundled Switch Ports. Customized Routing is not currently available.

* Unbundled Loop available in combination with Unbundled Analog Switch Port services.

- Human-to-computer interface is not provided by U S WEST. These functions may or may not be supported by the particular human-to-computer interface the CLEC has chosen to use.

Electronic Interface Functionality

	NUMBER PORTABILITY Checklist Item #11			
	Interim Number Portability (INP)		Local Number Portability (LNP)	
Function	IMA	EDI	IMA	EDI
■ **Pre-Order**				
Address Verification	Y	Y	Y	Y
Facility Availability	N/A	N/A	N/A	N/A
Carrier List	Y	Y	Y	Y
Service Availability	N/A	N/A	N/A	N/A
Customer Service Record Retrieval	Y	Y	Y	Y
Telephone Number Process	N/A	N/A	N/A	N/A
Appointment Scheduling	N/A	N/A	N/A	N/A
■ **Order & Provisioning**				
Product and Service Selection	N/A	N/A	N/A	N/A
Customer Listing Creation	N/A	N/A	N/A	N/A
Billing Number Establishment	Y	Y	Y	Y
Summary Information Review	Y	N/A	Y	N/A
Order Storage & Retrieval	Y	N/A	Y	N/A
Order Submission	Y	Y	Y	Y
Firm Order Confirmation	Y	Y	Y	Y
Supplemental Order Submission	Y	Y	Y	Y
Order Inquiry	Y	Y	Y	Y
Order Completion	Y	Y	Y	Y
■ **Billing**				
	SOP		**SOP**	
Completion and Loss Report	Y		Y	
	CRIS		**CRIS**	
Usage Data	Y		Y	
Bill for Non-recurring / Recurring Charges	Y		Y	
	EB-TA		**EB-TA**	
■ **Maintenance & Repair**				
Create Trouble Report	Y		Y	
Modify Trouble Report	Y		Y	
Inquire on Trouble Report	Y		Y	
Active Notification of Status Change	Y		Y	
Cancel Trouble Report	Y		Y	
Close Trouble Report	Y		Y	
Trouble Report History	Y		Y	

N/A = Not applicable

Electronic Interface Functionality

RESALE: Checklist Item # 14 – Plain Old Telephone Service (POTS)

	Residence Exchange		Business Exchange	
Function	**IMA**	**EDI**	**IMA**	**EDI**
■ **Pre-Order**				
Address Verification	Y	Y	Y	Y
Facility Availability	Y	Y	Y	Y
Carrier List	Y	Y	Y	Y
Service Availability	Y	Y	Y	Y
Customer Service Record Retrieval	Y	Y	Y	Y
Telephone Number Process	Y	Y	Y	Y
Appointment Scheduling	Y	Y	Y	Y
■ **Order & Provisioning**				
Product and Service Selection	Y	Y	Y	Y
Customer Listing Creation	Y	N/A	Y	N/A
Billing Number Selection	Y	N/A	Y	N/A
Summary Information Review	Y	N/A	Y	N/A
Order Storage & Retrieval	Y	N/A	Y	N/A
Order Submission	Y	Y	Y	Y
Firm Order Confirmation	Y	Y	Y	Y
Supplemental Order Submission	Y	Y	Y	Y
Order Inquiry	Y	Y	Y	Y
Order Completion	Y	Y	Y	Y
■ **Billing**				
	SOP		**SOP**	
Completion and Loss Report	Y		Y	
	CRIS		**CRIS**	
Usage Data	Y		Y	
Bill for Non-recurring / Recurring Charges	Y		Y	
	EB-TA		**EB-TA**	
■ **Maintenance & Repair**				
Create Trouble Report	Y		Y	
Modify Trouble Report	Y		Y	
Inquire on Trouble Report	Y		Y	
Active Notification of Status Change	Y		Y	
Cancel Trouble Report	Y		Y	
Close Trouble Report	Y		Y	
Trouble Report History	Y		Y	

N/A = Not applicable

Electronic Interface Functionality

	RESALE: Checklist Item #14 - Designed Services*						
	Private Branch Exchange (PBY) (for POTS only)		Basic Centrex (non-design, line only)	Private Line Transport		Integrated Services Digital Network (ISDN)	
Function	IMA	EDI	EDI	IMA	EDI	IMA	EDI
■ **Pre-Order**							
Address Verification	Y	Y	Y	Y	Y	Y	Y
Facility Availability	Y	Y	Y	Y	Y	Y	Y
Carrier List	Y	Y	Y	Y	Y	Y	Y
Service Availability	Y	Y	N/A	N	N	Y	Y
Customer Service Record Retrieval	Y	Y	Y	Y	Y	Y	Y
Telephone Number Process	Y	Y	N	N	N	Y	Y
Appointment Scheduling	Y	Y	Y	N	N	Y	Y
■ **Order & Provisioning**							
Product and Service Selection	Y	Y	Y	Y	Y	Y	Y
Customer Listing Creation	Y	Y	Y	Y	Y	Y	Y
Billing Number Establishment	Y	Y	Y	Y	Y	Y	Y
Summary Information Review	Y	N/A	N/A	Y	N/A	Y	N/A
Order Storage & Retrieval	Y	N/A	N/A	Y	N/A	Y	N/A
Order Submission	Y	Y	Y	Y	Y	Y	Y
Firm Order Confirmation	Y	Y	Y	Y	Y	Y	Y
Supplemental Order Submission	Y	Y	Y	Y	Y	Y	Y
Order Inquiry	Y	Y	Y	Y	Y	Y	Y
Order Completion	Y	Y	Y	Y	Y	Y	Y
■ **Billing**							
	SOP		SOP	SOP		SOP	
Completion and Loss Report	Y		Y	Y		Y	
	CRIS		CRIS	CRIS		CRIS	
Usage Data	Y		Y	Y		Y	
Bill for Non-recurring / Recurring Charges	Y		Y	Y		Y	
	EB-TA		EB-TA	EB-TA		EB-YTA	
■ **Maintenance & Repair**							
Create Trouble Report	Y		Y	Y		Y	
Modify Trouble Report	Y		Y	Y		Y	
Inquire on Trouble Report	Y		Y	Y		Y	
Active Notification of Status Change	Y		Y	Y		Y	
Cancel Trouble Report	Y		Y	Y		Y	
Close Trouble Report	Y		Y	Y		Y	
Trouble Report History	Y		Y	Y		Y	

N/A = Not applicable
* Frame Relay currently not available through IMA nor EDI Interfaces. Can be ordered manually.
• Centrex currently not available through IMA.

U S WEST System Descriptions

AFTS (A File Transfer System). AFTS is an interface with the Regional Subscription System (RSS) for Interexchange Carriers (IXCs) to receive billing data for their customers and to EXACT to transmit ASR data. The carrier logs onto AFTS (via their communications package) and inputs the inquiry transaction (format is supplied by U S WEST).

ALOC (Access LOCation). ALOC is a Bellcore supported system that manages customer service addresses, the access (or edge) points of a communications network, and the connection of service locations to the network.. Along with CNUM, ALOC will replace PREMIS.

AMA (Automatic Message Accounting). AMA is a system which records all of the data of customer dialed calls needed for billing purposes.

Appointment Scheduler. Appointment Scheduler system that manages technician schedules. Ordering systems, such as SONAR and the IMA GUI, electronically interface with Appointment Scheduler to reserve technician time slots.

BOSS (Business Operations Support System). BOSS is the system that manages the Customer Service Record (CSR). CSRs contain account status,

billing, listing and services and equipment information. This system serves U S WEST's central and eastern regions.

CABS (Carrier Access Billing System). CABS is the system for billing access services to customers who purchase access to a local exchange company (LEC) network. CABS has been replaced by IABS in U S WEST.

CARS (Customer Account Retrieval System). CARS is the system that manages the Customer Service Record (CSR). CSRs contain account status, billing, listing and services and equipment information.. This system serves U S WEST's western region.

CMATE. The CMATE system processes service orders for DS0 and feature groups taken at U S WEST Service Delivery Centers. After entering orders, the application, along with the another application, chart the required sub-tasks necessary to complete the service orders. CMATE then communicates with different OSSs to extract and update required information to complete the service order requests.

CNUM (Customer NUMber Management System). CNUM is a Bellcore supported system designed to support telephone number administration, service negotiation, and service activation. CNUM provides a single repository for number administration that is technology and service independent. Along with ALOC, CNUM will replace PREMIS.

CPS (Capacity Planning System). CPS is a monitoring system used by U S WEST to capture and record data for all mid-range systems. This system records specific component utilization statistics and then forwards the data to a central repository for use by the Capacity Planning Group.

CRIS (Customer Records Information System). CRIS is a billing system for the majority of residence and business account bills for exchange. It calculates, prints, and mails bills to individual retail end-user customers for retail products, and co-carriers for some interconnect (wholesale) products. After rating usage, CRIS posts service order processing updates, provisioning information, rating data, tolls, cash treatments, bills, payments, journal entries or adjustments, rate changes, message processing and other billing related information to the CSRs.

Data Arbiter. This system provides access from UNIX-based systems to PREMIS, BOSS/CARS, TIRKS, LFACS, and LMOS.

DELIVER. DELIVER is a graphical user interface (GUI) which allows its U S WEST's repair representatives to communicate with LMOS.

Event Tracker. Event Tracker is a graphical user interface (GUI) used for viewing customer service request information about design orders. Order information is used to check the progress and timelines of customer service requests.

Facility Check. Facility Check is a Netscape-based interface used to access LFACS to determine whether loop facilities will be available for new service to a specific customer site.

FACS (Facility Assignment and Control System). FACS is an "umbrella" term that includes LFACS, SWITCH, and SOAC.

FEPS (Facility and Equipment Planning System). The FEPS system is a tactical planning tool for interoffice facilities and transmission equipment.

FnS (Fetch 'N' Stuff). This system provides a common point of access to US WEST's OSSs using a standard application programmer interface (API) to simplify data access. Fetch 'N' Stuff accesses ALOC, Appointment Scheduler, APRIL, BOSS/CARS, CNUM, Event Tracker, LFACS, LMOS, OSCAR, PREMIS, SONAR, TIRKS, and WFA/DO.

FOM (Firm Order Manager). The FOM is part of the IMA architecture that manages LSRs.

FOMS (Frames Operation Management System). FOMS is a dispatch-in system for central office wiring instructions used by central office technicians.

IABS (Integrated Access Billing System). IABS is a billing system, focused on access or facility driven billing, whose functionality includes switched

and special service orders, meet point billing, mechanized adjustments for interexchange carriers and other facilities based co-provider accounts.

IFE (Integrated Front End). IFE is a graphical user interface system designed to create and submit service orders for designed services using the Bellcore supported ORDERMATE or Flex-TUF systems.

LFACS (Loop (or Line) Facility Assignment Control System). LFACS is a component of FACS which maintains a mechanized inventory of outside plant facilities, (e.g., facility addresses, cables, cable pairs, serving terminals, cross connection devices, loops, etc.) and assigns the outside plant facilities to assignment requests received from SOAC as a result of customer service order activity.

LIDB (Line Information Database). Databases developed and used by ILECs and other local phone companies to validate telephone and calling card numbers within a LEC region. The databases are used to perform billing validations; such as originating line number screening, validating calling card; screening billing number (determination of billed lines that automatically reject or accept verification of certain calls billed as collect or bill-to-third party); detecting calling card fraud, performing public telephone check (payphone owner and type - public or semi-public); and determining the status of Central Office codes as active or vacant.

LMOS (Loop Management Operations System). LMOS is a repair system for POTS services that provide trouble entry, tracking and work status. LMOS Host stores detailed line record information and maintains historical data of closed troubles.

LSMS (Local Service Management System). LSMS is the local service provider's network database that holds down-loaded ported number information.

LSS (Listing Services System). LSS is a system that maintains customer listings for white page directories and directory assistance.

MEDIACC (MEDIated ACCess). MECIACC is a system that provides a common electronic gateway for processing repair requests, created by external entities. MEDIACC support repair reports for both Interexchange Carriers and CLECs.

MIHR (Mechanized Installation History Reports). MIHR is a system that reports on installations for new POTS customers. This system is fed by data produced from LMOS when new service is requested.

MLT (Mechanized Loop Testing). This is a system that tests and analyzes the condition of customer loops. MLT provides test results that assist in decision regarding trouble flow.

PREMIS (PREMises Information System). PREMIS is a component of FACS that provides address verification, information to aid in service order preparation, telephone numbers for assignment to customers, and information on interexchange carriers to assist customers in selecting the carrier of their choice.

REACT. REACT is a test system that allows circuit testing and network management.

ROMS (Regional Operations Management System). ROMS is a Web-based application that allows a representative to capture service order information. This information is then transmitted to an order entry center where order typists retype the information into SONAR or directly in the appropriate service order processor.

SARTS (Switched Access Remote Test System). SARTS is an analog testing system that provides access to remote end offices.

SMS (Service Management System). SMS is a hardware and software platform that supports the porting of telephone numbers. In concert with the Number Portability Administration Center (NPAC), SMS receives customer information from the old and new service providers (including the new location routing number), validates the information received, and downloads the new routing information when an "activate" message is received indicating that the customer has been physically connected to the new service provider's network.

NPAC/SMS also contains a record of all ported numbers and a history file of all transactions relating to the porting of a number.

SOA (Service Order Administration), SOA is an interface to the NPAC/SMS for provisioning ported end-user data.

SOAC (Service Order Analysis and Control). SOAC is a Bellcore system that controls the flow of service orders activity from U S WEST service order processors (SOPs), to other downstream systems. Based on the service order input, SOAC determines which operations systems need to be involved in activating service, and provides instructions and sequencing to those operations systems.

SONAR (Service Order Negotiation and Retrieval). SONAR is a system used to create and submit service orders for non-designed services for residential and small business customers.

SOP (Service Order Processors). SOLAR (Service Order Logistics and Reference), SOPAD (Service Order Processor and Distribution) , and RSOLAR (Regional SOLAR). Within each region, the corresponding SOP for that region directs/processes service orders for all product types. SOPAD is the SOP in the central region that services Arizona. SOPAD distributes the order to necessary systems such as directory listings, E911, and billing systems. SOLAR is the SOP in U S WEST's eastern region; RSOLAR is the SOP in the western region.

SWITCH. SWITCH is a central office inventory system. With cable pair data from LFACS and telephone number inventory information from CNUM, SWITCH completes the initial step in designing the circuit package. SWITCH supports line-side and trunk-side central office provisioning of digital, analog, and packet switching facilities by providing connection information for central office personnel.

TAG (Telephone Address Guide). TAG is front-end interface to PREMIS that allows U S WEST service representatives to retrieve telephone numbers.

TAXI. TAXI is a front-end interface to IABS.

TIRKS (Trunks Inventory Record Keeping System). TIRKS is a Bellcore application that inventories central office and outside plant facilities. TIRKS contains the inventory information to update equipment components, frame data, circuit assignments, and other data related to telephone equipment. Generic Order Control is a sub-module of TIRKS that controls the flow of work within TIRKS.

TUF (Translator of USOCs and FIDs). TUF is the system that accesses ASR data entered into EXACT and translates the information to format a Universal Service Order (USO).

WFA (Work Force Administration). This is an umbrella term that includes three subsystems: WFA/C, WFA/DI and WFA/DO. WFA/C (Work Force Administration/Control) mechanizes the administration of the installation and maintenance of designed and non-designed circuits. WFA/C directs the flow of work items to WFA/DO and WFA/DI. WFA/DI automates the work assignments of the technicians working within the central offices. WFA/DO automates the support of the dispatch function for outside plant installation, maintenance and routine work. WFA/DO provides screening, pricing, mapping, routing, scheduling and loading functions within a dispatch center.

EDI/EB-TA FUNCTIONAL PROCESS DESCRIPTION

U S WEST has made many pre-order, order and repair functions available to CLECs via computer-to-computer interfaces. In the case of pre-order and order functions, the computer-to-computer interface is called EDI and, for repair functions, the computer-to-computer interface is called EB-TA. The processes for these functions are summarized below.

1. PRE-ORDERING, ORDERING & PROVISIONING PROCESS DESCRIPTIONS

The EDI interface supports the following pre-order, order & provisioning functions: (1) telephone number processing, (2) address verification, (3) check for facility availability, (4) check for service availability, (5) retrieval of customer service record, (6) appointment processing, (7) submission of orders, (8) processing of customer listing information, (9) submission of supplemental orders, (10) inquiry of orders, and (11) error processing.

Telephone Number Process

The EDI pre-order telephone number process allows the user to execute the following transactions: (1) check for telephone number availability (EDI transaction set 850/TNAQ and 855/TNAR), (2) select and reserve a telephone number (EDI transaction set 850/TNSQ and 855/TNSR), and (3) cancel or return a telephone number (EDI transaction set 860/CTQ and 865/CTR).

To request a list of available telephone numbers, the CLEC provides end-user related information on the telephone number availability query. A list of available telephone numbers is returned to the CLEC. The telephone numbers are reserved in PREMIS for the end-user's address at the time the list is sent to the CLEC. Once a telephone number has been reserved, the CLEC has 24 busness hours within which the telephone number may be included on a request for service. Any unused numbers will be returned automatically if an LSR is not submitted in 24 business hours or if the number has not been included on a subsequesnt LSR.

Telephone numbers may be canceled or returned to an available status in the OSS. The CLEC may return the telephone number by submitting a cancel transaction, via EDI, or simply by allowing the telephone number time limitation to be reached. The unused telephone number will automatically be returned to an available status.

Address Verification

The EDI pre-order address verification process allows the user to: query for and retrieve confirmation of valid address information (EDI transaction set 850/AVQ and 855/AVR).

Before service can be ordered, the address where service is to be established can be verified to ensure that a proper address is located.

The CLEC is also able to search for an address using the descriptive name for a specific address.

Facility Availability

The EDI pre-order facility availability process allows the user to: query for and retrieve information related to the presence or absence of POTS facilities for a particular address (EDI transaction set 850/FAQ and 855/FAR).

Using the telephone number or the end-user service address, obtained through the use of the address verification process, a CLEC can query on the existence or availability of and characteristics of POTS facilities at a given point in time.

Service Availability

The EDI pre-order service availability process allows the user to: query for and retrieve information related to POTS service availability (EDI transaction set 850/SAQ and 855/SAR).

Service availabiliyt lists the services that are available at the serving wire center.

Customer Service Record Retrieval

The EDI pre-order customer service record (CSR) retrieval process allows the user to: query for and retrieve an existing CSR (EDI transaction set 850/CSRQ and 855/CSRR).

A CLEC can request to retrieve an existing CSR to verify listing, billing and service related information.

Appointment Process

The EDI pre-order appointment process allows the user to: (1) check for appointment availability (EDI transaction set 850/AAQ and 855/AAR), (2) select and reserve an appointment (EDI transaction set 850/AASQ and 855/AASR), and (3) cancel or return an appointment (EDI transaction set 860/CTQ and 865/CTR).

EDI provides to the CLEC a list of available appointments within a four-week time period. The CLEC has a predetermined amount of time in which to select an appointment from the list. If the time limit is exceeded, the CLEC will need to request an updated list of appointments and choose one of the appointments within the time limitation. To select an appointment via EDI, an appointment selection query is sent with the appropriate date and time selection. Once an appointment has been reserved, the CLEC has 24 business hours to

submit an LSR in which the appointment is included on a request for service.

Appointments may be canceled and returned to an available status. A CLEC can return an appointment by issuing a supplemental request to cancel the original request for service. The appointment will then be canceled automatically. If an appointment is reserved but it is later determined that it will not be used, the CLEC may cancel the appointment by submitting a cancel transaction, via EDI, or simply allow the appointment time limitation to be reached and IMA will automatically return the appointment to an available status.

Order Submission

After the CLEC submits an LSR, the LSR is converted into a service order that is recognized by U S WEST's OSSs. If the order is eligible for flow-through, the LSR is electronically converted into a service order. U S WEST has flow-through functionality for conversion as-is orders and conversion as-specified orders. Once the service order has passed IMA edits, it is sent to a U S WEST Service Order Processor (SOP). POTS and PBX orders can be submitted via EDI using the EDI transaction set 850/SVCRQT and 855/FOC. For Loop Service (LS) and Number Portability Service (INP and LNP) orders can

be submitted via EDI using the EDI tranactions set 850/LNPRQT and 855/LNPFOC.

Customer Listing Creation

The Interconnect Service Center (ISC) representative can retrieve, view and process Local Service Requests (LSRs) with complex listings. A complex listing is one that requires special indenting and formatting. Listing information is transmitted as part of the original service order (EDI transaction set 850/SVCRQT and 855/FOC).

Supplemental Order Submission

Using EDI, a CLEC can transmit supplemental orders to either request specific changes, a change in due date only or a cancelation of the entire order (EDI transaction set 860/SUPP or 860/CANCEL and 865/FOC). The original service order is corrected or canceled by the issuance of a supplemental service order.

Order Inquiry

Using the Customer Carrier Name Abbrevation (CCNA), Purchase Order Number (PON) and an optional version number of a LSR, a CLEC can query and retrieve status information. The EDI order inquiry (LSR Status Inquiry) process provides CLECs the ability to inquire the status of a LSR it has submitted. (EDI transaction set 850/LSRSQ and 855/LSRSR).

Error Process

U S WEST detects errors on CLEC's LSRs and notifies the CLEC in one of two ways. The first type of error is the one that is detected and has notices generated by the IMA/EDI architecture. These error notices are transmitted via an EDI error transaction to the CLEC. An example of this type of error is when a required field is not populated or is populated with data in an invalid format (EDI transaction set 855/FATAL or 855/LNPFATAL).The second type of error is detected by the Interconnect Service Center which transmits an order to the CLEC via an EDI error transaction. These types of errors are those that have been identified after the request has passed the initial IMA/EDI architecture error edit process. For example, if the end-user name, telephone number and/or address are inconsistent with the information retrieved contained in U S WEST's OSSs, an error message will be sent to the CLEC (EDI transaction set 855/NONFATAL or 855/LNPNONF).

2. REPAIR TROUBLE REPORTING PROCESS

Overview of Electronic Bonding for Repair Functions

Currently, Electronic Bonding – Trouble Administration (EB-TA) enables CLECs to submit trouble tickets for POTS, design services, and unbundled loop facilities. EB-TA uses CMIP (Common

Management Information Protocol) to access functions of the MEDIACC (MEDIated ACCess) interface which, in turn, communicates to back-end repair OSSs such as LMOS (Line Maintenance Operations System). MEDIACC is an interface to the U S WEST repair systems which has been used for years by interexchange carriers to submit trouble tickets. MEDIACC similarly enables CLECs to submit trouble tickets.

Both IMA and EB-TA use MEDIACC to access repair functions in U S WEST's OSSs. By accepting commands from IMA, thehuman-to-computer interface, MEDIACC supports a human-to-computer interface. By employing a CMIP interface, MEDIACC also accepts commands from CLECs' OSSs to support a computer-to-computer interface.

The Electronic Bonding interface to MEDIACC currently supports the following repair functions for trouble tickets: (1) create trouble ticket, (2) inquire on a trouble ticket (3) modify a trouble ticket, (4) receive active notification of status changes, (5) cancel a trouble ticket, and (6) receive active notification of close out status. To use the EB-TA repair functions, a CLEC must deploy its own OSSs that provide inputs,

outputs and logic surrounding the CLEC's use of the EB-TA repair function.

Create a Trouble Ticket

To use the EB-TA function to create a trouble ticket, the CLEC must input into its OSSs information about the customer line and the nature of the trouble. The CLEC's OSS then formats the data according to the CMIP protocol and sends it to MEDIACC, which sends it to LMOS to invoke the LMOS function to create a trouble ticket.

Inquire, Modify or Cancel a Trouble Ticket

Similarly, requests from a CLEC's OSS to obtain status information on a ticket, or to modify or cancel a ticket, require the CLEC to input into its OSSs the required information, format it and send it to MEDIACC via CMIP. In the case of an inquiry, MEDIACC maintains current information on the ticket, which it sends back to the CLEC's OSS via CMIP. To modify or cancel a ticket, MEDIACC takes information from the CLEC's OSS and forwards certain required information to LMOS. LMOS then performs a transaction to add a subsequent report, identifying the ticket as modified or cancelled.

Receive Active Notification of Trouble Ticket Status Change

The EB-TA interface actively notifys CLECs of certain ticket status changes. The active notification function relies on the capability of

LMOS to automatically notify MEDIACC of changes in the status of a trouble ticket. MEDIACC forwards this automatic notification to the CLEC's OSS via CMIP.

Close a Trouble Ticket

When U S WEST has resolved the repair order, the trouble ticket status is changed to cleared, then closed in LMOS. MEDIACC receives both notifications and formats the data relating to these status changes. This combined information is then sent to the CLEC's OSSs via CMIP. This information indicates the cause of the trouble, how long the service was impaired, when it was restored, and if billing charges could apply.

Error Process

There are two types of errors which can be sent to the CLEC for repair processing. Both types of errors are detected and have notices generated by EB-TA. The first type of errors is the T1M1 standards errors which relate to EB-TA business functions. For example, a T1M1 error will be sent to the CLEC if the CLEC sends a create transaction without all the required attributes. The second type of error occurs after the trouble ticket passes the trouble administration business function rules. This type of error is a transaction-level error usually associated with data values, data formats and implementation

agreement violations. An example of this type of error is when an optional attribute is not populated according to the rules of the implementation agreement. As when the telephone number contains dashes and the implementation agreement calls for only digits.

GENERAL RESALE DESCRIPTION

Resale processes involve responding to pre-ordering requests for information, processing orders for resale services and changing information in U S WEST's OSSs to identify the fact that a particular end-user is being served by a specific CLEC. After being resold, the CLEC becomes U S WEST's customer and the end-user customer becomes the customer of the CLEC.

Resale POTS and Designed Services

The description of the order processing flow for POTS and designed services is based on the diagram contained below. First, regarding the CLEC's process, the CLEC, in discussing with the end-user customer, identifies the customer's needs, requests pre-ordering information and sends an order (LSR) to U S WEST. The ISC reviews the order to verify that the information is correct, routes the order between ISC sites, if appropriate, converts the LSR into a service order[1] and places it into the service order processing flow. The service order is assigned and routed depending on its type. Designed service orders are routed to the Design Services Center which creates the design; POTS service orders are routed directly to those operations which complete any translations or provisioning work steps in the switch and inside or outside field work. After these steps are completed, the service orders (both POTS and designed services) are marked as completed on a nightly basis. This nightly batch process is the same process that U S WEST uses for its retail orders. U S WEST's OSSs such as those supporting billing, customer service records, repair line records, etc. are electronically updated. A completion file is transmitted the next morning to the CLEC

[1] LSRs must be converted into service orders. This is because service orders predate the act and are the ordering forms that U S WEST's OSS recognize. LSRs were created by national standards bodies, principally the OBF, and are intended to support local service ordering as a wholesale business.

containing information about orders completed the night before. Billing records are transmitted to the CLEC.

Illustration

To illustrate the POTS Resale processes, I will describe the process flow for a conversion-as-is order. In this example, a customer has called the CLEC to change their existing U S WEST service to the CLEC's service without any changes to their account. The CLEC, while talking to the customer online, uses U S WEST's electronic interface, IMA, to perform the following pre-order transactions:

- Retrieve CSR (provides current account information, such as listings, billing information, and products and services to which the customer subscribes)
- Validate Address (returns address and central office information so that a dispatch to the correct address can be accomplished)
- Retrieve Service Availability (provides list of products and services available at the customer's location

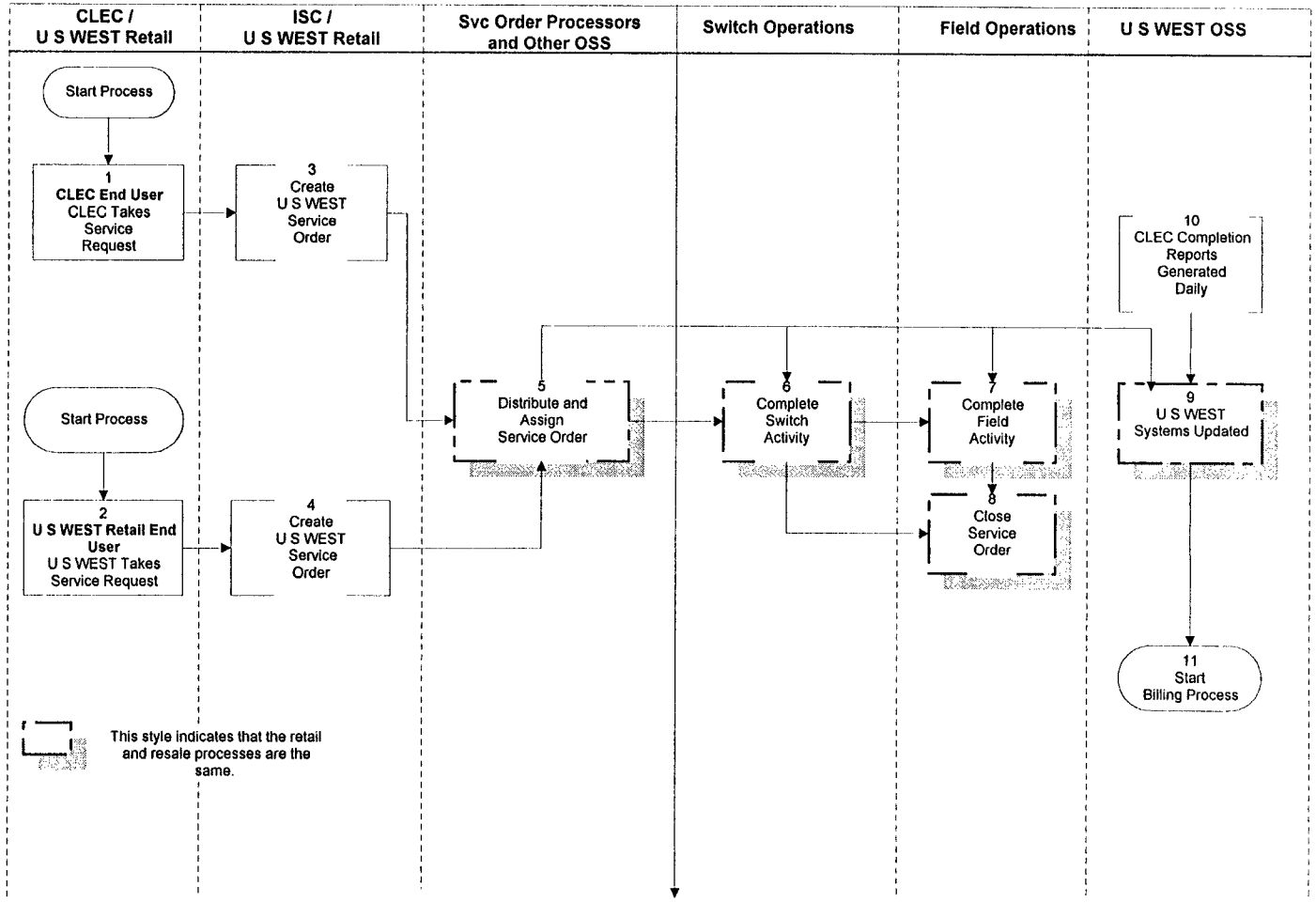
In addition, the CLEC using IMA completes the various forms defined by the OBF for this type of service request. This includes the LSR (local service request), EUI (end user information) and Resale (resale information) forms. These forms identify the CLEC's authorization to become the local service provider of the customer and provide the order information as defined by the OBF. After completing the forms, the CLEC electronically transmits them to U S WEST where they are placed into a database known as the Firm Order Manager (FOM). From here, the screener in the ISC briefly reviews the forms. In this example, there are no items on this customer's U S WEST account that require further action, the screener clicks the "Flow-Through" button. The

forms are then electronically converted into a service order and placed into the service order processing flow. Because the order is a conversion as-is, no assignment of facilities, switch translations or field dispatches are required. During the nightly batch run, the service order is marked as completed, and the following morning, a completion report containing this customer's information, is electronically transmitted to the CLEC.

If certain situations are present on the customer's account, the screener must take additional steps and the order would not qualify for "flow-through". Examples of these situations are:

- existing gift bill arrangements that require instructions on what to do with the gift bill account, this may result in the need for a service order to sever the arrangement;
- any directory advertising which requires the establishment of a separate U S WEST account;
- any special pay treatment processes that require canceling and collection of the bill.

Checklist Item 14 - Resale
POTS Pre-order, Order, Provisioning and Downstream Processes



Checklist Item 14 - Pots Resale

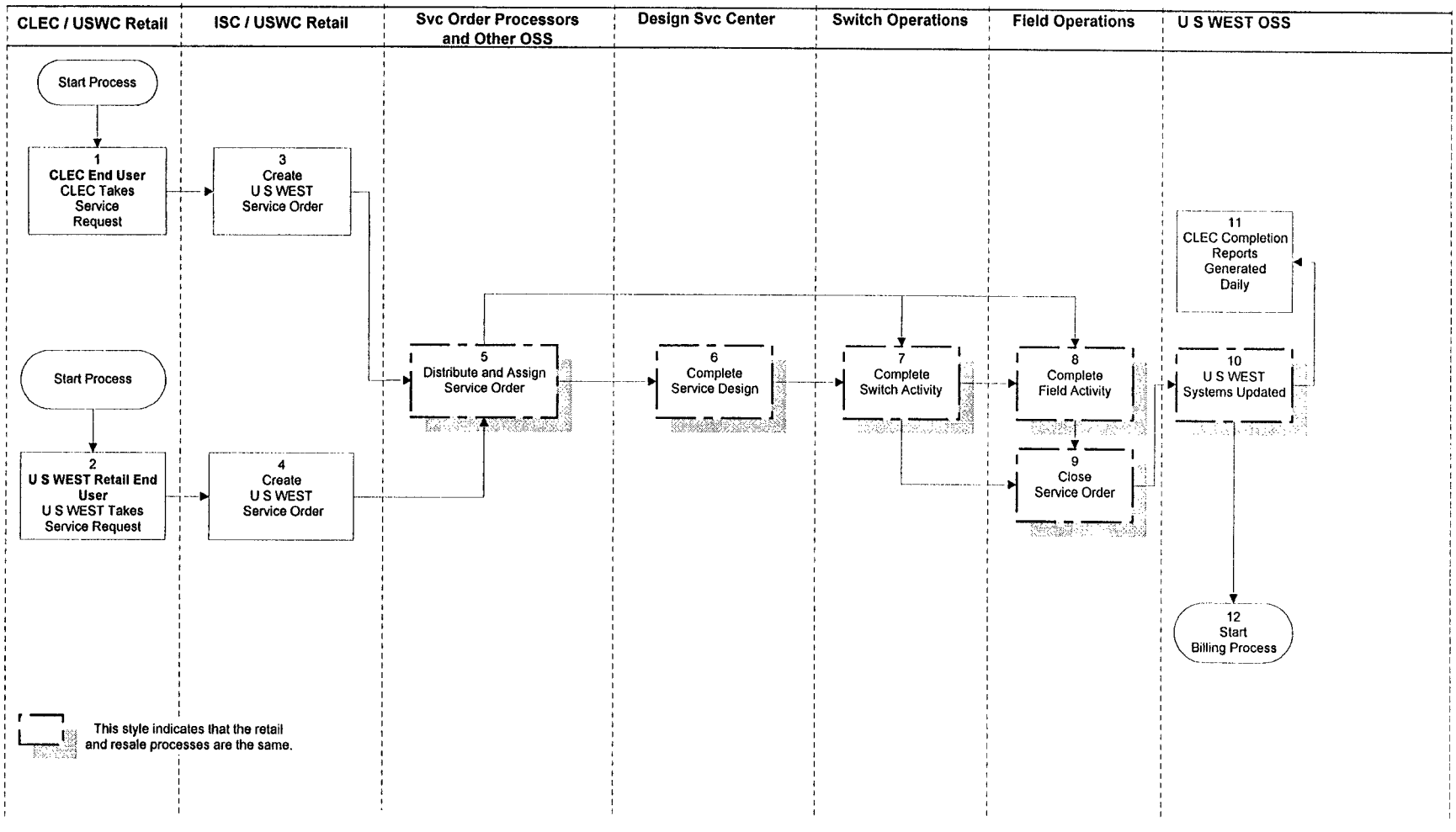
Pre-Order, Order, Provisioning And Downstream Processes

Task Descriptions

Task	Description
1	CLEC employee consults with the end-user, conducts pre-order, and order activities. Gathers the end-user's requests and prepares and submits the Local Service Request (LSR) forms to U S WEST using EDI, IMA or Faxing.
2	U S WEST employee obtains the end-user service requirements, access the end-users CSR, and consults with the end-user. If the U S WEST employee uses an order entry system, he or she will enter the end-user request by completing the numerous service order input screens, providing the end-user with all the U S WEST disclosure requirements for products, listings, carriers, etc. This is the case with either SONAR or ROMS.
3	The Interconnect Service Center receives the LSRs and creates the U S WEST service orders. For "flow through" orders, the ISC merely clicks on the "flow through" button and the LSRs are electronically created. If the LSR was Faxed, then it is automatically converted into an LSR electronic image. The electronic image is reviewed and is electronically sent to an Order Specialist who types the U S WEST service orders. U S WEST sends the CLEC a Firm Order Commitment (FOC) when the orders are issued.
4	If the service representative uses either SONAR or ROMS, the service representative hits the enter button. In the case of SONAR, the service order is sent on to the SOP. In the case of ROMS, the order is sent to the order center where an order typist retypes the order either into SONAR or directly into the SOP.
5	The Service Order Analysis and Control (SOAC) distributes all service orders to all appropriate "downstream" systems and work groups. Based on the type of order SOAC determines were to send the orders. For instance the order are passed to: LFAC for assignment, RCMAC for switch translations, the Central Office for physical switch wiring, the LNO for outside technician work, and the Listings, DA, Operator Services and 911 work centers / systems.
6	Complete any necessary switch activity changes such adding features to an existing line, establishing a new line or changing the long distance carrier. All service orders, retail and resale, are handled in the same fashion using the same processes and procedures. The orders are reviewed for completeness and accuracy.
7	Complete any necessary fieldwork such central office wiring and wiring the circuit at the end-user's location.
8	Complete the service order. The OSS as part of the nightly batch runs will automatically complete the order.
9	The completed service order is passed to the internal U S WEST systems for listings, 911, DA, Operator Services, etc. The end-user end-user's account is marked to show that the end-user is no longer a U S WEST end-user, but rather a CLEC end-user.

Task	Description
10	CLEC completion and loss reports are generated and sent to the CLEC. These reports are generated nightly based on the service orders completed that day and sent to the CLECs every morning. The reports, paper or electronic, are forwarded based on the CLEC stated preference in the New Customer Questionnaire.
11	The completed order is passed to the U S WEST billing systems so that the CLEC or the U S WEST end-user can be billed correctly. The end-user's account is marked to show the responsibility for the account transferred to the CLEC and that the end-user belongs to U S WEST.

Checklist Item14 - Resale
Design Sevices Pre-order, Order, Provisioning and Downtream Processes



Checklist Item 14 - Resale Design Services

Pre-Order, Order, Provisioning And Downstream Processes

Task Descriptions

Task	Description
1	CLEC employee consults with the end-user, conducts pre-order, and order activities. Gathers the end-user's requests and prepares and submits the Local Service Request (LSR) forms to U S WEST using EDI, IMA or Faxing.
2	U S WEST employee obtains the end-user service requirements, access the end-users CSR, and consults with the end-user. If the U S WEST employee uses an order entry system, he or she will enter the end-user request by completing the numerous service order input screens, providing the end- user with all the U S WEST disclosure requirements for products, listings, carriers, etc. This is the case with IFE. Otherwise, the service representative takes the order information by hand.
3	The Interconnect Service Center receives the LSRs and creates the U S WEST service orders. If the LSR was faxed, then it is automatically converted into an LSR electronic image. The electronic image is reviewed and is electronically sent to an Order Specialist who types the U S WEST service orders. U S WEST sends the CLEC a Firm Order Commitment (FOC) when the orders are issued.
4	If the service request has been entered into IFE it is then electronically sent to the appropriate service order processors.
5	The Service Order Processors (SOPS) receive the order performs some edits and passes them to the Service Order Analysis and Control (SOAC). At this point all U S WEST and CLEC requests are commingled and handled by the same systems and processes. The SOAC distributes all service orders to all-appropriate "downstream" systems and work groups. Based on the type of order, SOAC determines where to send the orders. For instance the orders are passed to: LFAC for assignment, RCMAC for switch translations, the Central Office for physical switch wiring, the LNO for outside technician work, and the Listings, DA, Operator Services and 911 work centers / systems.
6	The orders are sent to Trunks Integrated Record Keeping System (TIRKS) and the service is designed. Critical dates are established including a test schedule. The TIRKS designs are sent to all appropriate downstream organizations.
7	Complete any necessary switch activity changes such adding central office features to an existing line, establishing a new line or changing the long distance carrier. All service orders, retail and resale, are handled in the same fashion using the same processes and procedures. The orders are reviewed for completeness and accuracy.
8	Complete any necessary fieldwork such central office wiring and wiring the circuit at the end-user's location.
9	Complete the service order. The OSS, as part of the nightly batch runs, will automatically complete the order.

Task	Description
10	The completed service order is passed to the internal U S WEST systems for listings, 911, DA, Operator Services, WFA, etc. The end-user's account is marked to show the responsibility for the account transferred to the CLEC. The end-user is no longer a U S WEST end-user.
11	CLEC completion and loss reports are generated and sent to the CLEC. These reports are generated nightly based on the service orders completed that day and sent to the CLECs every morning. The reports, paper or electronic, are forwarded based on the CLEC stated preference in the New Customer Questionnaire.
12	The completed order is passed to the U S WEST billing systems so that the CLEC or the U S WEST end-user can be billed correctly. The end-user's account is marked to show the responsibility for the account transferred to the CLEC and that the end-user belongs to U S WEST.

UNBUNDLED LOOP PRE-ORDERING, ORDERING AND PROVISIONING PROCESS

Unbundled loop entails provisioning facilities from the Network Interface Device (NID) at the customer's premise to the U S WEST's Main Distributing Frame (MDF) or equivalent and on to the point at which U S WEST's facilities meet the CLEC's facilities (co-location space or Interconnection Distribution Frame). To illustrate the processes in support of unbundled loop, the example I use assumes an end-user customer moves into U S WEST territory for the first time and contacts a facilities based CLEC for local telecommunications services. The CLEC is co-located in the U S WEST central office that services the customer's address and the CLEC decides to provide service via an unbundled loop.

Unbundled Loop Process

The description of the order processing flow for unbundled loop is based on the diagram contained below. The CLEC, in talking with the end-user, identifies the customer's needs, requests pre-ordering information, creates an LSR and transmits it to U S WEST either electronically via one of U S WEST's pre-ordering/ordering interfaces or via facsimile. In turn, U S WEST briefly screens the order, routes the order to the proper ISC that converts the LSR into a service order and places it into the service order processing flow. The service order is assigned and provisioned, as appropriate. At this point, the ISC returns an FOC to the CLEC.

If the order flows through TIRKS, it is routed to the implementer; otherwise, the order is routed to the designer who creates the necessary design in TIRKs. The implementer coordinates the central office work with the LRAC and the CLEC, if requested, and works with the LRAC to assign the Central Office Technician (COT) who must run a jumper from U S WEST's MDF or equivalent to the tie cable leading the meet point where U S WEST's facilities meet those of the CLEC. In addition, a dispatch in the field (outside plant dispatch) may be necessary. If so, that field dispatch is scheduled and the work completed. The implementer also tests the circuit, completes the order and notifies the CLEC. Like resale

orders, the unbundled loop service order is marked as completed on a nightly basis. This is because the same service order processors process service orders for resale and UNEs. U S WEST's OSS supporting billing and customer service records are electronically updated.

A completion file is transmitted the next morning to the CLEC containing information about orders completed the night before. Billing records are transmitted to the CLEC according to appropriate cycles, i.e. daily usage files and monthly summary bills.

Illustration

When the customer contacts the CLEC, its representative would request pre-ordering information. In this example, the CLEC is using U S WEST's IMA electronic interface and issues online, real-time queries to U S WEST for the following pre-ordering transactions.

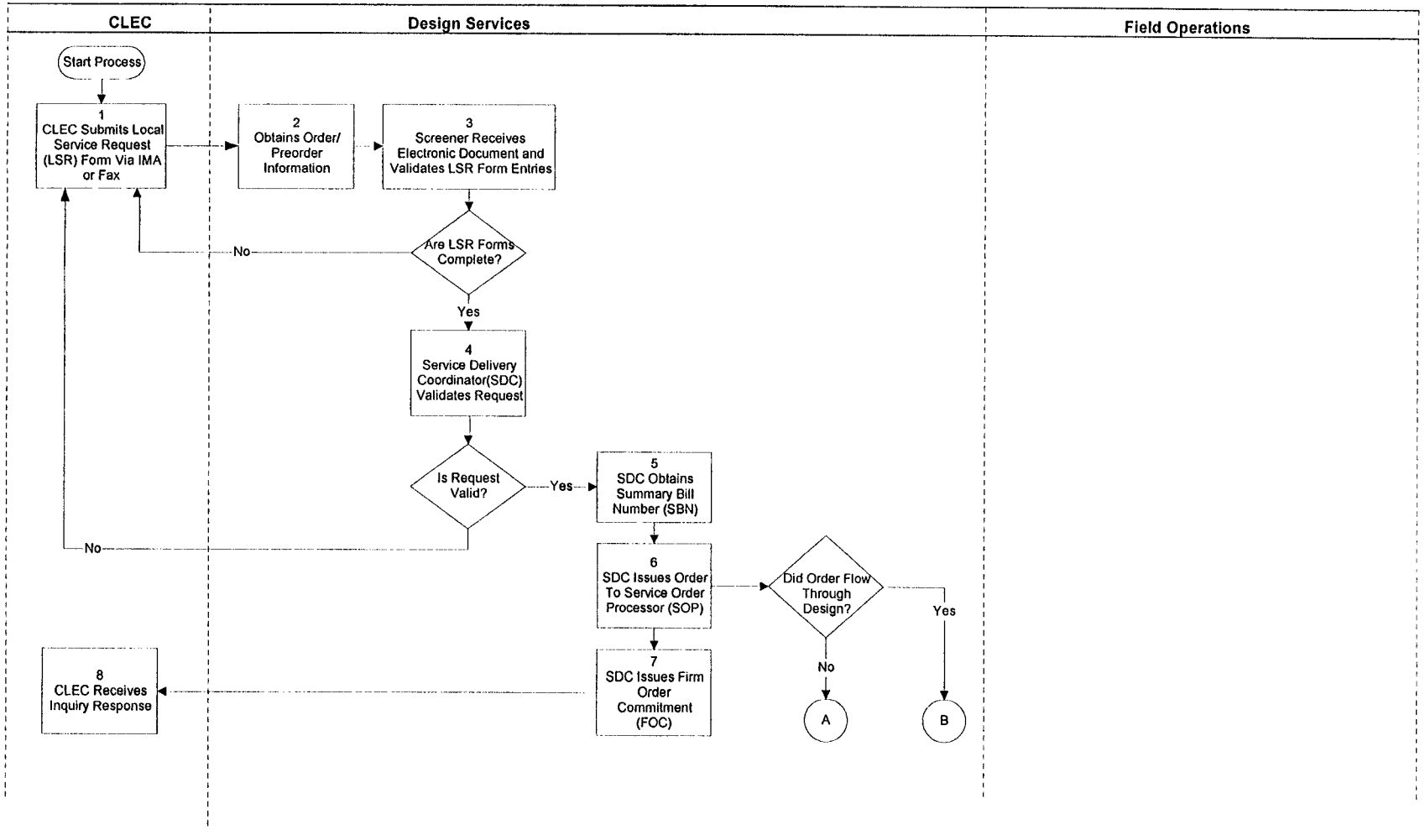
- Validate Address (returns address and central office information so that a dispatch to the correct address can be accomplished)
- Retrieve Facility Availability (provides information so that the CLEC may determine whether available facilities exist, i.e. whether the order may be held for lack of facilities)
- Retrieve/Reserve Available Appointments (provides list of available dispatch appointments so that the CLEC can reserve a specific date and time for an installation appointment; this query may be necessary if the facility availability query indicates that a dispatch is needed

In addition, the CLEC using IMA completes the various forms defined by the OBF for the type "unbundled loop as a new installation". This includes the LSR (local service request), EUI (end user information) and Resale (resale information) forms. These forms identify the CLEC's authorization to become the local service provider of the end-user customer on the basis of an

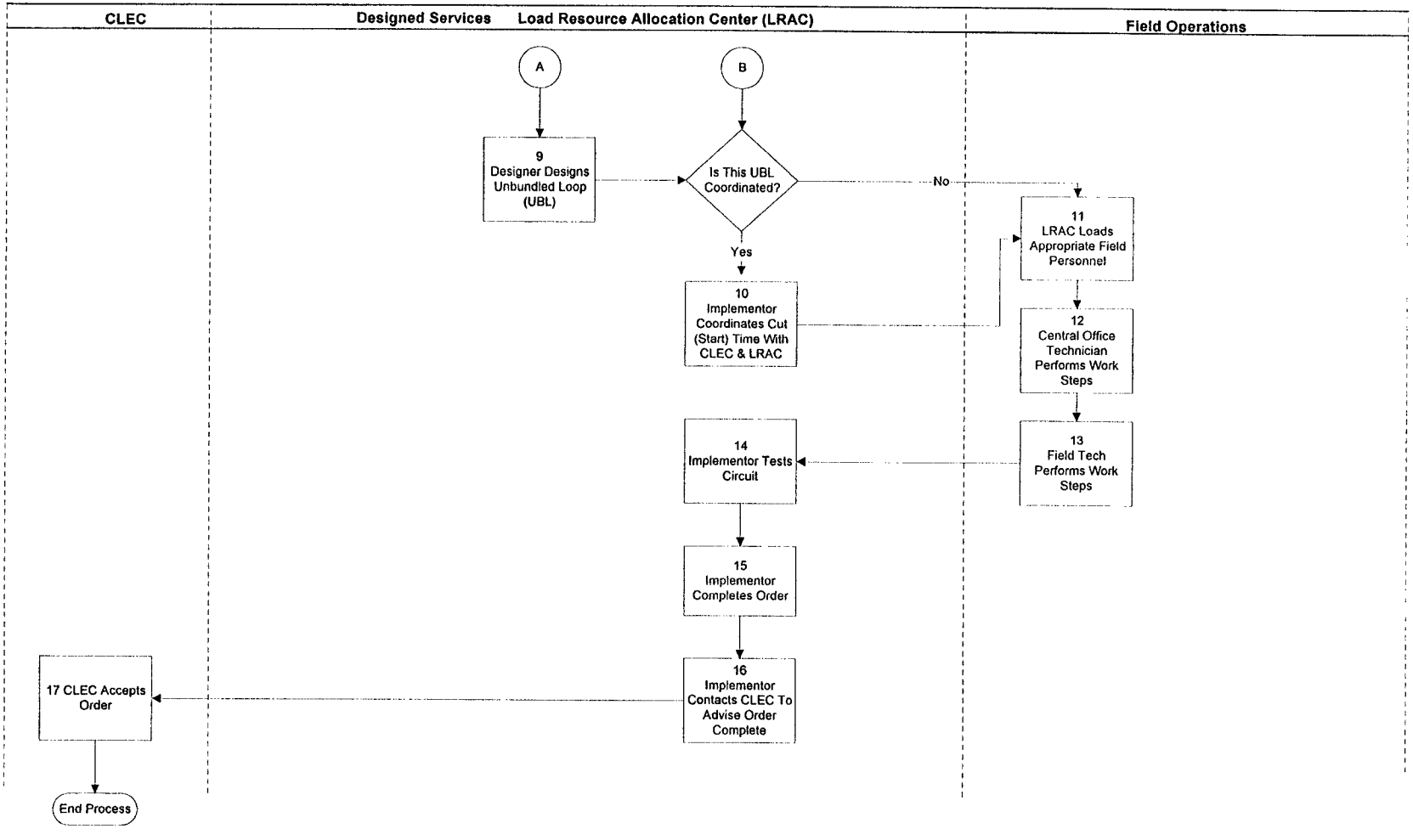
unbundled loop. After completing the forms, the CLEC electronically transmits them to U S WEST where they are placed into a database known as the Firm Order Manager (FOM). From here, the screener in the ISC briefly reviews the forms and routes them to the Des Moines ISC. The SDC checks to see if there are any related orders, reviews remarks for additional information, validates the CLLI code, issues the service orders in the appropriate SOP and transmits an FOC to the CLEC.

In this example, the order is assumed not to flow-through TIRKS so a designer must design the loop. Since the CLEC ordered coordination and conformance testing, an implementer is assigned to coordinate the cut-over and testing with the CLEC and the U S WEST LRAC. After the design step is completed, coordination is scheduled and the work begins. A specific technician is assigned using U S WEST's standard loading and coordination procedures. Once the installation and testing of the loop is complete, the implementer completes the order and contacts the appropriate CLEC person to advise that the order has been completed. During the nightly batch run, the service order is marked as completed, and the following morning, a completion report containing this customer's information, is electronically transmitted to the CLEC.

UNBUNDLED LOOP PROVISIONING FLOW



UNBUNDLED LOOP PROVISIONING FLOW



Task Descriptions

Task	Description
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2 and 3	Obtain preorder/order information and review LSR and associated forms for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	Verifies that facilities are available to service address
2.4	CLEC Termination Point verified
2.5	Network Channel (NC) and Network Channel Interface (NCI) codes verified
2.6	CLEC interval validated
4	Determines if the request is accurate; resolves questions and problems
5	Summary Billing number for account obtained
6	Service Order is issued into Service Order Processor (SOP).
7 and 8	Firm Order Commitment (FOC) is issued to CLEC
9	Unbundled Loop is designed
10*	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC), Central Office Technician (COT), Field Technician.*=If CLEC orders the coordinated installation option this step is used otherwise this step is omitted.
11	Provisioning work request received in Network Operations
12	Word Doc issued and Central Office work performed
13	Word Doc issued and field work at end user's premise performed if required
14	Circuit is tested (If provisioning option is basic and circuit is reused, task not performed.)
15	Order completed
16	CLEC notified via phone call to accept service and begin billing

GENERAL UNBUNDLED SWITCH DESCRIPTION

Unbundled switch consists of three components: a port (line or trunk), vertical features and switching usage.

Unbundled Switch Line Side Switch Port Process

The description of the order processing flow for unbundled loop is based on the diagram contained below. The CLEC interacts with end-user customers to identify needs, retrieve appropriate pre-order information and issue LSRs to U S WEST. Upon receipt, LSRs are screened, routed to the proper center for issuance of the corresponding service orders and FOC. Service orders are assigned, designed to the CLEC's termination point, installed and completed. If the CLEC ordered coordination, the implementer works with the LRAC to load the appropriate COT who completes the frame wiring and assists the implementer in testing the switch port. The RCMAC completes line translations and also assists the implementer in testing. The implementer completes the order and contacts the CLEC for acceptance. OSSs are updated, completion reports issued and billing is established.

Illustration

To illustrate the unbundled line-side switch port provisioning processes, assume that an end-user customer moves into U S WEST territory for the first time and contacts CLEC Y, a facilities-based provider, for its local telecommunications services. CLEC Y is co-located in U S WEST's central office that services the customer's location, has its own loop facilities to the end-user customer's premise but decides to use U S WEST's switching capabilities.

The customer would contact CLEC Y. The CLEC's representative would request pre-ordering information. If CLEC X is using U S WEST's IMA or EDI electronic interfaces, the user would issue online, real-time queries to U S WEST. Those pre-ordering transactions that the CLEC user may wish to issue are:

- Retrieve Service Availability (because this query only is used for POTS Resale)[i]; and
- Retrieve/Select Available Telephone Numbers (because, with an unbundled loop, the CLEC performs the switching function, not U S WEST).

The other pre-ordering transactions would not apply:

- Validate Address (because no outside dispatch to the correct address is needed);
- Retrieve CSR (because there is no existing account);
- Retrieve/Reserve Available Appointments (because no outside dispatch is needed); and
- Retrieve Facility Availability (because no loop is being ordered).

After the appropriate pre-order transactions are completed, the CLEC would create various forms (defined by the OBF) of the type "unbundled analog line-side switch port or unbundled digital line-side switch port-ISDN capable as a new installation." Order forms include the LSR (local service request), EUI (end user information), Switch Service Form (switch port information) and Listing (white page listings information). These forms identify the CLEC's becoming the local service

[i] This information is also only available for U S WEST's POTS retail services, not design retail services.

provider of the end-user customer on the basis of an unbundled switch port. After completing the forms, the CLEC electronically transmits the forms to U S WEST.

If the LSR is received electronically, the screener briefly reviews the LSR, EUI and Switch Service forms for completeness. After screening the order, the screener routes the forms to the appropriate center for creation of the service orders. Today, the unbundled switch orders are routed to the Des Moines ISC. The SDC issues the service orders in the appropriate SOP and transmits an FOC to the CLEC. The service order is assigned in the SWITCH systems and the designer designs the port in TIRKS. The designer also transmits the design layout record (DLR) to the CLEC. The implementer tests and turns up the switch port, ensuring that the order is sent to MARCH/APRIL for line side translations and provisioning of vertical features, if any. The RCMAC completes the translation work, if assistance is required. If inside work is necessary, the LRAC determines the type of work and technician that are necessary and loads the appropriate LNO technician using U S WEST standard loading procedures. The COT wires the circuit according to the WORD document and works cooperatively with implementer to test and turn up the circuit.

On the due date, the implementer contacts the CLEC and completes the order. Depending on the installation options requested (Basic Installation or Coordinated Installation), U S WEST and the CLEC complete the order with either cooperative or coordinated testing. The implementer calls the CLEC for acceptance of the order. Upon completion, U S WEST's OSS are updated and billing established.

Unbundled Switch Trunk Side Switch Port Process

If an Unbundled Switch DS1 Trunk Port is ordered, the CLEC issues an ASR (access service request) either manually or through U S WEST's EXACT electronic

interface. Three forms are used: the ASR, the Special Access Service Request (SPE) and the SPE2 forms. The SDC receives the ASR, verifies the CLEC's certification, verifies the accurateness and completeness of the ASR and/or builds the trunk group request form. The SDC also validates the ordering intervals, reviews other pertinent information and logs the ASR in TIRKS-GOC (Generic Order Control).

The designer accesses WFM (Work Flow Manager), EXACT and TIRKS to design the switch port, resolves any RMAs (Request for Manual Assistance) and checks for spare capacity. Afterwards, the designer issues the DLR to the CLEC and distributes the order for provisioning.

The implementer coordinates the installation of the switch port, resolves jeopardies and works with the Load Specialist and COT to load the COT, complete the wiring and setting up of cross connects and perform conformance testing. The implementer records the conformance test results and contacts the CLEC to turn up the DS1 Trunk Port element. Working with the appropriate CLEC personnel, the implementer completes the service order in WFA-C (Work Force Administration-Control) and IABS (Integrated Access Billing System) for billing.

Illustration

To further illustrate these processes, I will describe how U S WEST processes a request for an unbundled switch trunk port. The CLEC completes the LSR, SPE and SPE2 forms which make up the request. Using TELIS software, the CLEC transmits the ASR to U S WEST and the ASR is placed in the EXACT system from where the SDC verifies the ASR has not been put in an error condition, adds information, such as the representative's name and number, and product codes. The SDC logs the request in TIRKS GOC (Trunk Inventory Record Keeping System – Generic Order Control) and

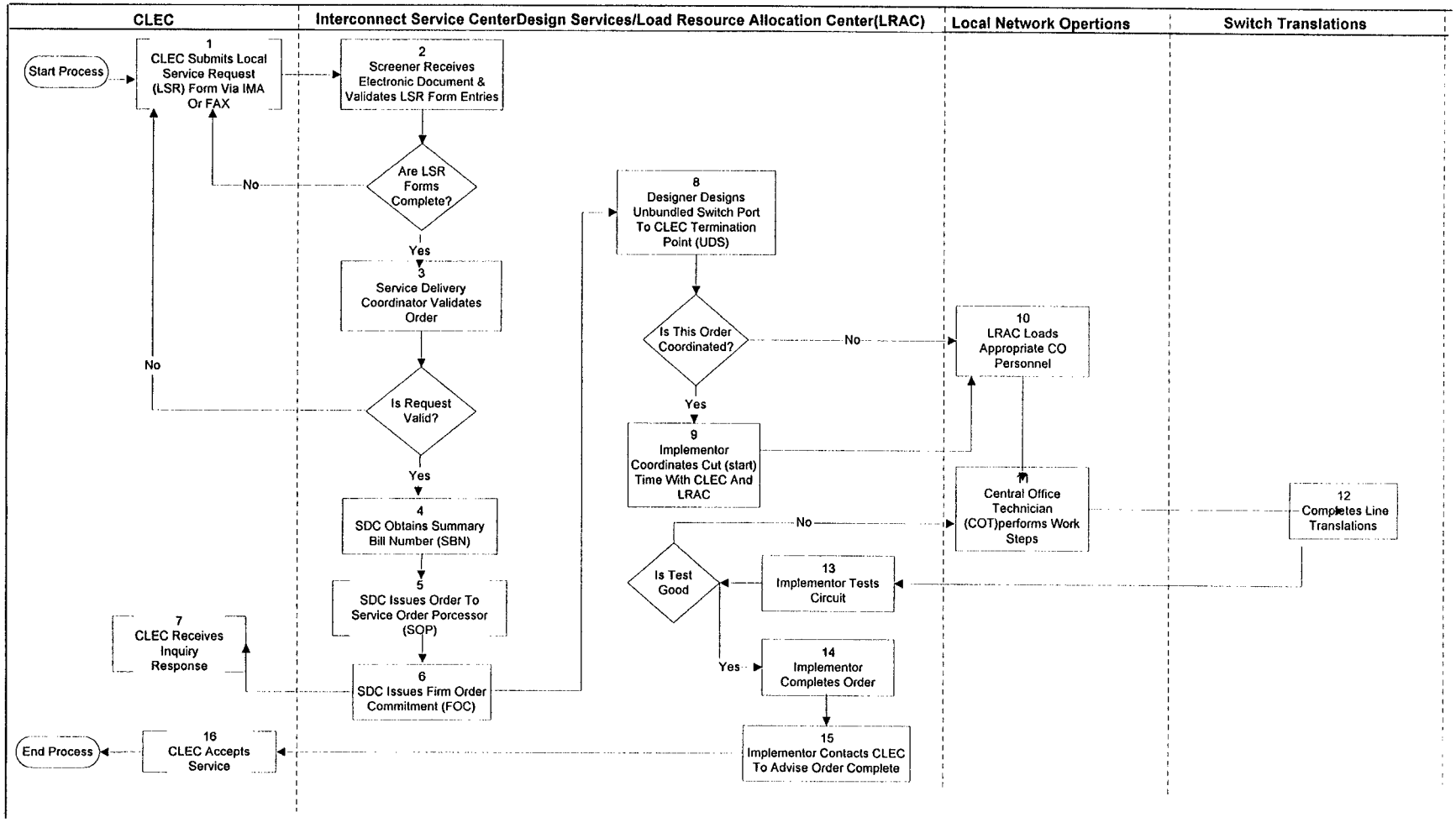
builds the trunk group request and work authorization forms. The SDC validates the ordering intervals such as the service order issue date (SID), record issue date and design, verify and assign date.

The SDC accesses WFM (Work Flow Manager), EXACT and TIRKS to design the switch port, resolves any RMAs (Request for Manual Assistance) and checks for spare capacity. Afterwards, the SDC issues the DLR and FOC to the CLEC and distributes the order for provisioning.

To coordinate, the implementer coordinates the installation of the switch port, resolves jeopardies and works with the Load Specialist and COT, to load the COT, complete the wiring and set up of cross connects, running from the frame to the CLEC's meet point and performs conformance testing. The implementer records the conformance test results and contacts the CLEC to turn up the DS1 Trunk Port element. Working with the appropriate CLEC personnel, the implementer completes the service order in WFA-C (Work Force Administration-Control) and IABS (Integrated Access Billing System) for billing.

Figure 1 - Provisioning Flow of Unbundled Line Port

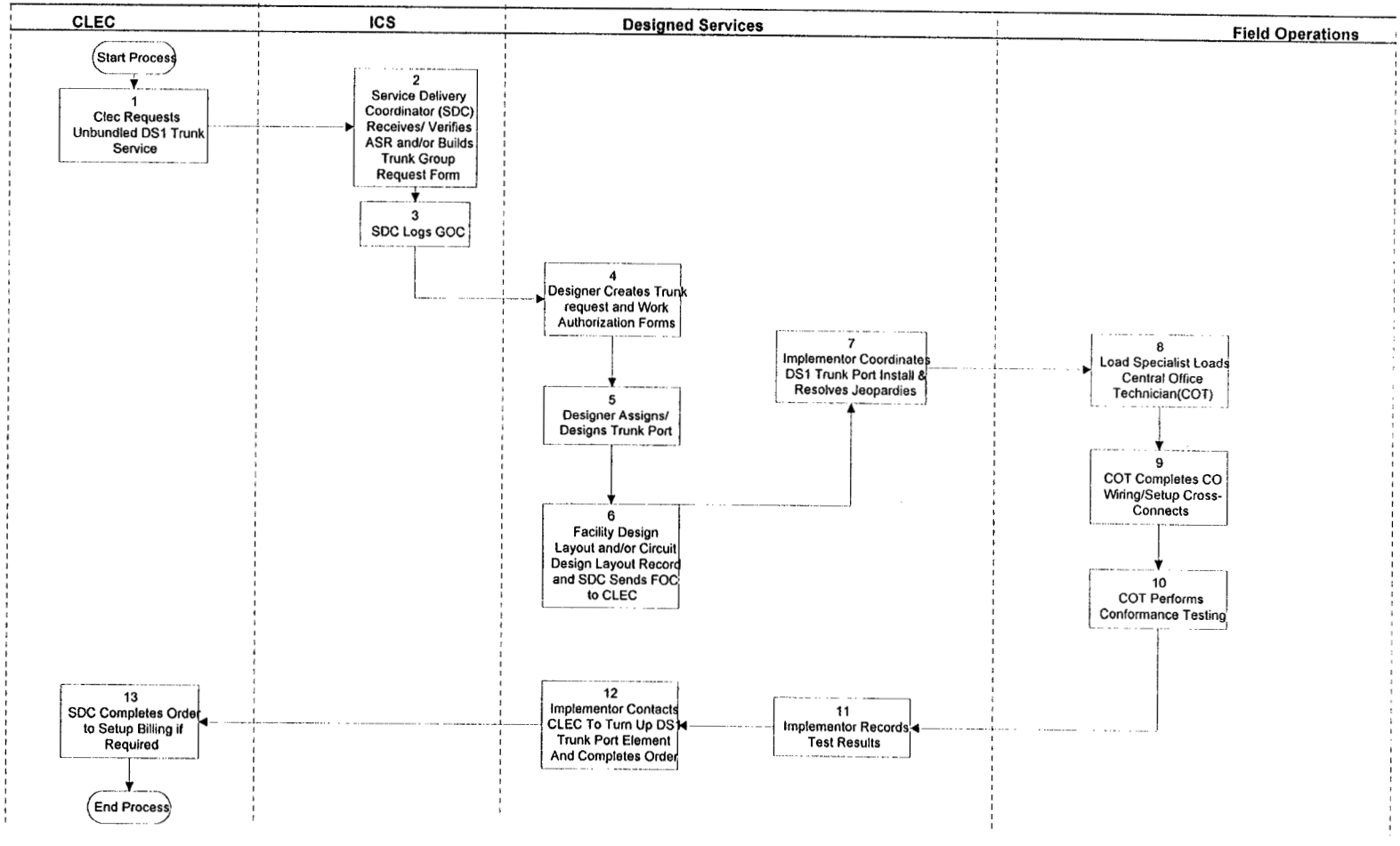
UNBUNDLED SWITCH LINE PORT PROVISIONING FLOW



Task Descriptions

Task	Description
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2	LSR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions
4	Summary Billing number for account obtained
5	Service Order is issued into Service Order Processor (SOP).
6	Firm Order Commitment (FOC) is issued to CLEC
7	Make Assignment and issues response to CLEC
7.1	Load USOCs and assign as business class of service
7.2	Identify Available Office Equipment
8	Order designed
9	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC),
10	Load Central Office work steps
11	COT performs work
12	Provision Line Translations
13	Circuit is tested
14	Order completed
15	CLEC notified
16	Billing established

UNBUNDLED SWITCH TRUNK PORT PROVISIONING PROCESS FLOW



Task Descriptions

Task	Description
1	Access Service Request (ASR) form submitted to Denver Interconnect Service Center (ISC)
2	ASR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions and logs order
3.1	Summary Billing number for account obtained
3.2	Service Order is issued into Service Order Processor (SOP).
4	Build Trunk DRI and WA
5	Design Trunk Port
6	Firm Order Commitment (FOC) is issued to CLEC
7	Trunk port installation is coordinated
8	Load Central Office work steps
9	Order issued and central work performed
10	Circuit is tested
11	Order completed
12	CLEC notified
13	Billing established

SHARED TRANSPORT

Shared Transport relates to U S WEST's interoffice message trunk network for the delivery of switched, voice grade traffic between U S WEST end offices and tandem switches within local calling areas. Shared Transport is only provided with Unbundled Switch Ports; consequently, unless custom routing is ordered, traffic will be directed over U S WEST's interoffice message trunk network.

Shared Transport Processes

The process definition for shared transport is expressed differently than the other processes discussed above. The OBF has not defined a specific form for shared transport, and there is no discrete service order that corresponds to a CLEC's request for this product; rather, the request for shared transport is identified in the Feature Detail field of the Switch Port Service Form in either IMA GUI or EDI. This is carried forward onto the switch port service order as a Line Class Code. When the switch port is provisioned, access to U S WEST's shared network is then included.

In summary, the provisioning process for shared transport is part and parcel of the provisioning process for switch ports.

LISTINGS FOR RESALE AND LINE SIDE UNBUNDLED NETWORK ELEMENTS

Listings is a term to describe the customer information (name, address and telephone number, for example) that appears in the white page telephone directory and directory assistance data bases. Listings are either simple or complex depending on the amount, type and format of information involved. Simple listings are basically customer name, address and telephone number with no special formatting. Complex listings include this same basic information and can include items such as multiple telephone numbers, customer names and special formatting, such as degree of indent and bolded type. Customers have the option to have their listings published (appears in both directory assistance and the white page directory), non-published (appears in neither directory assistance nor the white page directory) or non-listed (appears in directory assistance but not in the white page directory).

Listings Processes

The listings process is made up of several entry points and a common downstream processing flow. Entry points reflect whether a purely facility-based provider,[1] a resale/unbundler or U S WEST retail subscriber provides listing information to U S WEST.

The facility-based provider prepares the listing forms, specified by the OBF. The provider may elect to either transmit the information via a batch EDI interface, built

specifically to support listings or via facsimile to U S WEST's listings operations group. If the EDI interface is used, the listings are fed directly in the Listings Services System (LSS). If facsimile is used, the listings operations group inputs the listings into LSS.

A reseller or unbundler may elect to transmit listing information either via IMA, EDI or facsimile. If the listings are contained on an LSR of the type eligible for flow-through, the LSR including the listing portion will be electronically converted into a service order and placed into the service order processing flow. If the listing is a "simple listing", it is included on the service order. If the listing is a "complex listing", the ISC refers the listings information to the Complex Listings Center which inputs the information directly into the SOP.

In the case of a U S WEST retail subscriber, the end-user customer contacts the U S WEST business office and provides listing information. If the listing is a simple listing, the listing information is input on the service order. If the listing is complex, the listing information is faxed to the Listings Group which inputs the listing information directly into LSS (Listings Support System).

Once in the SOP, the listings information from the service orders are placed into the listings database from which a nightly download file is created. This file, containing commingled listings for CLECs and U S WEST, is sent to directory assistance and DEX. In each case, directory assistance and DEX updates their data bases the next calendar

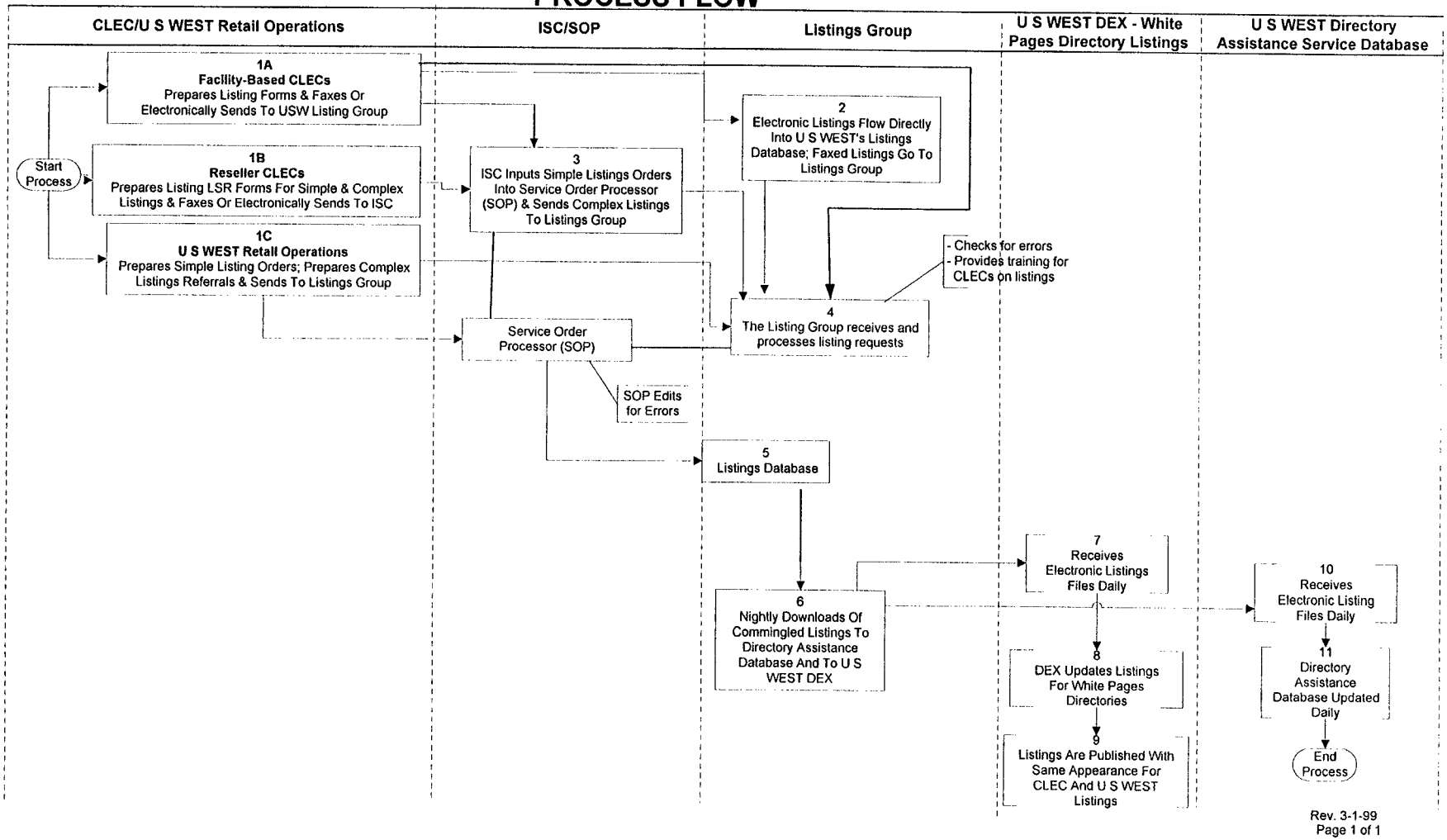
[1] The term purely facility-based provider describes a CLEC that only interconnects to U S WEST's network and does not issue orders for resale services or unbundled network elements.

day. Additionally, DEX publishes the listings with the same appearance for CLECs and U S WEST.

Illustration

To illustrate listings provisioning processes, assume that a CLEC that is a purely facilities-based provider wishes to have a simple residential listing appear in U S WEST's DEX directory and directory assistance. Further assume that this CLEC uses U S WEST's batch EDI interface for listings. The CLEC defines the listing information, formats the listing and transmits it to U S WEST via the EDI interface that feeds the listing directly into LSS without human intervention. The residential listing is placed into the nightly download file with the other listings in the database and is sent to DEX and directory assistance. The databases for DEX and directory assistance are updated the next calendar day.

WHITE PAGES DIRECTORY LISTINGS - CHECKLIST ITEM 8
CLEC AND U S WEST RETAIL END USER LISTINGS
PROCESS FLOW



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Task Descriptions

TASK	DESCRIPTION
1A Facility-Based CLECs Prepares Listing Forms & Faxes or Electronically Sends to USW Listing Group	1. Prepares one or more of the following OBF Directory Listing Forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end-user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 2. When the listing is associated with UNE-Switch Port, the CO-PROVIDER may submit their request via Fax, On-line EDI, or On-line IMA..
1B Reseller CLECs Prepares Listing LSR Forms for Simple & Complex Listings & Faxes or Electronically Sends to ISC	3. Prepares one or more of the following OBF Directory Listing Forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end-user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 4. The CO-PROVIDER may submit their request via Fax, On-line EDI or On-line IMA.
1C U S WEST Retail Operations Prepares Simple Listing Orders; Prepares Complex Listings Referrals & Sends to Listings Group	Any end user or Co-Provider who purchases services from U S WEST at retail rates. • Via telephone. • Via mail. • Via faxed listing request (No OBF forms are used by Retail subscribers)

TASK	DESCRIPTION
2 A. Inputs listings into listings database: or, B. Electronic listings go directly into U S WEST's listings database	• Types listings directly into LSS system in format according to LSS formats. Batch EDI formats directly to LSS.
3 ISC inputs simple listings orders into Service Order Processor (SOP)	• Types listing orders into SOPs such as RSOLAR, SOLAR, SONAR and SOPAD.
Service Order Processor	Handles listing requests and interfaces with the Listing Database
4 Listings Group receives listing orders from CLEC	• Listings Group receives Faxed Complex & Simple listing orders from Fac-Based CLECs - Processes Fac-Based Listings & Releases to Listings Database. Receives Complex Listing Orders from ISC, & U S WEST retail Operations - Processes Complex Listings Orders & Releases to SOP • EDI Batch Process – Simple and Complex listings • Fax – Both Complex and Simple listings
5 Listings flow into listings database	• Mechanical edits are applied to all listings • CLEC listings and U S WEST listings are commingled in database • CLECs are provided monthly "proof" reports • of all their listings
6 Nightly downloads of commingled listings to Directory Assistance database and to U S WEST DEX	Downloads listings to DA database and Dex. • Datafile for Directory Assistance listings are downloaded to DA from LSS nightly • Data file is produced for all white page listings and downloaded to Dex database nightly
7 Receives electronic listings files daily	Receives listings from LSS. Dex receives data file from LSS nightly with white page listings that need to be in the published directory.
8 DEX updates listings for white pages directories	Dex white page listing database updated next day. Dex Master database and subsystems updated with data from LSS file.

TASK	DESCRIPTION
9 Listings are published with same appearance for CLEC and U S WEST listings	
10 Receives electronic listing files daily	Receives listings from LSS. Data file is received from LSS nightly with all listings that need to appear in DA.
11 Directory Assistance database updated daily	DA database updated with data from data file from LSS.

INTERIM NUMBER PORTABILITY

The term number portability describes the service offering provided by U S WEST to a CLEC which allows an end-user customer to retain his or her telephone number when moving to a different local service provider's switch. Interim number portability solution that uses the existing switch infrastructure to forward a call from a U S WEST switch to a switch provided by the CLEC. Specifically, three solutions are provided: Remote Call Forwarding (RCF), Direct Inward Dialing Service (DID) and Directory Number Route Indexing (DNRI). Each of these solutions routes the call from the dialed end office to the CLEC using the existing switch infrastructure and each removes the vertical and horizontal services of the end-user customer from U S WEST's switches. Thus the number is ported to the CLEC switch.

Remote Call Forwarding Description

Stored Program Control switches are used to forward calls to a different switch. A permanent RCF is established in U S WEST's switch forwarding any incoming call to the number assigned and maintained in the CLEC switch. All call types destined for the ported number will be forwarded to the CLEC.

Directory Number Route Indexing Description

Directory Number Route Indexing is a local exchange telecommunications service which permits incoming calls to be ported to a service provider's switch via DNRI. A permanent Route Index is assigned to the end user's ported number in the U S WEST switch.

EDI/EB-TA FUNCTIONAL PROCESS DESCRIPTION

U S WEST has made many pre-order, order and repair functions available to CLECs via computer-to-computer interfaces. In the case of pre-order and order functions, the computer-to-computer interface is called EDI and, for repair functions, the computer-to-computer interface is called EB-TA. The processes for these functions are summarized below.

1. PRE-ORDERING, ORDERING & PROVISIONING PROCESS DESCRIPTIONS

The EDI interface supports the following pre-order, order & provisioning functions: (1) telephone number processing, (2) address verification, (3) check for facility availability, (4) check for service availability, (5) retrieval of customer service record, (6) appointment processing, (7) submission of orders, (8) processing of customer listing information, (9) submission of supplemental orders, (10) inquiry of orders, and (11) error processing.

Telephone Number Process

The EDI pre-order telephone number process allows the user to execute the following transactions: (1) check for telephone number availability (EDI transaction set 850/TNAQ and 855/TNAR), (2) select and reserve a telephone number (EDI transaction set 850/TNSQ and 855/TNSR), and (3) cancel or return a telephone number (EDI transaction set 860/CTQ and 865/CTR).

To request a list of available telephone numbers, the CLEC provides end-user related information on the telephone number availability query. A list of available telephone numbers is returned to the CLEC. The telephone numbers are reserved in PREMIS for the end-user's address at the time the list is sent to the CLEC. Once a telephone number has been reserved, the CLEC has 24 busness hours within which the telephone number may be included on a request for service. Any unused numbers will be returned automatically if an LSR is not submitted in 24 business hours or if the number has not been included on a subsequesnt LSR.

Telephone numbers may be canceled or returned to an available status in the OSS. The CLEC may return the telephone number by submitting a cancel transaction, via EDI, or simply by allowing the telephone number time limitation to be reached. The unused telephone number will automatically be returned to an available status.

Address Verification

The EDI pre-order address verification process allows the user to: query for and retrieve confirmation of valid address information (EDI transaction set 850/AVQ and 855/AVR).

Before service can be ordered, the address where service is to be established can be verified to ensure that a proper address is located.

The CLEC is also able to search for an address using the descriptive name for a specific address.

Facility Availability

The EDI pre-order facility availability process allows the user to: query for and retrieve information related to the presence or absence of POTS facilities for a particular address (EDI transaction set 850/FAQ and 855/FAR).

Using the telephone number or the end-user service address, obtained through the use of the address verification process, a CLEC can query on the existence or availability of and characteristics of POTS facilities at a given point in time.

Service Availability

The EDI pre-order service availability process allows the user to: query for and retrieve information related to POTS service availability (EDI transaction set 850/SAQ and 855/SAR).

Service availabiliyt lists the services that are available at the serving wire center.

Customer Service Record Retrieval

The EDI pre-order customer service record (CSR) retrieval process allows the user to: query for and retrieve an existing CSR (EDI transaction set 850/CSRQ and 855/CSRR).

A CLEC can request to retrieve an existing CSR to verify listing, billing and service related information.

Appointment Process

The EDI pre-order appointment process allows the user to: (1) check for appointment availability (EDI transaction set 850/AAQ and 855/AAR), (2) select and reserve an appointment (EDI transaction set 850/AASQ and 855/AASR), and (3) cancel or return an appointment (EDI transaction set 860/CTQ and 865/CTR).

EDI provides to the CLEC a list of available appointments within a four-week time period. The CLEC has a predetermined amount of time in which to select an appointment from the list. If the time limit is exceeded, the CLEC will need to request an updated list of appointments and choose one of the appointments within the time limitation. To select an appointment via EDI, an appointment selection query is sent with the appropriate date and time selection. Once an appointment has been reserved, the CLEC has 24 business hours to

submit an LSR in which the appointment is included on a request for service.

Appointments may be canceled and returned to an available status. A CLEC can return an appointment by issuing a supplemental request to cancel the original request for service. The appointment will then be canceled automatically. If an appointment is reserved but it is later determined that it will not be used, the CLEC may cancel the appointment by submitting a cancel transaction, via EDI, or simply allow the appointment time limitation to be reached and IMA will automatically return the appointment to an available status.

Order Submission

After the CLEC submits an LSR, the LSR is converted into a service order that is recognized by U S WEST's OSSs. If the order is eligible for flow-through, the LSR is electronically converted into a service order. U S WEST has flow-through functionality for conversion as-is orders and conversion as-specified orders. Once the service order has passed IMA edits, it is sent to a U S WEST Service Order Processor (SOP). POTS and PBX orders can be submitted via EDI using the EDI transaction set 850/SVCRQT and 855/FOC. For Loop Service (LS) and Number Portability Service (INP and LNP) orders can

be submitted via EDI using the EDI tranactions set 850/LNPRQT and 855/LNPFOC.

Customer Listing Creation

The Interconnect Service Center (ISC) representative can retrieve, view and process Local Service Requests (LSRs) with complex listings. A complex listing is one that requires special indenting and formatting. Listing information is transmitted as part of the original service order (EDI transaction set 850/SVCRQT and 855/FOC).

Supplemental Order Submission

Using EDI, a CLEC can transmit supplemental orders to either request specific changes, a change in due date only or a cancelation of the entire order (EDI transaction set 860/SUPP or 860/CANCEL and 865/FOC). The original service order is corrected or canceled by the issuance of a supplemental service order.

Order Inquiry

Using the Customer Carrier Name Abbrevation (CCNA), Purchase Order Number (PON) and an optional version number of a LSR, a CLEC can query and retrieve status information. The EDI order inquiry (LSR Status Inquiry) process provides CLECs the ability to inquire the status of a LSR it has submitted. (EDI transaction set 850/LSRSQ and 855/LSRSR).

Error Process

U S WEST detects errors on CLEC's LSRs and notifies the CLEC in one of two ways. The first type of error is the one that is detected and has notices generated by the IMA/EDI architecture. These error notices are transmitted via an EDI error transaction to the CLEC. An example of this type of error is when a required field is not populated or is populated with data in an invalid format (EDI transaction set 855/FATAL or 855/LNPFATAL).The second type of error is detected by the Interconnect Service Center which transmits an order to the CLEC via an EDI error transaction. These types of errors are those that have been identified after the request has passed the initial IMA/EDI architecture error edit process. For example, if the end-user name, telephone number and/or address are inconsistent with the information retrieved contained in U S WEST's OSSs, an error message will be sent to the CLEC (EDI transaction set 855/NONFATAL or 855/LNPNONF).

2. REPAIR TROUBLE REPORTING PROCESS

Overview of Electronic Bonding for Repair Functions

Currently, Electronic Bonding – Trouble Administration (EB-TA) enables CLECs to submit trouble tickets for POTS, design services, and unbundled loop facilities. EB-TA uses CMIP (Common

Management Information Protocol) to access functions of the MEDIACC (MEDIated ACCess) interface which, in turn, communicates to back-end repair OSSs such as LMOS (Line Maintenance Operations System). MEDIACC is an interface to the U S WEST repair systems which has been used for years by interexchange carriers to submit trouble tickets. MEDIACC similarly enables CLECs to submit trouble tickets.

Both IMA and EB-TA use MEDIACC to access repair functions in U S WEST's OSSs. By accepting commands from IMA, thehuman-to-computer interface, MEDIACC supports a human-to-computer interface. By employing a CMIP interface, MEDIACC also accepts commands from CLECs' OSSs to support a computer-to-computer interface.

The Electronic Bonding interface to MEDIACC currently supports the following repair functions for trouble tickets: (1) create trouble ticket, (2) inquire on a trouble ticket (3) modify a trouble ticket, (4) receive active notification of status changes, (5) cancel a trouble ticket, and (6) receive active notification of close out status. To use the EB-TA repair functions, a CLEC must deploy its own OSSs that provide inputs,

outputs and logic surrounding the CLEC's use of the EB-TA repair function.

Create a Trouble Ticket

To use the EB-TA function to create a trouble ticket, the CLEC must input into its OSSs information about the customer line and the nature of the trouble. The CLEC's OSS then formats the data according to the CMIP protocol and sends it to MEDIACC, which sends it to LMOS to invoke the LMOS function to create a trouble ticket.

Inquire, Modify or Cancel a Trouble Ticket

Similarly, requests from a CLEC's OSS to obtain status information on a ticket, or to modify or cancel a ticket, require the CLEC to input into its OSSs the required information, format it and send it to MEDIACC via CMIP. In the case of an inquiry, MEDIACC maintains current information on the ticket, which it sends back to the CLEC's OSS via CMIP. To modify or cancel a ticket, MEDIACC takes information from the CLEC's OSS and forwards certain required information to LMOS. LMOS then performs a transaction to add a subsequent report, identifying the ticket as modified or cancelled.

Receive Active Notification of Trouble Ticket Status Change

The EB-TA interface actively notifys CLECs of certain ticket status changes. The active notification function relies on the capability of

LMOS to automatically notify MEDIACC of changes in the status of a trouble ticket. MEDIACC forwards this automatic notification to the CLEC's OSS via CMIP.

Close a Trouble Ticket

When U S WEST has resolved the repair order, the trouble ticket status is changed to cleared, then closed in LMOS. MEDIACC receives both notifications and formats the data relating to these status changes. This combined information is then sent to the CLEC's OSSs via CMIP. This information indicates the cause of the trouble, how long the service was impaired, when it was restored, and if billing charges could apply.

Error Process

There are two types of errors which can be sent to the CLEC for repair processing. Both types of errors are detected and have notices generated by EB-TA. The first type of errors is the T1M1 standards errors which relate to EB-TA business functions. For example, a T1M1 error will be sent to the CLEC if the CLEC sends a create transaction without all the required attributes. The second type of error occurs after the trouble ticket passes the trouble administration business function rules. This type of error is a transaction-level error usually associated with data values, data formats and implementation

agreement violations. An example of this type of error is when an optional attribute is not populated according to the rules of the implementation agreement. As when the telephone number contains dashes and the implementation agreement calls for only digits.

GENERAL RESALE DESCRIPTION

Resale processes involve responding to pre-ordering requests for information, processing orders for resale services and changing information in U S WEST's OSSs to identify the fact that a particular end-user is being served by a specific CLEC. After being resold, the CLEC becomes U S WEST's customer and the end-user customer becomes the customer of the CLEC.

Resale POTS and Designed Services

The description of the order processing flow for POTS and designed services is based on the diagram contained below. First, regarding the CLEC's process, the CLEC, in discussing with the end-user customer, identifies the customer's needs, requests pre-ordering information and sends an order (LSR) to U S WEST. The ISC reviews the order to verify that the information is correct, routes the order between ISC sites, if appropriate, converts the LSR into a service order[1] and places it into the service order processing flow. The service order is assigned and routed depending on its type. Designed service orders are routed to the Design Services Center which creates the design; POTS service orders are routed directly to those operations which complete any translations or provisioning work steps in the switch and inside or outside field work. After these steps are completed, the service orders (both POTS and designed services) are marked as completed on a nightly basis. This nightly batch process is the same process that U S WEST uses for its retail orders. U S WEST's OSSs such as those supporting billing, customer service records, repair line records, etc. are electronically updated. A completion file is transmitted the next morning to the CLEC

[1] LSRs must be converted into service orders. This is because service orders predate the act and are the ordering forms that U S WEST's OSS recognize. LSRs were created by national standards bodies, principally the OBF, and are intended to support local service ordering as a wholesale business.

containing information about orders completed the night before. Billing records are transmitted to the CLEC.

Illustration

To illustrate the POTS Resale processes, I will describe the process flow for a conversion-as-is order. In this example, a customer has called the CLEC to change their existing U S WEST service to the CLEC's service without any changes to their account. The CLEC, while talking to the customer online, uses U S WEST's electronic interface, IMA, to perform the following pre-order transactions:

- Retrieve CSR (provides current account information, such as listings, billing information, and products and services to which the customer subscribes)
- Validate Address (returns address and central office information so that a dispatch to the correct address can be accomplished)
- Retrieve Service Availability (provides list of products and services available at the customer's location

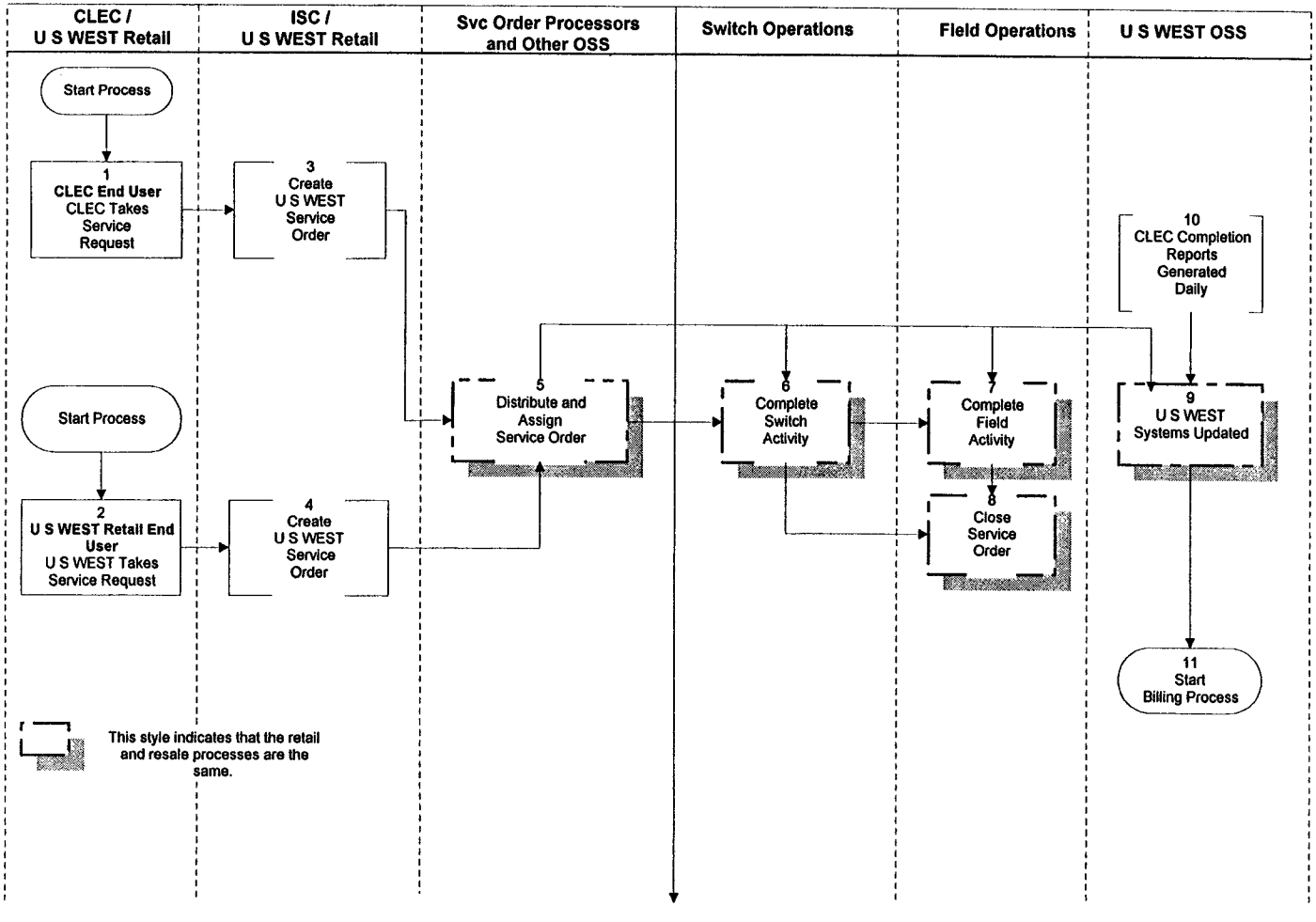
In addition, the CLEC using IMA completes the various forms defined by the OBF for this type of service request. This includes the LSR (local service request), EUI (end user information) and Resale (resale information) forms. These forms identify the CLEC's authorization to become the local service provider of the customer and provide the order information as defined by the OBF. After completing the forms, the CLEC electronically transmits them to U S WEST where they are placed into a database known as the Firm Order Manager (FOM). From here, the screener in the ISC briefly reviews the forms. In this example, there are no items on this customer's U S WEST account that require further action, the screener clicks the "Flow-Through" button. The

forms are then electronically converted into a service order and placed into the service order processing flow. Because the order is a conversion as-is, no assignment of facilities, switch translations or field dispatches are required. During the nightly batch run, the service order is marked as completed, and the following morning, a completion report containing this customer's information, is electronically transmitted to the CLEC.

If certain situations are present on the customer's account, the screener must take additional steps and the order would not qualify for "flow-through". Examples of these situations are:

- existing gift bill arrangements that require instructions on what to do with the gift bill account, this may result in the need for a service order to sever the arrangement;
- any directory advertising which requires the establishment of a separate U S WEST account;
- any special pay treatment processes that require canceling and collection of the bill.

Checklist Item 14 - Resale
POTS Pre-order, Order, Provisioning and Downstream Processes



Checklist Item 14 - Pots Resale

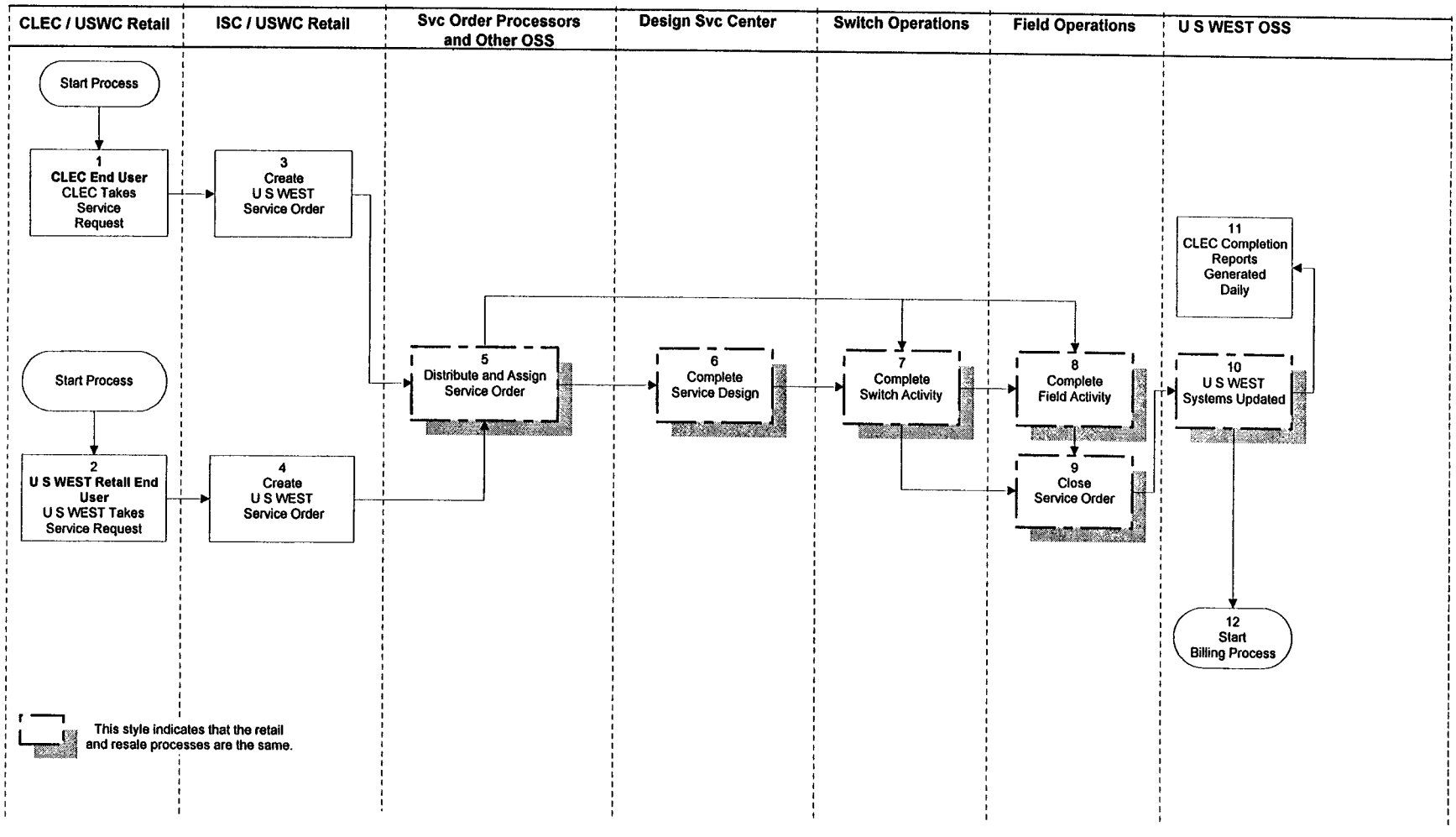
Pre-Order, Order, Provisioning And Downstream Processes

Task Descriptions

Task	Description
1	CLEC employee consults with the end-user, conducts pre-order, and order activities. Gathers the end-user's requests and prepares and submits the Local Service Request (LSR) forms to U S WEST using EDI, IMA or Faxing.
2	U S WEST employee obtains the end-user service requirements, access the end-users CSR, and consults with the end-user. If the U S WEST employee uses an order entry system, he or she will enter the end-user request by completing the numerous service order input screens, providing the end-user with all the U S WEST disclosure requirements for products, listings, carriers, etc. This is the case with either SONAR or ROMS.
3	The Interconnect Service Center receives the LSRs and creates the U S WEST service orders. For "flow through" orders, the ISC merely clicks on the "flow through" button and the LSRs are electronically created. If the LSR was Faxed, then it is automatically converted into an LSR electronic image. The electronic image is reviewed and is electronically sent to an Order Specialist who types the U S WEST service orders. U S WEST sends the CLEC a Firm Order Commitment (FOC) when the orders are issued.
4	If the service representative uses either SONAR or ROMS, the service representative hits the enter button. In the case of SONAR, the service order is sent on to the SOP. In the case of ROMS, the order is sent to the order center where an order typist retypes the order either into SONAR or directly into the SOP.
5	The Service Order Analysis and Control (SOAC) distributes all service orders to all appropriate "downstream" systems and work groups. Based on the type of order SOAC determines were to send the orders. For instance the order are passed to: LFAC for assignment, RCMAC for switch translations, the Central Office for physical switch wiring, the LNO for outside technician work, and the Listings, DA, Operator Services and 911 work centers / systems.
6	Complete any necessary switch activity changes such adding features to an existing line, establishing a new line or changing the long distance carrier. All service orders, retail and resale, are handled in the same fashion using the same processes and procedures. The orders are reviewed for completeness and accuracy.
7	Complete any necessary fieldwork such central office wiring and wiring the circuit at the end-user's location.
8	Complete the service order. The OSS as part of the nightly batch runs will automatically complete the order.
9	The completed service order is passed to the internal U S WEST systems for listings, 911, DA, Operator Services, etc. The end-user end-user's account is marked to show that the end-user is no longer a U S WEST end-user, but rather a CLEC end-user.

Task	Description
10	CLEC completion and loss reports are generated and sent to the CLEC. These reports are generated nightly based on the service orders completed that day and sent to the CLECs every morning. The reports, paper or electronic, are forwarded based on the CLEC stated preference in the New Customer Questionnaire.
11	The completed order is passed to the U S WEST billing systems so that the CLEC or the U S WEST end-user can be billed correctly. The end-user's account is marked to show the responsibility for the account transferred to the CLEC and that the end-user belongs to U S WEST.

Checklist Item14 - Resale
Design Sevices Pre-order, Order, Provisioning and Downtream Processes



Checklist Item 14 - Resale Design Services

Pre-Order, Order, Provisioning And Downstream Processes

Task Descriptions

Task	Description
1	CLEC employee consults with the end-user, conducts pre-order, and order activities. Gathers the end-user's requests and prepares and submits the Local Service Request (LSR) forms to U S WEST using EDI, IMA or Faxing.
2	U S WEST employee obtains the end-user service requirements, access the end-users CSR, and consults with the end-user. If the U S WEST employee uses an order entry system, he or she will enter the end-user request by completing the numerous service order input screens, providing the end- user with all the U S WEST disclosure requirements for products, listings, carriers, etc. This is the case with IFE. Otherwise, the service representative takes the order information by hand.
3	The Interconnect Service Center receives the LSRs and creates the U S WEST service orders. If the LSR was faxed, then it is automatically converted into an LSR electronic image. The electronic image is reviewed and is electronically sent to an Order Specialist who types the U S WEST service orders. U S WEST sends the CLEC a Firm Order Commitment (FOC) when the orders are issued.
4	If the service request has been entered into IFE it is then electronically sent to the appropriate service order processors.
5	The Service Order Processors (SOPS) receive the order performs some edits and passes them to the Service Order Analysis and Control (SOAC). At this point all U S WEST and CLEC requests are commingled and handled by the same systems and processes. The SOAC distributes all service orders to all-appropriate "downstream" systems and work groups. Based on the type of order, SOAC determines where to send the orders. For instance the orders are passed to: LFAC for assignment, RCMAC for switch translations, the Central Office for physical switch wiring, the LNO for outside technician work, and the Listings, DA, Operator Services and 911 work centers / systems.
6	The orders are sent to Trunks Integrated Record Keeping System (TIRKS) and the service is designed. Critical dates are established including a test schedule. The TIRKS designs are sent to all appropriate downstream organizations.
7	Complete any necessary switch activity changes such adding central office features to an existing line, establishing a new line or changing the long distance carrier. All service orders, retail and resale, are handled in the same fashion using the same processes and procedures. The orders are reviewed for completeness and accuracy.
8	Complete any necessary fieldwork such central office wiring and wiring the circuit at the end-user's location.
9	Complete the service order. The OSS, as part of the nightly batch runs, will automatically complete the order.

Task	Description
10	The completed service order is passed to the internal U S WEST systems for listings, 911, DA, Operator Services, WFA, etc. The end-user's account is marked to show the responsibility for the account transferred to the CLEC. The end-user is no longer a U S WEST end-user.
11	CLEC completion and loss reports are generated and sent to the CLEC. These reports are generated nightly based on the service orders completed that day and sent to the CLECs every morning. The reports, paper or electronic, are forwarded based on the CLEC stated preference in the New Customer Questionnaire.
12	The completed order is passed to the U S WEST billing systems so that the CLEC or the U S WEST end-user can be billed correctly. The end-user's account is marked to show the responsibility for the account transferred to the CLEC and that the end-user belongs to U S WEST.

UNBUNDLED LOOP PRE-ORDERING, ORDERING AND PROVISIONING PROCESS

Unbundled loop entails provisioning facilities from the Network Interface Device (NID) at the customer's premise to the U S WEST's Main Distributing Frame (MDF) or equivalent and on to the point at which U S WEST's facilities meet the CLEC's facilities (co-location space or Interconnection Distribution Frame). To illustrate the processes in support of unbundled loop, the example I use assumes an end-user customer moves into U S WEST territory for the first time and contacts a facilities based CLEC for local telecommunications services. The CLEC is co-located in the U S WEST central office that services the customer's address and the CLEC decides to provide service via an unbundled loop.

Unbundled Loop Process

The description of the order processing flow for unbundled loop is based on the diagram contained below. The CLEC, in talking with the end-user, identifies the customer's needs, requests pre-ordering information, creates an LSR and transmits it to U S WEST either electronically via one of U S WEST's pre-ordering/ordering interfaces or via facsimile. In turn, U S WEST briefly screens the order, routes the order to the proper ISC that converts the LSR into a service order and places it into the service order processing flow. The service order is assigned and provisioned, as appropriate. At this point, the ISC returns an FOC to the CLEC.

If the order flows through TIRKS, it is routed to the implementer; otherwise, the order is routed to the designer who creates the necessary design in TIRKs. The implementer coordinates the central office work with the LRAC and the CLEC, if requested, and works with the LRAC to assign the Central Office Technician (COT) who must run a jumper from U S WEST's MDF or equivalent to the tie cable leading the meet point where U S WEST's facilities meet those of the CLEC. In addition, a dispatch in the field (outside plant dispatch) may be necessary. If so, that field dispatch is scheduled and the work completed. The implementer also tests the circuit, completes the order and notifies the CLEC. Like resale

orders, the unbundled loop service order is marked as completed on a nightly basis. This is because the same service order processors process service orders for resale and UNEs. U S WEST's OSS supporting billing and customer service records are electronically updated.

A completion file is transmitted the next morning to the CLEC containing information about orders completed the night before. Billing records are transmitted to the CLEC according to appropriate cycles, i.e. daily usage files and monthly summary bills.

Illustration

When the customer contacts the CLEC, its representative would request pre-ordering information. In this example, the CLEC is using U S WEST's IMA electronic interface and issues online, real-time queries to U S WEST for the following pre-ordering transactions.

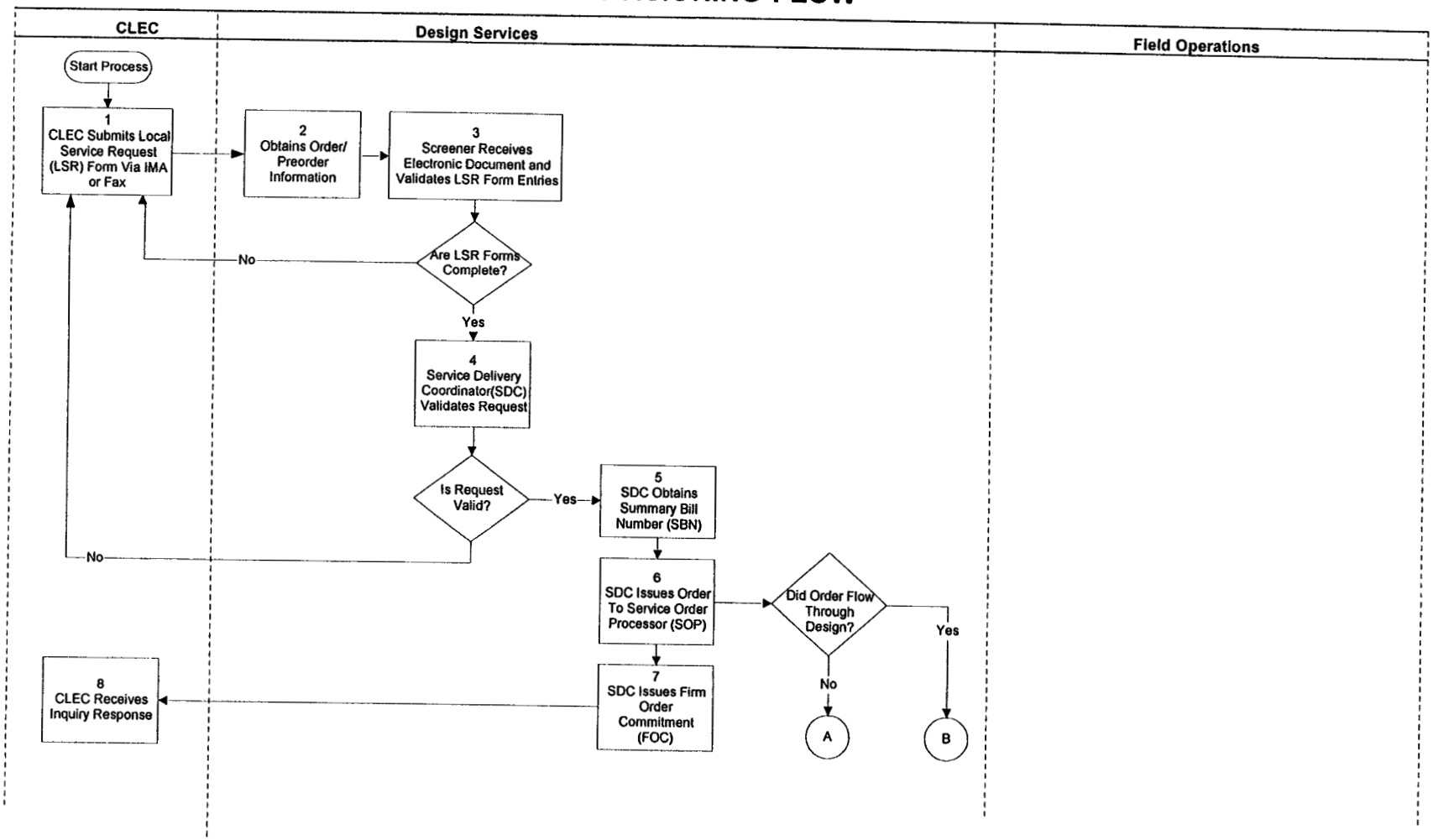
- Validate Address (returns address and central office information so that a dispatch to the correct address can be accomplished)
- Retrieve Facility Availability (provides information so that the CLEC may determine whether available facilities exist, i.e. whether the order may be held for lack of facilities)
- Retrieve/Reserve Available Appointments (provides list of available dispatch appointments so that the CLEC can reserve a specific date and time for an installation appointment; this query may be necessary if the facility availability query indicates that a dispatch is needed

In addition, the CLEC using IMA completes the various forms defined by the OBF for the type "unbundled loop as a new installation". This includes the LSR (local service request), EUI (end user information) and Resale (resale information) forms. These forms identify the CLEC's authorization to become the local service provider of the end-user customer on the basis of an

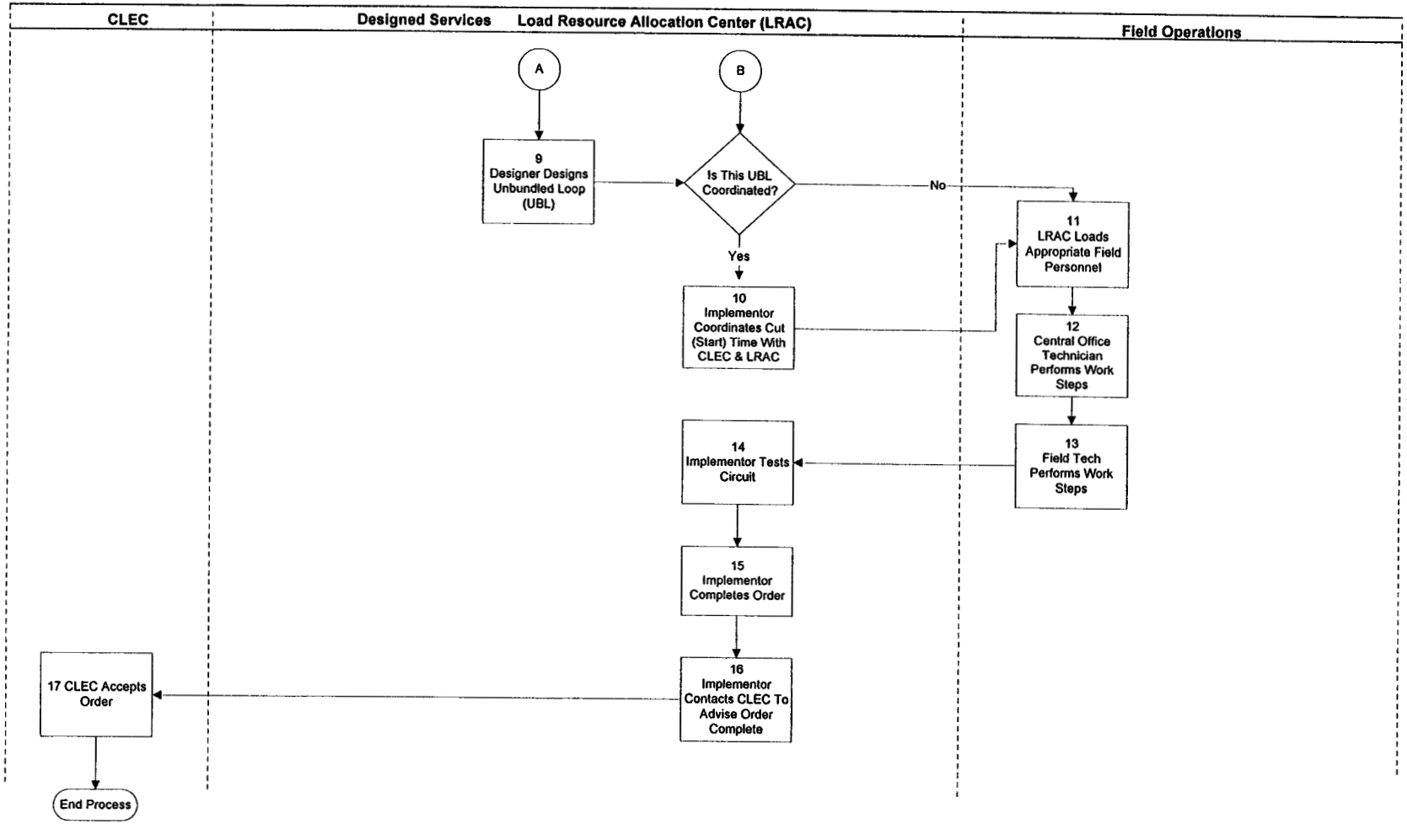
unbundled loop. After completing the forms, the CLEC electronically transmits them to U S WEST where they are placed into a database known as the Firm Order Manager (FOM). From here, the screener in the ISC briefly reviews the forms and routes them to the Des Moines ISC. The SDC checks to see if there are any related orders, reviews remarks for additional information, validates the CLLI code, issues the service orders in the appropriate SOP and transmits an FOC to the CLEC.

In this example, the order is assumed not to flow-through TIRKS so a designer must design the loop. Since the CLEC ordered coordination and conformance testing, an implementer is assigned to coordinate the cut-over and testing with the CLEC and the U S WEST LRAC. After the design step is completed, coordination is scheduled and the work begins. A specific technician is assigned using U S WEST's standard loading and coordination procedures. Once the installation and testing of the loop is complete, the implementer completes the order and contacts the appropriate CLEC person to advise that the order has been completed. During the nightly batch run, the service order is marked as completed, and the following morning, a completion report containing this customer's information, is electronically transmitted to the CLEC.

UNBUNDLED LOOP PROVISIONING FLOW



UNBUNDLED LOOP PROVISIONING FLOW



Task Descriptions

Task	Description
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2 and 3	Obtain preorder/order information and review LSR and associated forms for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	Verifies that facilities are available to service address
2.4	CLEC Termination Point verified
2.5	Network Channel (NC) and Network Channel Interface (NCI) codes verified
2.6	CLEC interval validated
4	Determines if the request is accurate; resolves questions and problems
5	Summary Billing number for account obtained
6	Service Order is issued into Service Order Processor (SOP).
7 and 8	Firm Order Commitment (FOC) is issued to CLEC
9	Unbundled Loop is designed
10*	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC), Central Office Technician (COT), Field Technician.*=If CLEC orders the coordinated installation option this step is used otherwise this step is omitted.
11	Provisioning work request received in Network Operations
12	Word Doc issued and Central Office work performed
13	Word Doc issued and field work at end user's premise performed if required
14	Circuit is tested (If provisioning option is basic and circuit is reused, task not performed.)
15	Order completed
16	CLEC notified via phone call to accept service and begin billing

GENERAL UNBUNDLED SWITCH DESCRIPTION

Unbundled switch consists of three components: a port (line or trunk), vertical features and switching usage.

Unbundled Switch Line Side Switch Port Process

The description of the order processing flow for unbundled loop is based on the diagram contained below. The CLEC interacts with end-user customers to identify needs, retrieve appropriate pre-order information and issue LSRs to U S WEST. Upon receipt, LSRs are screened, routed to the proper center for issuance of the corresponding service orders and FOC. Service orders are assigned, designed to the CLEC's termination point, installed and completed. If the CLEC ordered coordination, the implementer works with the LRAC to load the appropriate COT who completes the frame wiring and assists the implementer in testing the switch port. The RCMAC completes line translations and also assists the implementer in testing. The implementer completes the order and contacts the CLEC for acceptance. OSSs are updated, completion reports issued and billing is established.

Illustration

To illustrate the unbundled line-side switch port provisioning processes, assume that an end-user customer moves into U S WEST territory for the first time and contacts CLEC Y, a facilities-based provider, for its local telecommunications services. CLEC Y is co-located in U S WEST's central office that services the customer's location, has its own loop facilities to the end-user customer's premise but decides to use U S WEST's switching capabilities.

The customer would contact CLEC Y. The CLEC's representative would request pre-ordering information. If CLEC X is using U S WEST's IMA or EDI electronic interfaces, the user would issue online, real-time queries to U S WEST. Those pre-ordering transactions that the CLEC user may wish to issue are:

- Retrieve Service Availability (because this query only is used for POTS Resale)[i]; and
- Retrieve/Select Available Telephone Numbers (because, with an unbundled loop, the CLEC performs the switching function, not U S WEST).

The other pre-ordering transactions would not apply:

- Validate Address (because no outside dispatch to the correct address is needed);
- Retrieve CSR (because there is no existing account);
- Retrieve/Reserve Available Appointments (because no outside dispatch is needed); and
- Retrieve Facility Availability (because no loop is being ordered).

After the appropriate pre-order transactions are completed, the CLEC would create various forms (defined by the OBF) of the type "unbundled analog line-side switch port or unbundled digital line-side switch port-ISDN capable as a new installation." Order forms include the LSR (local service request), EUI (end user information), Switch Service Form (switch port information) and Listing (white page listings information). These forms identify the CLEC's becoming the local service

[i] This information is also only available for U S WEST's POTS retail services, not design retail services.

provider of the end-user customer on the basis of an unbundled switch port. After completing the forms, the CLEC electronically transmits the forms to U S WEST.

If the LSR is received electronically, the screener briefly reviews the LSR, EUI and Switch Service forms for completeness. After screening the order, the screener routes the forms to the appropriate center for creation of the service orders. Today, the unbundled switch orders are routed to the Des Moines ISC. The SDC issues the service orders in the appropriate SOP and transmits an FOC to the CLEC. The service order is assigned in the SWITCH systems and the designer designs the port in TIRKS. The designer also transmits the design layout record (DLR) to the CLEC. The implementer tests and turns up the switch port, ensuring that the order is sent to MARCH/APRIL for line side translations and provisioning of vertical features, if any. The RCMAC completes the translation work, if assistance is required. If inside work is necessary, the LRAC determines the type of work and technician that are necessary and loads the appropriate LNO technician using U S WEST standard loading procedures. The COT wires the circuit according to the WORD document and works cooperatively with implementer to test and turn up the circuit.

On the due date, the implementer contacts the CLEC and completes the order. Depending on the installation options requested (Basic Installation or Coordinated Installation), U S WEST and the CLEC complete the order with either cooperative or coordinated testing. The implementer calls the CLEC for acceptance of the order. Upon completion, U S WEST's OSS are updated and billing established.

Unbundled Switch Trunk Side Switch Port Process

If an Unbundled Switch DS1 Trunk Port is ordered, the CLEC issues an ASR (access service request) either manually or through U S WEST's EXACT electronic

interface. Three forms are used: the ASR, the Special Access Service Request (SPE) and the SPE2 forms. The SDC receives the ASR, verifies the CLEC's certification, verifies the accurateness and completeness of the ASR and/or builds the trunk group request form. The SDC also validates the ordering intervals, reviews other pertinent information and logs the ASR in TIRKS-GOC (Generic Order Control).

The designer accesses WFM (Work Flow Manager), EXACT and TIRKS to design the switch port, resolves any RMAs (Request for Manual Assistance) and checks for spare capacity. Afterwards, the designer issues the DLR to the CLEC and distributes the order for provisioning.

The implementer coordinates the installation of the switch port, resolves jeopardies and works with the Load Specialist and COT to load the COT, complete the wiring and setting up of cross connects and perform conformance testing. The implementer records the conformance test results and contacts the CLEC to turn up the DS1 Trunk Port element. Working with the appropriate CLEC personnel, the implementer completes the service order in WFA-C (Work Force Administration-Control) and IABS (Integrated Access Billing System) for billing.

Illustration

To further illustrate these processes, I will describe how U S WEST processes a request for an unbundled switch trunk port. The CLEC completes the LSR, SPE and SPE2 forms which make up the request. Using TELIS software, the CLEC transmits the ASR to U S WEST and the ASR is placed in the EXACT system from where the SDC verifies the ASR has not been put in an error condition, adds information, such as the representative's name and number, and product codes. The SDC logs the request in TIRKS GOC (Trunk Inventory Record Keeping System – Generic Order Control) and

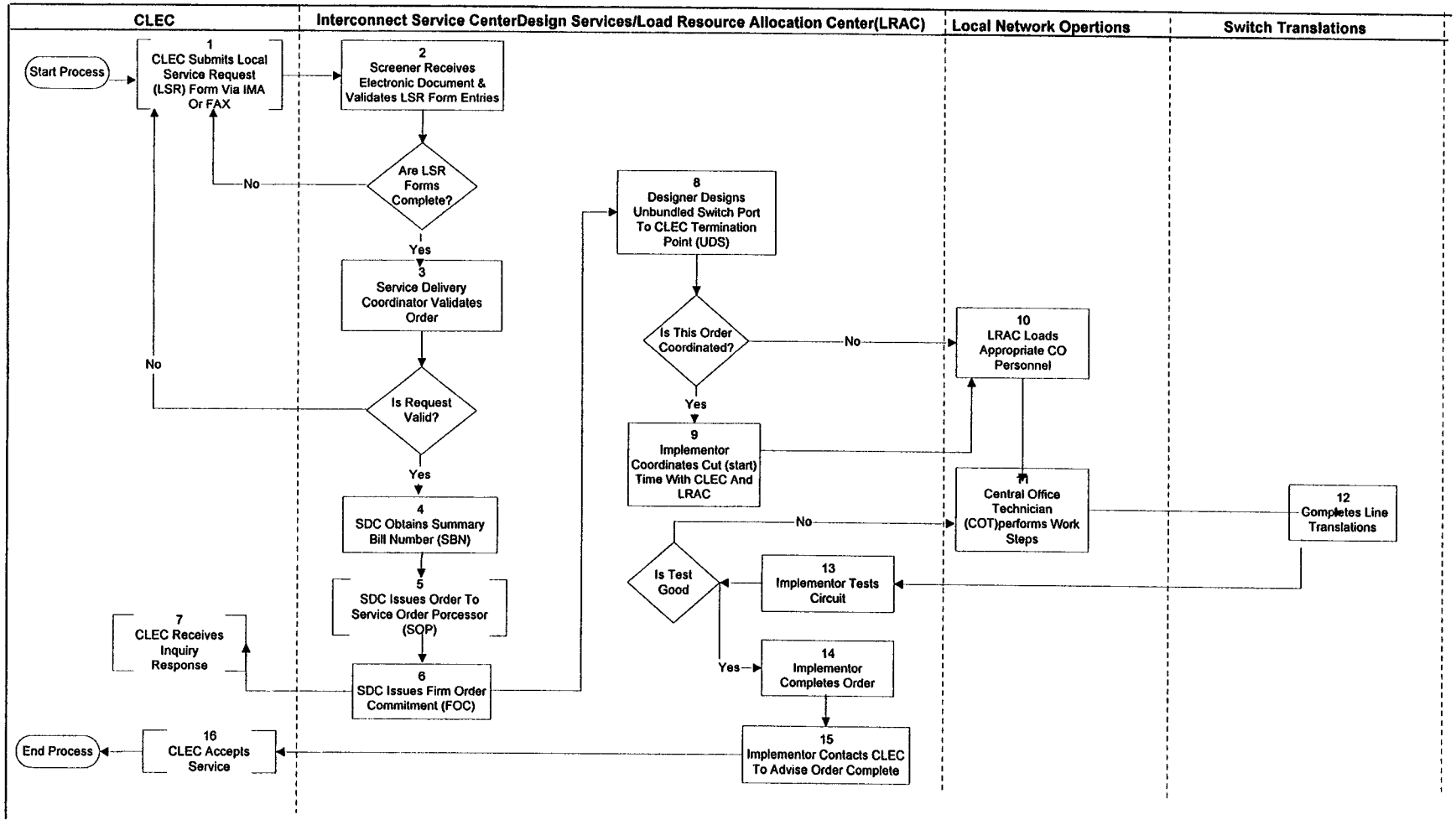
builds the trunk group request and work authorization forms. The SDC validates the ordering intervals such as the service order issue date (SID), record issue date and design, verify and assign date.

The SDC accesses WFM (Work Flow Manager), EXACT and TIRKS to design the switch port, resolves any RMAs (Request for Manual Assistance) and checks for spare capacity. Afterwards, the SDC issues the DLR and FOC to the CLEC and distributes the order for provisioning.

To coordinate, the implementer coordinates the installation of the switch port, resolves jeopardies and works with the Load Specialist and COT, to load the COT, complete the wiring and set up of cross connects, running from the frame to the CLEC's meet point and performs conformance testing. The implementer records the conformance test results and contacts the CLEC to turn up the DS1 Trunk Port element. Working with the appropriate CLEC personnel, the implementer completes the service order in WFA-C (Work Force Administration-Control) and IABS (Integrated Access Billing System) for billing.

Figure 1 - Provisioning Flow of Unbundled Line Port

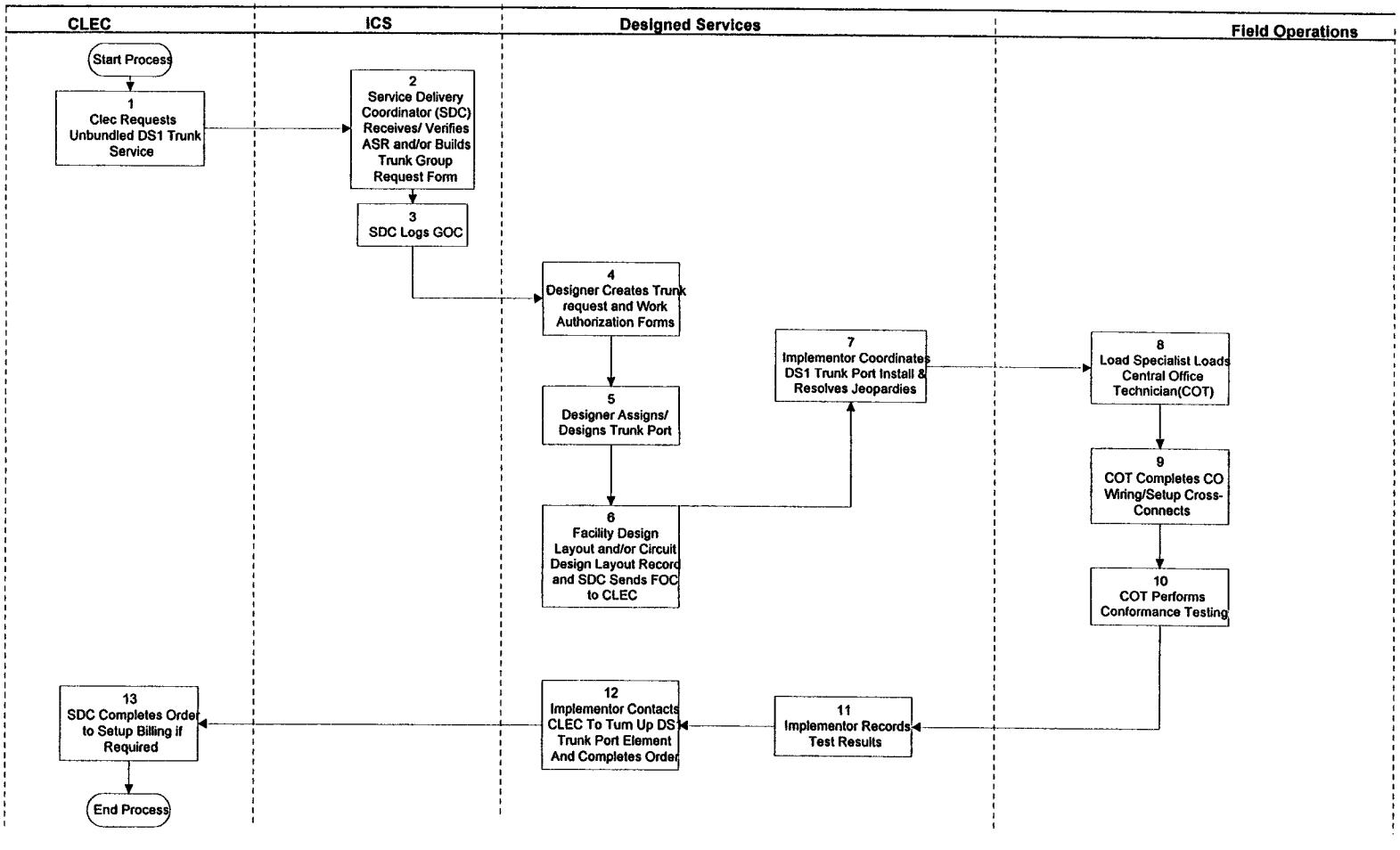
UNBUNDLED SWITCH LINE PORT PROVISIONING FLOW



Task Descriptions

Task	Description
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2	LSR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions
4	Summary Billing number for account obtained
5	Service Order is issued into Service Order Processor (SOP).
6	Firm Order Commitment (FOC) is issued to CLEC
7	Make Assignment and issues response to CLEC
7.1	Load USOCs and assign as business class of service
7.2	Identify Available Office Equipment
8	Order designed
9	Cut (start) time is coordinated with CLEC and U S WEST Load & Resource Allocation Center (LRAC),
10	Load Central Office work steps
11	COT performs work
12	Provision Line Translations
13	Circuit is tested
14	Order completed
15	CLEC notified
16	Billing established

UNBUNDLED SWITCH TRUNK PORT PROVISIONING PROCESS FLOW



Task Descriptions

Task	Description
1	Access Service Request (ASR) form submitted to Denver Interconnect Service Center (ISC)
2	ASR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	CLEC interval validated
3	Determines if the request is accurate; resolves questions and logs order
3.1	Summary Billing number for account obtained
3.2	Service Order is issued into Service Order Processor (SOP).
4	Build Trunk DRI and WA
5	Design Trunk Port
6	Firm Order Commitment (FOC) is issued to CLEC
7	Trunk port installation is coordinated
8	Load Central Office work steps
9	Order issued and central work performed
10	Circuit is tested
11	Order completed
12	CLEC notified
13	Billing established

SHARED TRANSPORT

Shared Transport relates to U S WEST's interoffice message trunk network for the delivery of switched, voice grade traffic between U S WEST end offices and tandem switches within local calling areas. Shared Transport is only provided with Unbundled Switch Ports; consequently, unless custom routing is ordered, traffic will be directed over U S WEST's interoffice message trunk network.

Shared Transport Processes

The process definition for shared transport is expressed differently than the other processes discussed above. The OBF has not defined a specific form for shared transport, and there is no discrete service order that corresponds to a CLEC's request for this product; rather, the request for shared transport is identified in the Feature Detail field of the Switch Port Service Form in either IMA GUI or EDI. This is carried forward onto the switch port service order as a Line Class Code. When the switch port is provisioned, access to U S WEST's shared network is then included.

In summary, the provisioning process for shared transport is part and parcel of the provisioning process for switch ports.

LISTINGS FOR RESALE AND LINE SIDE UNBUNDLED NETWORK ELEMENTS

Listings is a term to describe the customer information (name, address and telephone number, for example) that appears in the white page telephone directory and directory assistance data bases. Listings are either simple or complex depending on the amount, type and format of information involved. Simple listings are basically customer name, address and telephone number with no special formatting. Complex listings include this same basic information and can include items such as multiple telephone numbers, customer names and special formatting, such as degree of indent and bolded type. Customers have the option to have their listings published (appears in both directory assistance and the white page directory), non-published (appears in neither directory assistance nor the white page directory) or non-listed (appears in directory assistance but not in the white page directory).

Listings Processes

The listings process is made up of several entry points and a common downstream processing flow. Entry points reflect whether a purely facility-based provider,[1] a resale/unbundler or U S WEST retail subscriber provides listing information to U S WEST.

The facility-based provider prepares the listing forms, specified by the OBF. The provider may elect to either transmit the information via a batch EDI interface, built

specifically to support listings or via facsimile to U S WEST's listings operations group. If the EDI interface is used, the listings are fed directly in the Listings Services System (LSS). If facsimile is used, the listings operations group inputs the listings into LSS.

A reseller or unbundler may elect to transmit listing information either via IMA, EDI or facsimile. If the listings are contained on an LSR of the type eligible for flow-through, the LSR including the listing portion will be electronically converted into a service order and placed into the service order processing flow. If the listing is a "simple listing", it is included on the service order. If the listing is a "complex listing", the ISC refers the listings information to the Complex Listings Center which inputs the information directly into the SOP.

In the case of a U S WEST retail subscriber, the end-user customer contacts the U S WEST business office and provides listing information. If the listing is a simple listing, the listing information is input on the service order. If the listing is complex, the listing information is faxed to the Listings Group which inputs the listing information directly into LSS (Listings Support System).

Once in the SOP, the listings information from the service orders are placed into the listings database from which a nightly download file is created. This file, containing commingled listings for CLECs and U S WEST, is sent to directory assistance and DEX. In each case, directory assistance and DEX updates their data bases the next calendar

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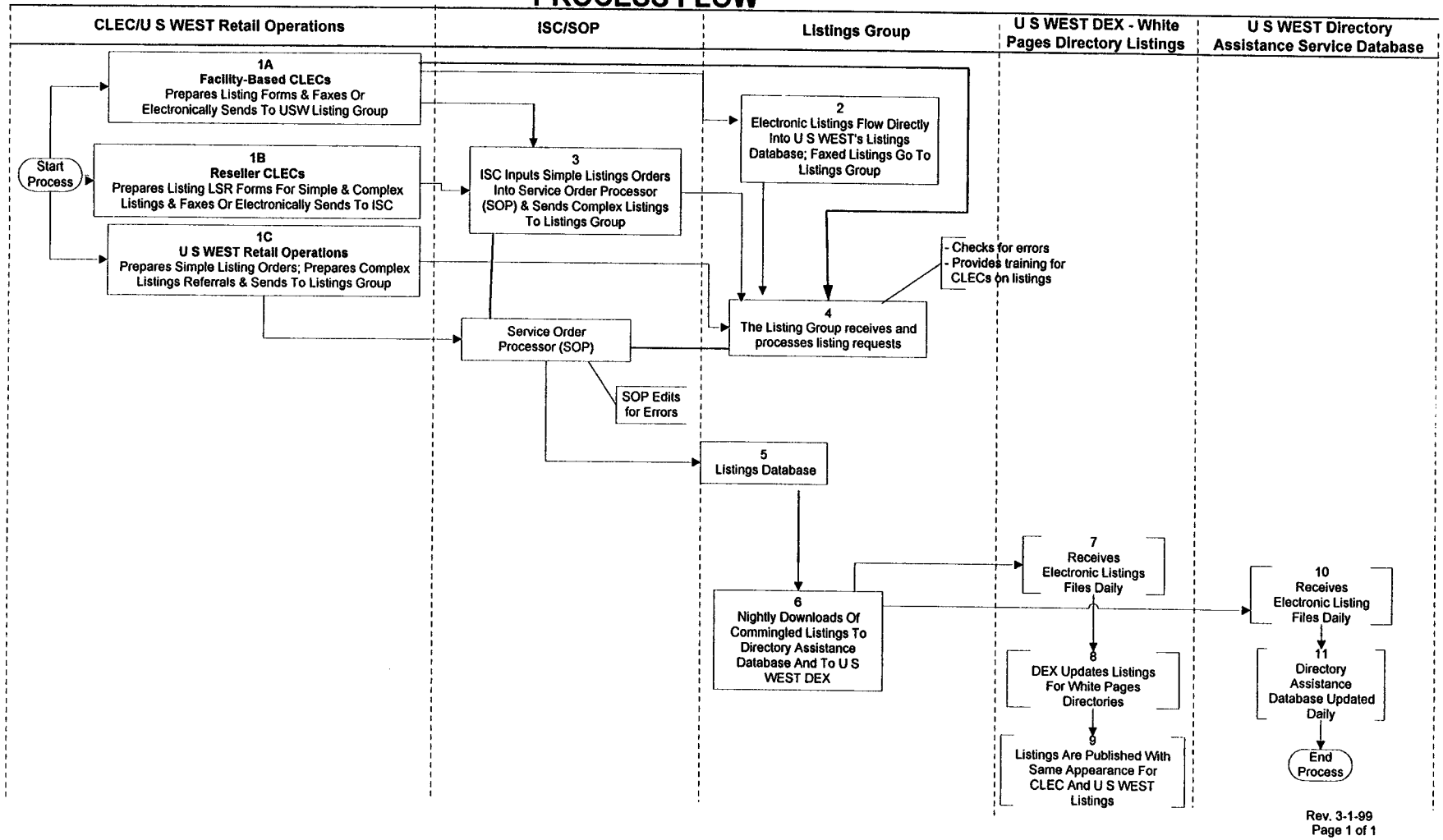
[1] The term purely facility-based provider describes a CLEC that only interconnects to U S WEST's network and does not issue orders for resale services or unbundled network elements.

day. Additionally, DEX publishes the listings with the same appearance for CLECs and U S WEST.

Illustration

To illustrate listings provisioning processes, assume that a CLEC that is a purely facilities-based provider wishes to have a simple residential listing appear in U S WEST's DEX directory and directory assistance. Further assume that this CLEC uses U S WEST's batch EDI interface for listings. The CLEC defines the listing information, formats the listing and transmits it to U S WEST via the EDI interface that feeds the listing directly into LSS without human intervention. The residential listing is placed into the nightly download file with the other listings in the database and is sent to DEX and directory assistance. The databases for DEX and directory assistance are updated the next calendar day.

WHITE PAGES DIRECTORY LISTINGS - CHECKLIST ITEM 8
CLEC AND U S WEST RETAIL END USER LISTINGS
PROCESS FLOW



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Task Descriptions

TASK	DESCRIPTION
1A Facility-Based CLECs Prepares Listing Forms & Faxes or Electronically Sends to USW Listing Group	1. Prepares one or more of the following OBF Directory Listing Forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end-user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 2. When the listing is associated with UNE-Switch Port, the CO-PROVIDER may submit their request via Fax, On-line EDI, or On-line IMA..
1B Reseller CLECs Prepares Listing LSR Forms for Simple & Complex Listings & Faxes or Electronically Sends to ISC	3. Prepares one or more of the following OBF Directory Listing Forms: • DSR – Directory Service Request – required for all listing information • DL – Directory Listing – contains end-user listing data as it is to appear in the published directory and on Directory Assistance • DSCR – Directory Service Caption Request – required when requesting caption or straight line indent listings 4. The CO-PROVIDER may submit their request via Fax, On-line EDI or On-line IMA.
1C U S WEST Retail Operations Prepares Simple Listing Orders; Prepares Complex Listings Referrals & Sends to Listings Group	Any end user or Co-Provider who purchases services from U S WEST at retail rates. • Via telephone. • Via mail. • Via faxed listing request (No OBF forms are used by Retail subscribers)

TASK	DESCRIPTION
2 A. Inputs listings into listings database: or, B. Electronic listings go directly into U S WEST's listings database	• Types listings directly into LSS system in format according to LSS formats. Batch EDI formats directly to LSS.
3 ISC inputs simple listings orders into Service Order Processor (SOP)	• Types listing orders into SOPs such as RSOLAR, SOLAR, SONAR and SOPAD.
Service Order Processor	Handles listing requests and interfaces with the Listing Database
4 Listings Group receives listing orders from CLEC	• Listings Group receives Faxed Complex & Simple listing orders from Fac-Based CLECs - Processes Fac-Based Listings & Releases to Listings Database. Receives Complex Listing Orders from ISC, & U S WEST retail Operations - Processes Complex Listings Orders & Releases to SOP • EDI Batch Process – Simple and Complex listings • Fax – Both Complex and Simple listings
5 Listings flow into listings database	• Mechanical edits are applied to all listings • CLEC listings and U S WEST listings are commingled in database • CLECs are provided monthly "proof" reports • of all their listings
6 Nightly downloads of commingled listings to Directory Assistance database and to U S WEST DEX	Downloads listings to DA database and Dex. • Datafile for Directory Assistance listings are downloaded to DA from LSS nightly • Data file is produced for all white page listings and downloaded to Dex database nightly
7 Receives electronic listings files daily	Receives listings from LSS. Dex receives data file from LSS nightly with white page listings that need to be in the published directory.
8 DEX updates listings for white pages directories	Dex white page listing database updated next day. Dex Master database and subsystems updated with data from LSS file.

TASK	DESCRIPTION
9 Listings are published with same appearance for CLEC and U S WEST listings	
10 Receives electronic listing files daily	Receives listings from LSS. Data file is received from LSS nightly with all listings that need to appear in DA.
11 Directory Assistance database updated daily	DA database updated with data from data file from LSS.

INTERIM NUMBER PORTABILITY

The term number portability describes the service offering provided by U S WEST to a CLEC which allows an end-user customer to retain his or her telephone number when moving to a different local service provider's switch. Interim number portability solution that uses the existing switch infrastructure to forward a call from a U S WEST switch to a switch provided by the CLEC. Specifically, three solutions are provided: Remote Call Forwarding (RCF), Direct Inward Dialing Service (DID) and Directory Number Route Indexing (DNRI). Each of these solutions routes the call from the dialed end office to the CLEC using the existing switch infrastructure and each removes the vertical and horizontal services of the end-user customer from U S WEST's switches. Thus the number is ported to the CLEC switch.

Remote Call Forwarding Description

Stored Program Control switches are used to forward calls to a different switch. A permanent RCF is established in U S WEST's switch forwarding any incoming call to the number assigned and maintained in the CLEC switch. All call types destined for the ported number will be forwarded to the CLEC.

Directory Number Route Indexing Description

Directory Number Route Indexing is a local exchange telecommunications service which permits incoming calls to be ported to a service provider's switch via DNRI. A permanent Route Index is assigned to the end user's ported number in the U S WEST switch.

Direct Inward Dialing Description

DID is a special trunking arrangement that permits incoming calls from the exchange network to reach a specific end-user customer of a CLEC by treating the CLEC's switch to which a number has been ported as though it were a PBX connected to U S WEST's switch (from which a number has been ported.)

Process Flows

The CLEC requests service and an order is sent to U S WEST. The ISC screens the LSR and the LSR is converted into a service order.

Remote Call Forwarding

If the request is for remote call forwarding, it is forwarded to Engineering where the simulated facility group (SFG) is verified (if 1A switch). The order flows back to the ISC to resolve any issues and network capacity. If the order is made in conjunction with an unbundled loop, the loop and INP service orders are coded in order for coordination to occur. Service orders and FOC are issued. Then, work is performed to establish the SFG.

If the order is for more than 400 telephone numbers and/or 1,000 paths, an overall coordinator is assigned. Coordination of this effort requires an up-front planning session. Any changes to the original FDT will be negotiated with the CLEC and will occur prior to issuing an FOC. Once the project is coordinated, the service order(s) are issued, an FOC is sent.

Direct Inward Dialing and Directory Number Route Indexing

If the order is either a DID or DNRI order, it is forwarded to Switching Operations for prebuilding trunk group members. The order is routed back to the ISC for review of any issues and network capacity checks. If the order is made in conjunction with an unbundled loop, the loop and INP service orders are coded for coordination to occur. Service orders and an FOC are issued. Then, the order is forwarded to the Complex Translations Group where trunk groups route indexes and pseudo codes (routing codes) are established. The cut-over is coordinated as scheduled and the service is tested and turned up.

If the order is for more than 400 telephone numbers and/or 1,000 paths, an overall coordinator is assigned. Coordination of this effort requires an up-front planning session. Any changes to the original FDT will be negotiated with the CLEC and will occur prior to issuing an FOC. Once the project is coordinated, the service orders are issued and an FOC is sent. Then, the order is forwarded to the Complex Translations Group where trunk groups route indexes and pseudo codes (routing codes) are established. The cut-over is coordinated by the Design Services Center as scheduled and the service is tested and turned up.

If there are less than 400 telephone numbers and/or 1,000 paths, the service orders are issued, an FOC is sent, and the order is forwarded to the Complex Translations Group where trunk groups route indexes and pseudo codes (routing codes) are established. The cut-over is coordinated by the Design Service Center as scheduled, and the service is tested and turned up.

Regardless of the INP port type, the SWITCH system is updated, the line is provisioned, and translations are updated in the switch. The order is confirmed with the CLEC and completed.

Illustration

Assume that a CLEC issues a request for an existing U S WEST customer to become the CLEC's resale customer. Further assume that the request is for interim number portability that is for a single number, not associated with an unbundled loop, and employs the remote call forwarding option.

The CLEC, while talking to the customer online, uses U S WEST's electronic interface, IMA, to perform the following the desired pre-order transactions:

- Retrieve CSR
- Validate Address
- Retrieve Service Availability
- Retrieve Facility Availability
- Retrieve Available Appointments
- Select Available Appointment

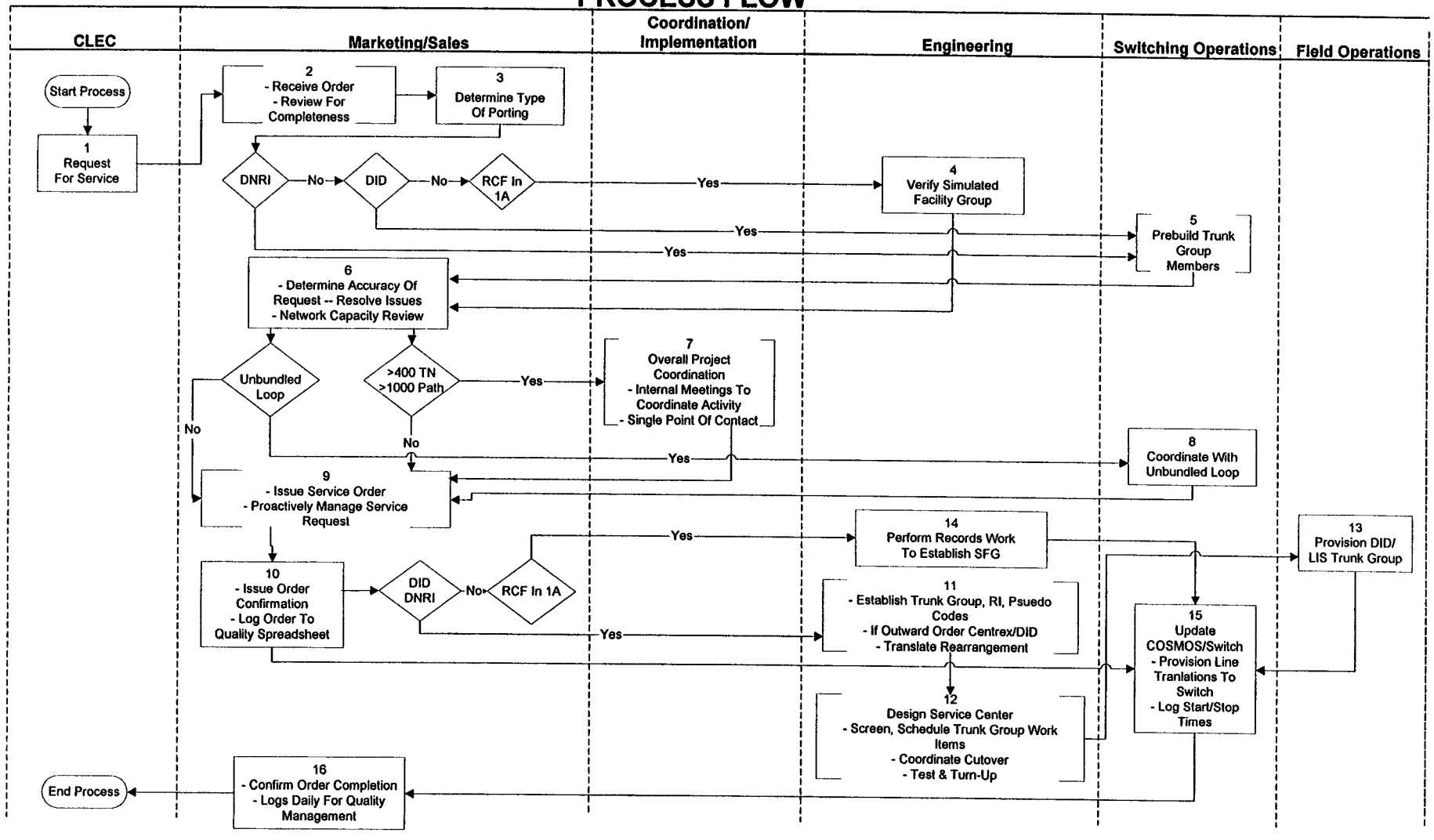
(The pre-ordering transaction regarding telephone numbers would not apply because this example assumes that the customer wishes to retain his or her existing number.)

In addition, the CLEC using IMA completes the various forms defined by the OBF for this type of service request. This includes the LSR (local service request), EUI (end user information) and Resale (resale information) and Number Portability forms.

These forms identify the CLEC's authorization to become the local service provider of the customer and provides the order information as defined by the OBF. After completing the forms, the CLEC electronically transmits them to U S WEST where they are placed into a database known as the Firm Order Manager (FOM). From here, the screener in the ISC briefly reviews the forms.

Since the request is for RCF, it is transmitted to Engineering to verify the SFG. Because the example does not involve an unbundled loop and is less than 400 numbers, the service orders are issued, an FOC is sent to the CLEC and the orders are forward to establish the SFG. The Switch system is updated and translations are performed in the OSSs. Marketing and Sales confirms the order completion, notifies the CLEC and logs the information for Quality Management.

INTERIM NUMBER PORTABILITY PROVISIONING PROCESS FLOW



Task Descriptions

Task	Description
1	CLEC requests Interim Number Portability Service
2	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2	LSR and associated forms reviewed for completeness (LSR, Number Portability Form, Outward LSR, End User Information Form)
2.1	CLEC certification verified
2.2	Blanket Agreement Authorization (BAA) verified
2.3	Verification that number is portable
2.4	Determines if end user account has outstanding balance or directory advertising
2.5	Determines if INP prefix is new for CLEC. If yes, sub account is established
2.6	Determines if Summary Bill exists; if not, establish account
3	Determine interim portability solution to be used (Remote Call Forwarding, Directory Number Route Indexing, INP/DID arrangement
3.1	If DID, prepare DID Trunking Request Form for CLEC trunk group and route index
4	If request is for RCF in a 1A switch, verify availability of Simulated Facility Group and provide to ISC for service order
5	If request is for DNRI/DID service, prebuild trunk group members
5.1	Receive DID Trunking Request Form. Establish DID trunk group. Assign route index by CLEC and phone to ISC. Assign pseudo codes in end offices and tandems.
6	Determines if the request forms are accurate and complete; resolves questions; initiates network capacity review
6.1	If request is for greater than 512 CCS, the order writer prepares IAC work Request Form for End Office Capacity check
6.2	CLEC LIS/DID capacity check (trunks in service, pending, forecasted). Return IAC Work Request Form to order writer
6.3	Determines if project management is required (service request is for greater than 400 telephone numbers and/or greater than 1000 call paths
6.4	Determines if unbundled loop and coordination is associated with this request
7	Overall project coordination for INP orders greater than 400 TNs and/or 1,000 paths. All DID/DNRI orders are project managed.
7.1	CLEC meetings held to coordinate key functional groups, up front coordination, day of conversion single point of contact
7.2	Up front coordination with Design Services Implementor
7.3	Project manage assignment and tracking of CLEC pseudo NPA's end office and local tandem by CLEC

8	If INP service is associated with unbundled loop service, follow INP/Unbundled Loop process flow for coordination
9	Issue Service Order and proactively manage all INP orders
9.1	Issues the outward activity order in the SOP (Service Order Processor). Releases associated paperwork for rearrangements
9.2	Issues the inward activity order in the SOP (Service Order Processor)
9.3	Release Service Order to SOP
9.4	Order Writer notified to release Service Order or reject subject to CLEC trunking; Traffic Administrator notified of large INP order due dates
10	Service Order Administrator issues order confirmation
10.1	Service Order Administrator logs order to quality spreadsheet (Orders/BTN)
10.2	INP orders proactively managed following INP quality team guidelines
10.3	If DID/DNRI, route to Complex Translations
10.4	If RCF in 1A switch with SFG limitations, route to NSAC
11	For DID/DNRI, establish trunk group, route index, pseudo codes. If outward order is Centrex/DID, retranslate common block
12	For DID/DNRI, screen, schedule trunk group work items. Coordinate cutover, testing and turn-up of trunk group at frame due time
13	If DID, provision DID and LIS trunk groups and augments via WFAC
13.1	Completes trunk group. Advises Design Services Implementer
14	If RCF in a 1A switch with no availability, perform records work to establish Simulated Facility Group
15	Update COSMOS/switch. Provision line translations to switch. Log start/stop time in Quality Database.
15.1	If outward order is Centrex/DID, update COSMOS switch - remove ported number from Centrex DID group
15.2	Manage SFG availability in office
15.3	Coordinate with Centers to resolve fallout orders
15.5	If service order errors in FACS or COSMOS/switch, analyze and take corrective action
16	ISC confirms order completions and logs daily in the INP Quality Database for quality management
16.1	Cooperative completions desk with RCMAC

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IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996	)	Docket No. T-00000B-97-0238 **U S WEST COMMUNICATIONS, INC.'S SUPPLEMENTAL NOTICE OF INTENT TO FILE WITH FCC AND APPLICATION FOR VERIFICATION OF § 271(c) COMPLIANCE**

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Arizona Corporation Commission
DOCKETED
MAR 25 1999
DOCKETED BY MN

PART III

LONG-TERM NUMBER PORTABILITY

General Long Term Number Portability Description

Number portability allows customers to retain, at the same location, their existing telecommunications numbers. The FCC requires that long-term number portability be the ultimate solution.

Long Term Number Portability Process

The process description below discusses the port-out process. It is based on the diagram contained below. The process begins with an end-user requesting service from a CLEC, retaining his or telephone number. The CLEC determines if the customer is porting all telephone numbers and composes a remark as appropriate. The CLEC gathers the desired pre-ordering/ordering information and transmits the LSR to U S WEST either electronically via one U S WEST's pre-ordering/ordering interfaces or via facsimile. U S WEST's ISC receives the request and follows the screening and routing processes described above. The LSR is converted into the service orders, which are processed through the downstream provisioning flows.

Both the CLEC and U S WEST notify the Number Portability Administration Center (NPAC) via the NPAC SMS (Service Management System). The NPAC SMS validates the data and communicates with the CLEC and U S WEST regarding inaccurate or mismatched information. The NPAC also communicates with either the CLEC or U S WEST if either party fails to send its notification.

If the old service provider (U S WEST in this context) places the order in conflict, the conflict is resolved according to the NANC's conflict resolution process, which results either in a cancellation of the order or a resumption of the provisioning flow.

If there is no conflict, the CLEC coordinates changes with U S WEST and the completion of the provisioning proceeds with or without an unconditional 10-digit trigger. The 10-digit trigger is an indicator to ensure that incoming calls terminate at the proper location, i.e. either U S WEST's existing switch (if the CLEC has not yet completed its work) or at the CLEC's switch (after the CLEC has completed its work).

Illustration

Assume that an existing U S WEST customer wishes to be serviced by a CLEC and the CLEC determines to use an unbundled loop. Further assume that the customer wishes to retain all of his or her numbers. The pre-ordering/ordering and provisioning phases of the process is as I have described it above. Please refer to the unbundled loop process previously described. Please note that in this instance, the FOC interval is 24 hours and U S WEST's ISC would then send the FOC to the CLEC within this interval for the conversion to unbundled loop with number portability order.

The remainder of the process follows the generalized description above: both parties contact the NPAC. Conflicts, if any, are resolved and the process is provisioned with or without the 10-digit trigger. After the completion of this process, a call destined for the CLEC's customer will be routed to the CLEC's switch and transmitted over the CLEC's facilities to the U S WEST unbundled loop terminating at the customer premise.

NANC Process Flows

INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- PROVISIONING -

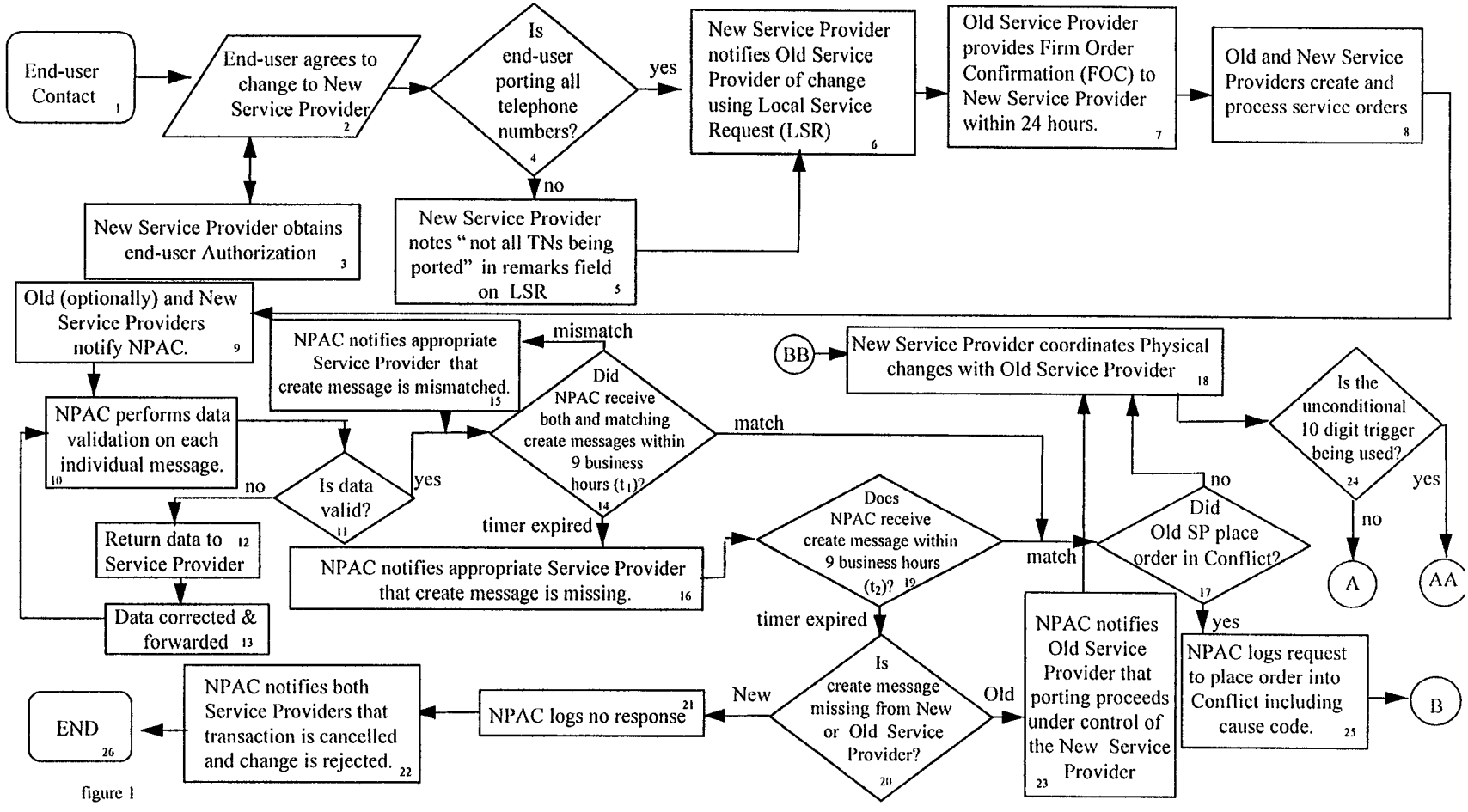


figure 1

Task Descriptions

Task	Description
1. End-user Contact	• The process begins with an end-user requesting service from the New Service Provider.
	• It is assumed that prior to entering the provisioning process the involved NPA/NXX was opened for porting.
2. End-user agrees to change to New Service Provider	• End-user agrees to change to New Service Provider and requests retention of current telephone number (TN)
3. New Service Provider obtains end-user Authorization	• New Service Provider obtains authority from end-user to act as the official agent on behalf of the end-user. The New Service Provider is responsible for demonstrating necessary authority.
4. Is end-user porting all telephone numbers?	• The New Service Provider determines if customer is porting all TNs.
	• If yes, go to Step (6).
	• If no, go to Step (5).
5. New Service Provider notes "not all TNs being ported" in remarks field on LSR.	• The New Service Provider makes a note in the remarks section of the LSR to identify whether the end-user is not porting all telephone numbers (TNs).
6. New Service Provider notifies Old Service Provider of change using Local Service Request (LSR).	• The New Service Provider notifies the Old Service Provider of the porting using the LSR and sends the information via an electronic gateway, FAX, or other manual means. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).
7. Old Service Provider provides Firm Order Confirmation (FOC) to New Service Provider within 24 hours.	• The minimum expectation is that the FOC is returned within 24 hours excluding weekends unless otherwise defined by inter-company agreements. It is the responsibility of the Old Service Provider to contact the New Service Provider if the Old Service Provider is unable to meet the 24-hour expectation for transmitting the FOC. If the FOC is not received by the New Service Provider within 24 hours, then the New Service Provider contacts the Old Service Provider.

Task	Description
	• The FOC due date is no earlier than three (3) business days after the FOC receipt date. The first TN ported in an NPA-NXX is no earlier than five (5) business days after FOC receipt date. It is assumed that the porting interval is not in addition to intervals for other requested services related to the porting (e.g., unbundled loops). The interval becomes the longest single interval required for the services requested.
	• The FOC process is defined by the OBF and the electronic interface by the TCIF.
8. Old and New Service Providers create and process service orders.	• The Service Providers create and process their service orders through their internal service order systems, from the information provided on the FOC and LSR.
9. Old (optionally) and New Service Providers notify NPAC.	• Due date on create message is the due date on the FOC. Any change of due date to NPAC is the result of a change in the FOC due date.
	• Service Providers enter subscription data into NPAC SMS via SOA interface for porting of end-user in accordance with the NANC Functional Requirements Specification (FRS) and the NANC Interoperability Interface Specifications (IIS).
10. NPAC performs data validation on each individual message.	• NPAC SMS validates data to ensure value formats and consistency as defined in the FRS. This is not a comparison between Old and New Service Provider messages.
11. Is data valid?	• If yes, go to Step (14). If this is the first valid create message, the t_1 timer is started.
	• If no, go to Step (12).
12. Return data to Service Provider.	• If the data is not valid, the NPAC returns notification to the Service Provider for correction.
13. Data corrected and forwarded.	• The Service Provider, upon notification from the NPAC SMS, corrects the data and forwards back to NPAC SMS.

Task	Description
14. Did NPAC receive both and matching create messages within nine (9) business hours (t_1).	• If matching, go to Step (17). • If mismatched, go to Step (15). • If t_1 timer expires, go to Step (16). • NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 daytime hours per day on Monday through Friday, except holidays. Holidays and business hours are regionally defined.
15. NPAC notifies appropriate Service Provider that information is mismatched.	• The NPAC informs the Service Provider that sent the second create that the messages are mismatched. If necessary, the Service Provider notified coordinates the correction.
16. NPAC notifies appropriate Service Provider that create message is missing.	• If Service Providers do not notify the NPAC SMS and/or provide matching data, the NPAC SMS sends a notification to the Service Provider who did not respond to the port.
	• The NPAC SMS provides an Initial Concurrence Window tunable parameter (t_1) defined as the number of hours after the subscription version was initially created by which both Service Providers can authorize transfer of subscription service. The current default is nine (9) business hours. • The t_2 timer starts.
17. Did Old Service Provider place order in Conflict.	• If yes, go to Step (25). • If no, go to Step (18).
	• Check Concurrence Flag Yes or No. If no, a conflict cause code as defined in the FRS, is designated. Old Service Provider makes a concerted effort to contact New Service Provider prior to placing subscription in conflict. Old Service Provider may initiate conflict with proper conflict cause code at anytime prior to noon of the business day before the due date.
18. New Service Provider coordinates physical changes with Old Service Provider.	• The New Service Provider has the option of requesting a coordinated order. This is the re-entry point from the Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process tie point BB.

Task	Description
	• If coordination is requested on the LSR, an indication of yes or no for the application of a 10-digit trigger is required. If no coordination indication is given, then by default, the 10-digit trigger is applied as defined in inter-company agreements. If the New Service Provider requests a coordinated order and specifies 'no' on the application of the 10-digit trigger, the Old Service Provider uses the 10-digit trigger at its discretion.
19. Does NPAC receive information within nine (9) business hours (t_2)?	• The NPAC SMS provides a Final Concurrence Window tunable parameter (t_2), defined as the number of hours after the concurrence request is sent by the NPAC SMS. The current default is nine (9) business hours.
	• NPAC SMS processing timers include business hours only, except where otherwise specified. Local business hours are defined as 12 daytime hours per day on Monday through Friday, except holidays. Holidays and business hours are regionally defined.
	• If create messages match, go to Step (17). • If t_2 timer expires, go to Step (20). • If create messages are mismatched they will be processed in the same manner as Step (15).
20. Is create message missing from New or Old Service Provider?	• If New Service Provider, go to Step (21). • If Old Service Provider, go to Step (23).
21. NPAC logs no response.	• The NPAC records that no matching create message was received from the New Service Provider.
22. NPAC notifies both Service Providers that transaction is canceled and change is rejected.	• The subscription version is immediately canceled by NPAC SMS. Both Service Providers take appropriate action related to internal work orders.
23. NPAC notifies Old Service Provider that porting proceeds under control of New Service Provider.	• A notification message is sent to the Old Service Provider noting that the porting is proceeding in the absence of any message from the Old Service Provider.
24. Is the Unconditional 10-Digit Trigger being used?	• If yes, go to Inter-Service Provider LNP Operations Flows - Provisioning with Unconditional 10-Digit Trigger - tie point AA.
	• If no, go to Inter-Service Provider LNP Operations Flows - Provisioning without Unconditional 10-digit Trigger - tie point A.

Task	Description
	• The unconditional 10-digit trigger is an option assigned to a line on a donor switch during the transition period when the line is physically moved from donor switch to recipient switch. During this period it is possible for the TN to reside in both donor and recipient switches at the same time.
	• The unconditional 10-digit trigger may be applied by the New Service Provider.
25. NPAC logs request to place order into Conflict including conflict cause code.	• Go to Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process - tie point B.
26. END	

Note: This is still under review by the LNP Western Region Operations Team.

Task	Description
1. End-user	• The process begins with the end-user customer making a call to a repair bureau to request service or to report a problem.
2. End-User Calls Service Provider and Indicates a Problem	• The end-user is instructed by their service provider, whomever is providing service, in the manner in which to report problems. Still, for a variety of reasons, end-users may not always reach the correct service provider.
3. Prescreening to Determine Reported Telephone Number and Associated Service Provider (use internal process and/or IVR. This IVR is not the same as the IVR that has been discussed in relation to the NPAC. This IVR is used as a tool to automate the "prescreening" process and is used by some Service Providers.)	• Prescreening is a common activity in customer care organizations apart from portability scenarios. These activities are designed to identify problems to aid in sectionalization and referral efforts, resolve end-user operational problems, and inform the user of outages that may be the reason for the trouble call. In short, the prescreening process is designed to learn as much as possible from the end-user about the problem, resolve issues immediately if possible, and use the information gained in the prescreen to assist in any necessary trouble sectionalization.
4. Does Called Service Provider Serve The Reported Telephone Number?	• This decision step is performed to determine if the end-user making the call, is the customer of the service provider that has been contacted. – It is recognized that in a portability environment the end-user making the call may not be reporting trouble on his or her

Task	Description
	telephone number, but possibly that they cannot reach another number. – In addition, the telephone line used to reach the service provider may not be the number being reported. – Thus, the service provider needs to determine if this end-user is reporting a telephone number that is a customer of theirs. • If the correct service provider cannot be determined, another Interactive Voice Response (IVR) device capability may be useful to a service provider in making the determination of who the service provider is. Connection of an IVR device to the NPAC can provide a capability for the aggregate of service providers in an area of portability. In addition, the IVR device can be used to support emergency services authorized personnel in obtaining trap and trace information. (Thus far, the Western Region has not determined that an IVR in the NPAC will be implemented.) • If the Called Service Provider serves the Reported Telephone Number, than proceed to step 6; if not, then go to step 5.
5. Refer customer to correct Service Provider	• If the contacted service provider is not serving the reported telephone number, then the service provider shall refer the end-user to their correct service provider. • This does not imply that the contacted service provider needs to determine who the correct service provider is, but to instruct the end-user that they have not reached the correct service provider and that the end-user should contact their service provider for assistance. • In the case where a number has ported and the ported-to service provider provides service via an unbundled loop from the donor or a third party provider, and the end-user has contacted the donor or third party provider, this situation should not be considered as a scenario where the contacted service provider is serving the reported telephone number. Instead, the end-user should report the problem to the service provider that they have a billing relationship with for repair service. If the problem is sectionalized to the unbundled loop, then the Billing service provider will refer the problem to the donor or third party provider and cared for pursuant to whatever contractual or business relationship has been negotiated.

Task	Description
6. Open Trouble Ticket	• If the contacted service provider is serving the reported telephone number, then the service provider shall create a trouble ticket and handle via internal processes.
7. Analyze Trouble	• This text is not intended to dictate procedures for a service provider to analyze reported troubles for their customer. Instead, this section is intended to indicate that a service provider must perform some sort of analysis process to sectionalize the problem, and that the reported trouble may be caused by LNP network uniqueness. • For example, a check could be made of the NPAC to determine if the telephone number is in the "Pending" state. If it is, this would signal that the number is in transition and being ported and thus, maybe the reason that the end-user is experiencing difficulty. • In addition, a check of the NPAC SMS may reveal that the number is in the "Active" state but has recently ported, possibly indicating a trouble with the NPAC broadcast routing database update process in all service providers' networks. Moreover, the active state may be indicative of a routing database problem if the customer is unable to receive calls from certain other end-users. • In short, there may be problems associated with the common provision of local telecommunications service, or there may be an anomaly related to the network and service provider changes that occur when Local Number Portability is implemented. In any case, the specific trouble analysis to be performed should be performed by the trouble handling service provider.
8. Is problem determined to be caused by LNP?	• This question is asked to direct the further efforts of the service provider. • Call processing network elements, translations, and call routing databases in the service providers' or another service provider's network may be the source of the problem. • In addition, there could be a problem with the NPAC SMS. • The analysis and sectionalization steps determine the steps that follow. • If it is an LNP problem, then proceed to step 10 or 14 as indicated by the results of trouble analysis; if it is not an LNP problem, then go to step 9.

Task	Description
9. Resolve non-LNP trouble (business as usual)	The service provider utilizes internal trouble resolution procedures to fix the problem (business as usual).
10. Are Line Translations Correct (Trigger)? Is NPAC/SMS Wrong? Is Local SMS/STP/SCP Wrong? Does Service Provider Audit Function Indicate and Resolve Problem?	• Step 10 is shown to indicate the possible activities that could be performed to make the decision required in Step 14. Each service provider will have their own specific procedures for this step • When the problem is determined to be caused by an anomaly related to the network and service provider changes that occur when Local Number Portability is implemented, these items are checks aimed at sectionalizing and isolating the problem and resolving it. • These verifications steps are used for two purposes. First, these checks can sectionalize where the problem exists. Second, these checks can determine if the problem resides in another network.
10. Continued	• Thus, these actions and their sequence are internal service provider specific in the manner in which they are performed, and may be performed at various stages of the repair process. • (Add Audit diamond and tie to Figure 8?) The "service provider audit" function has been developed in response to the possibility that data mismatches may occur between the NPAC and local SMS/SCP databases. Further information on the Audit function is shown in Process Flow 8 (Audit Process) and its supporting narrative text. • The result of the activities above should result in going to boxes11, 12, 13, or 14.
11. Correct Translations	• If the translations in the switch are found to be wrong, then they are corrected.
12. Issue Correction throughout entire system	• If NPAC SMS, the provider's LSMS, SCP, or STP is incorrectly provisioned, then the data provisioning is corrected. If the incorrect data was in the NPAC SMS, then the subsequent correction is broadcast throughout all participating LSMSs.
13. Is problem resolved?	• If all internal checks have shown that no trouble exists, re-verify that the trouble is still occurring.

Task	Description
Is trouble being caused by another Service Provider?	• It is understood that if the problem appears to be the cause of another service provider's network, that the verification steps of Step 10 (the dotted box area) will have preceded referral to the other service provider. Step 10 is shown to indicate the possible activities that could be performed to make the decision required in Step 14. Each service provider will have their own specific procedures for Step 10. Associated service providers involved in the provision of LNP service will work cooperatively with other service providers to sectionalize troubles.
Indicate Trouble to Involved Service Provider	• The following information should be exchanged when handing off or referring the trouble: – Trouble report number or equivalent – Contact telephone number – Contact ID (i.e., name or initials) – Time and date report was received from referring service provider – Telephone number or circuit ID – Trouble reported – Other information that may be of assistance (e.g., history, subsequent reports) • Upon receipt of a trouble report from the referring service provider, the service provider will conduct, independently or cooperatively with the referring service provider, tests required to determine if the trouble is in its own equipment and facilities or the point of interface of an adjacent service provider(s).

Task	Description
15. Continued	• If the trouble is found to be in the referred to service provider's equipment or facilities, the trouble report will be closed out with the referring service provider and the following information will be provided: – Trouble report number or equivalent – Date & Time Cleared – Status of problem (i.e., temporary or permanent repair)-- If temporary, estimated time of restoral – Contact name or initials and telephone number of the person closing out the report – Type & Nature of trouble found and action taken – Service provider Testing Information (if requested by referring service provider) – Circuit ID if appropriate – Trouble reported – Other information that may be of assistance (e.g., history, subsequent reports, referring service provider testing information, if available) • In the event a premature or improper hand-off has occurred, the service provider will resume cooperative testing with the referring service provider in order to sectionalize the trouble.

Task	Description
15. Continued	• If there is no trouble found in the referred to service provider's own network, they shall return the trouble to the referring service provider and provide the following information: – Trouble report number or equivalent (referring service provider) – Contact telephone number (referring service provider) – Contact ID (referring service provider) (i.e., name or initials) – Time and date report was received from referring service provider – Service provider testing information (If requested) – Circuit ID for circuit specific problems – Other information that may be of assistance (e.g., history, subsequent reports) • If the trouble is determined to be in another service provider's network, then proceed to Step 15. Else, return the trouble to the referring service provider by going to Step 10.
16. End	• Other information that may be of assistance (• Close out the trouble per internal company procedures.
17. Seek Technical Assistance	• Contact your company's technical support organization for further assistance.

E911 PRE-ORDERING, ORDERING, PROVISIONING AND DOWNSTREAM PROCESSING

General E911 Description

E911 services route 911 calls to a Public Safety Answering Point (PSAP) designated by the E911 customer based on the address of the calling party. These services include facilities and equipment needed to switch and transport 911 calls to the designated PSAP.

Process Flows

The process begins when a CLEC requests service for an end-user customer. The CLEC performs the pre-ordering transactions appropriate for the type of request. Please refer to the resale process description in Exhibit DWB-XXX. The CLEC transmits an LSR to U S WEST where it is screened by the ISC and converted into a service order. The service order is processed and completed, again as described in the resale process description.

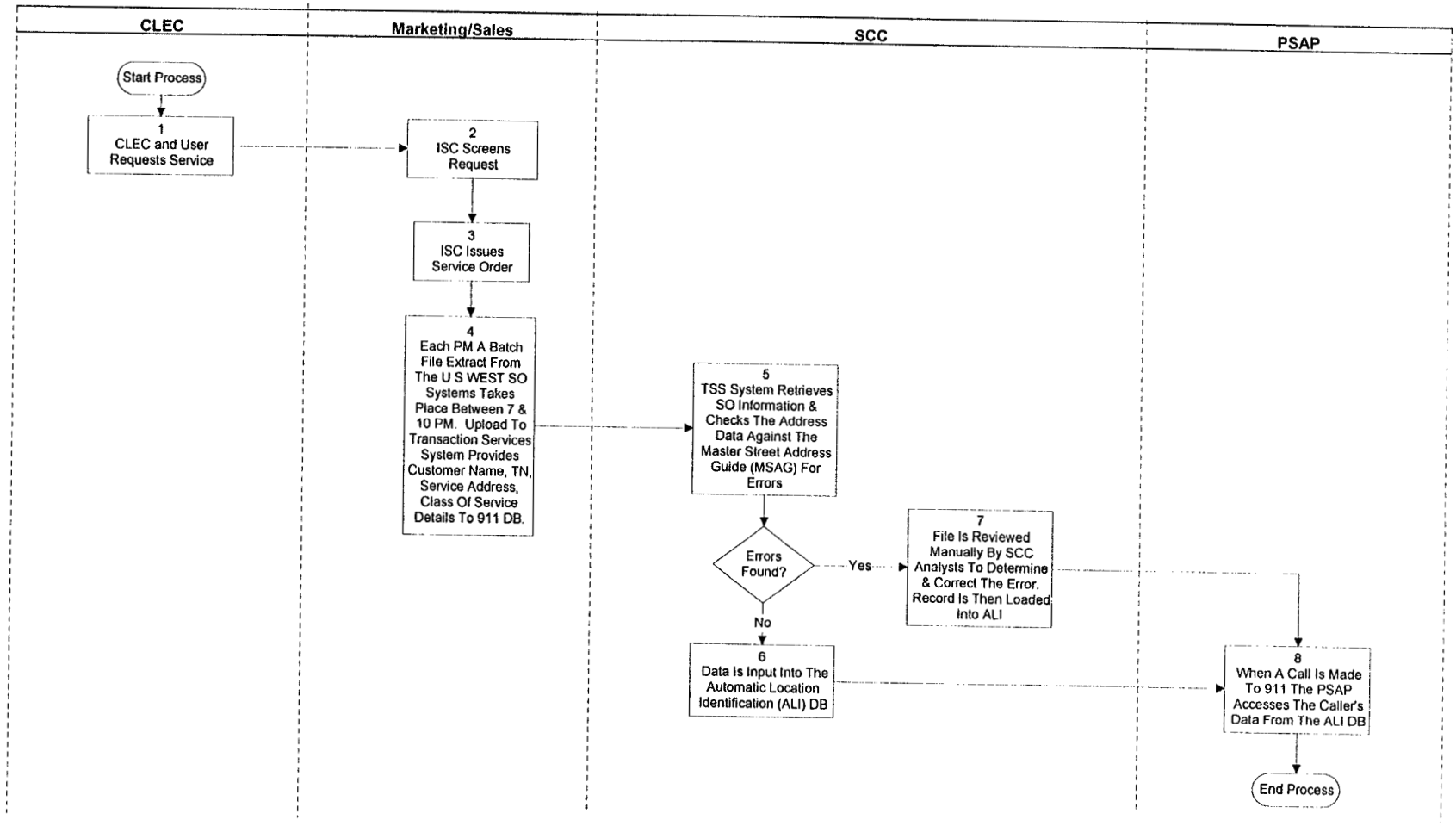
Upon completion, the service order is included in a batch file containing the customer's information. This file is uploaded to the Transaction Services System (TSS). TSS verifies the end-user's address against the Master Street Address Guide (MSAG) to check for errors. Once the address is verified, either through TSS or manually by SCC analysts (if necessary), the customer data is input into the Automatic Location

Identification (ALI) database. From that point forward, whenever a call is made to 911, the PSAP accesses the caller's data from the ALI database.

Illustration

Assume that a customer moves into U S WEST territory and wishes to be served by a CLEC and that the CLEC wishes to serve the customer on a resale basis; accordingly, the CLEC issues a resale LSR. U S WEST reviews the LSR and issues a service order. Upon completion, the information on the service order (customer name, telephone, service address, class of service) is verified against the Master Street Address Guide (MSAG) and input into the Automatic Location Identification (ALI) database. The people in the PSAP can then access the information about that customer whenever they place a 911 call.

911 RESALE PROCESS FLOW



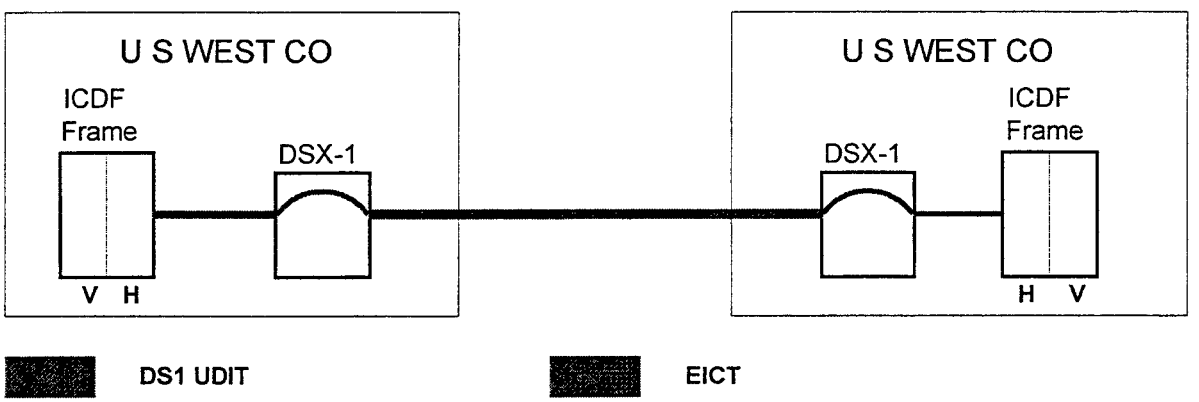
Task Descriptions

Task	Descriptions
1	Local Service Request (LSR) form submitted to Denver Interconnect Service Center (ISC)
2	Obtain preorder/order information and review LSR and associated forms for completeness
3	Service Order is issued into Service Order Processor (SOP)
4	Service is initiated and order is completed in SOP. A batch file is created and uploaded to Transaction Services System (TSS) between 7 & 10 PM each business day
5	TSS electronically reviews customer record for any 911 relevant data fields; check format and matches address information against the MSAG for accuracy.
6	If OK, record is entered by /TSS into ALI – DB
7	If not okay, record errors out for an analyst to resolve discrepancy. Upon resolution, the file is then loaded into ALI
8	Once loaded in ALI, SCC maintains the record for future use should a 911 call be made. At the time of a 911 call a query from the Selective routers causes the ALI records associated with a particular Telephone number to be sent to the respondents PSAP.

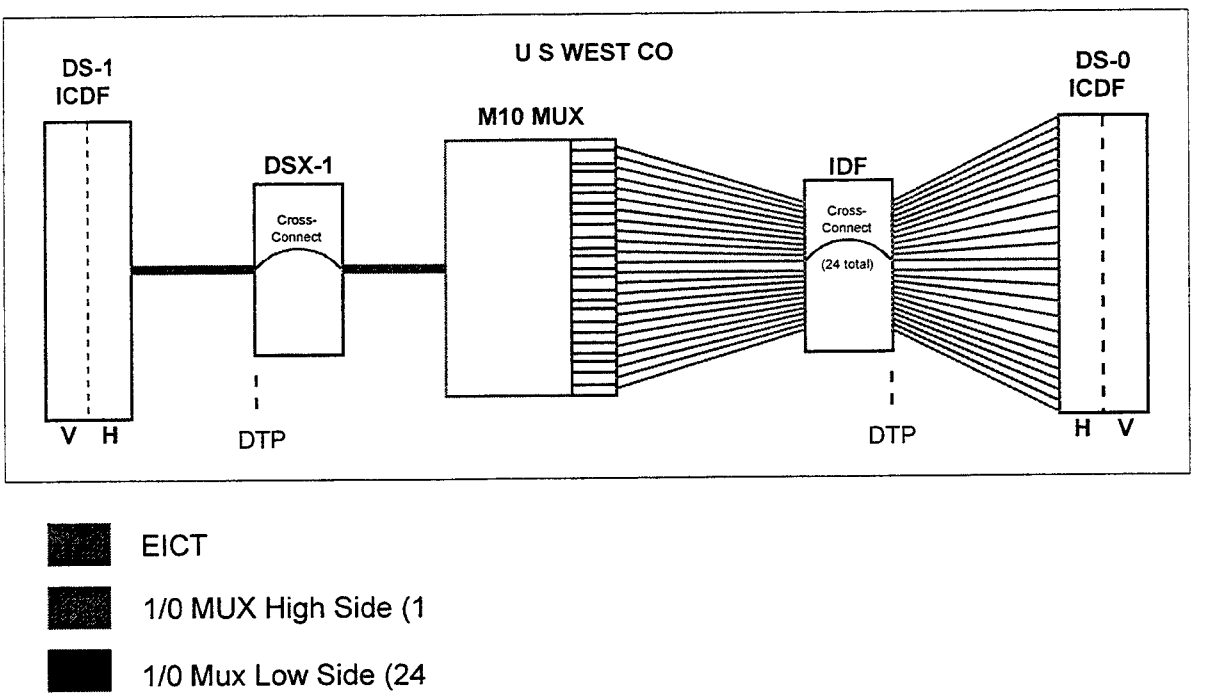
UNBUNDLED DEDICATED INTEROFFICE TRANSPORT

Requests for unbundled dedicated interoffice transport entail provisioning facilities between U S WEST's end offices. There are two types of UDIT UNEs: the point to point channel and the multiplexer. The point-to-point UDIT provides a network transmission path between two U S WEST wire centers within the same calling area. Unbundled UDIT Multiplexing provides the CLEC with a stand-alone UNE to multiplex low-level channels into a single high level channel. (see diagrams below)

UDIT – Point to Point Channel



UDIT – Multiplexer



UDIT Processes

There are similarities and differences between the resale and line side unbundled network element processes and those for UDIT. There are no pre-ordering transactions that apply, because no standards have been developed for pre-ordering transactions regarding UDIT and because U S WEST has no such transactions that it performs for itself.

The CLEC submits an Access Service Request (ASR) as defined by the Ordering and Billing Forum (OBF). If the CLEC wishes to transmit the ASR to U S WEST electronically, it may communicate via an electronic interface called EXACT (Exchange Access Control and Tracking System); otherwise, the CLEC faxes the ASR to U S WEST. The SDC validates the ASR and contacts the CLEC if the ASR has

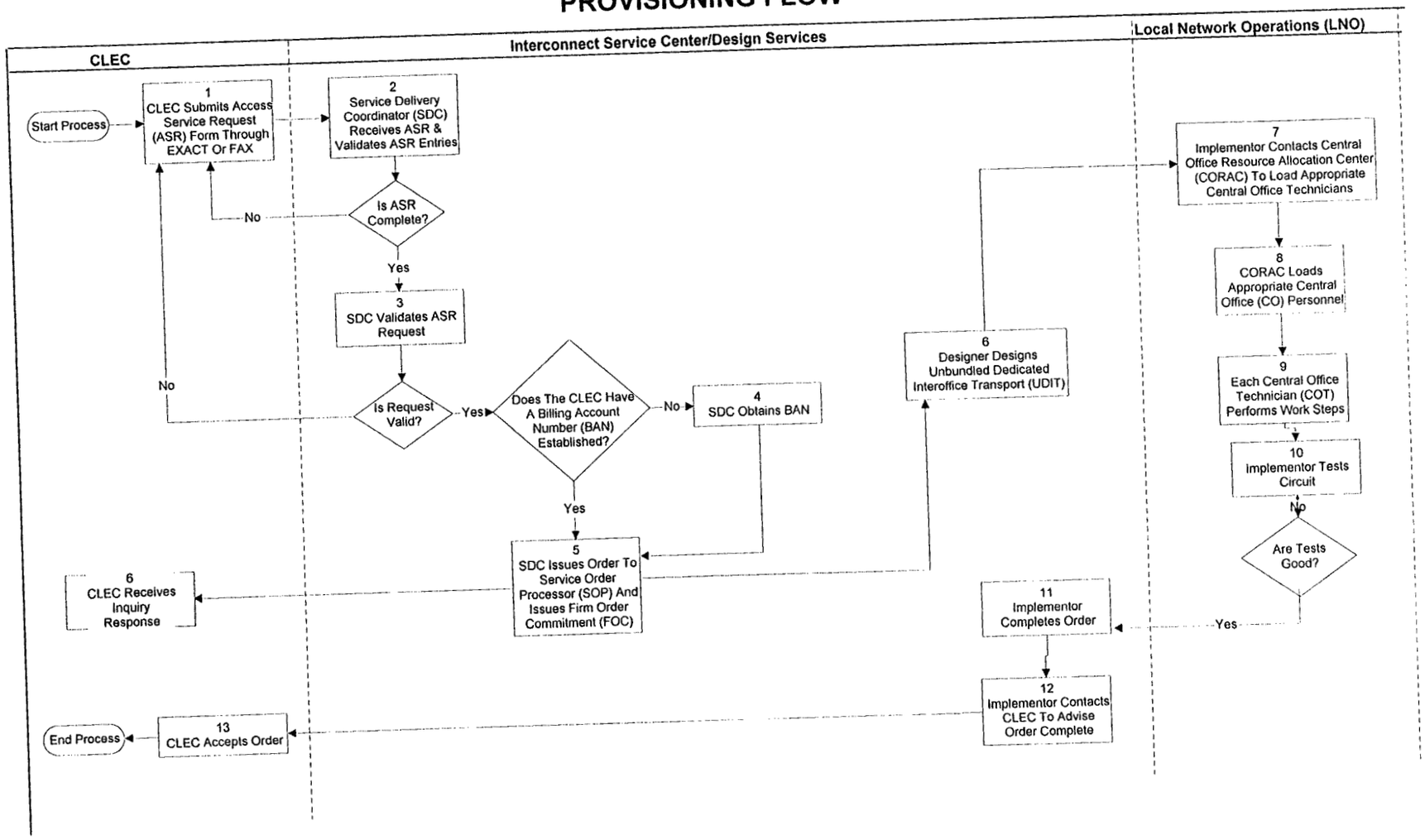
been placed in an error condition. The SDC establishes a billing account number (BAN), if necessary, and issues a service order based on the ASR. When the service order is issued, the SDC creates an FOC and transmits it to the CLEC. The designer reviews the order, validates the circuit identifier and order codes, such as CLCI code, and designs the UDIT. In the next step, the implementer contacts the Central Office Resource Allocation Center (CORAC), which loads the appropriate COT. After the COT performs the necessary inside work, the COT tests the element and works with the implementer to arrive at a successful test completion. The implementer completes the order and contacts the CLEC for order acceptance.

Illustration

The description of the order processing flow for unbundled loop is based on the diagram contained below. I will further illustrate this process with the scenario where a CLEC, using EXACT, issues an ASR for a point to point channel between U S WEST's central office A and B. The ASR is made up of the ASR form (Access Service Request), SASR (Special Access Service Request) and ACI (Additional Circuit Information). The CLEC gathers all of the necessary information for the ASR and transmits it to U S WEST via the EXACT interface. The SDC screens the ASR, ensures its completeness, adds U S WEST information, such as name of the representative handling the ASR, and verifies the BAN is established. In the review of the ASR, the SDC checks for related orders (a trunk side switch port for example) and reads the remarks section for additional information. Also, the SDC checks for critical dates, for the CFA CLLI, which should match the 11 character CLLI code of the CLEC's collocation, and for the compatibility of the NCI codes with interconnect products. Using WFA-DI, the CORAC identifies the work request as a UDIT order, determines if the work type requires special handling and loads the appropriate technician. The COT

evaluates the WORD document and identifies the circuit as a UDIT. On the DVA date (Design, Verify and Assign Date), the COT wires the circuit per the WORD document. On the due date, the COT receives a call from the implementer and completes conformance testing. The CLEC is then notified of the work completed.

UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) PROVISIONING FLOW



Task Descriptions

Task	Description
1	Access Service Request (ASR) form submitted to Denver Interconnect Service Center (ISC)
2	ASR and associated forms reviewed for completeness
2.1	CLEC certification verified
2.2	Letter of Authorization (LOA) verified
2.3	Facilities verified
2.4	CLEC Carrier Facility Assignment (CFA) verified
2.5	Network Channel (NC) and Network Channel Interface (NCI) codes verified
2.6	CLEC interval validated
3	Determines if the request is accurate; resolves questions
4	Summary Billing number for account obtained
5	Firm Order Commitment (FOC) issued to CLEC and Service Order is issued into Service Order Processor (SOP).
6	Unbundled Loop is, if required, designed
7	Implementer Contacts Central Office Resource Allocation Center(CORAC)
8	CORAC loads appropriate Central Office Personnel
9	Central Office Technician (COT) performs work steps
10	Implementer tests circuit
11	Order completed
12	CLEC notified

LOCAL INTERCONNECTION SERVICE PROCESSES

Local Interconnection Service (LIS) is an interconnection service used to connect a CLEC that is a facilities-based interconnecter to U S WEST's network for the exchange of local traffic. LIS is a terminating, trunk-side service provided between the point of interconnection (POI) of a CLEC's network and a U S WEST end office or local tandem switch, for the purpose of completing calls within a Local Calling Area or Extended Area Service (EAS) area.

LIS Trunking Process

Initially, the CLEC makes a request to U S WEST for LIS trunking. The request may be a new request or an augmentation. If the request is new, U S WEST's marketing personnel work with the CLEC to reach an agreement on applicable construction costs, quantity and type of trunks, routing and due dates. They then issue a change request for IABS to begin billing. The remaining process steps are the same whether the request is new or an augmentation.

The SDC in U S WEST's Design Services Center verifies the ASR, assigns a trunk group serial number and a master record. If there are existing facilities available, the designer completes the necessary tasks in TIRKS, including the design, assignment and work authorization (WA). The designer also issues the appropriate DLRs and the FOC to the CLECs for acceptance. If facilities are not available, the request is forwarded to the construction organization.

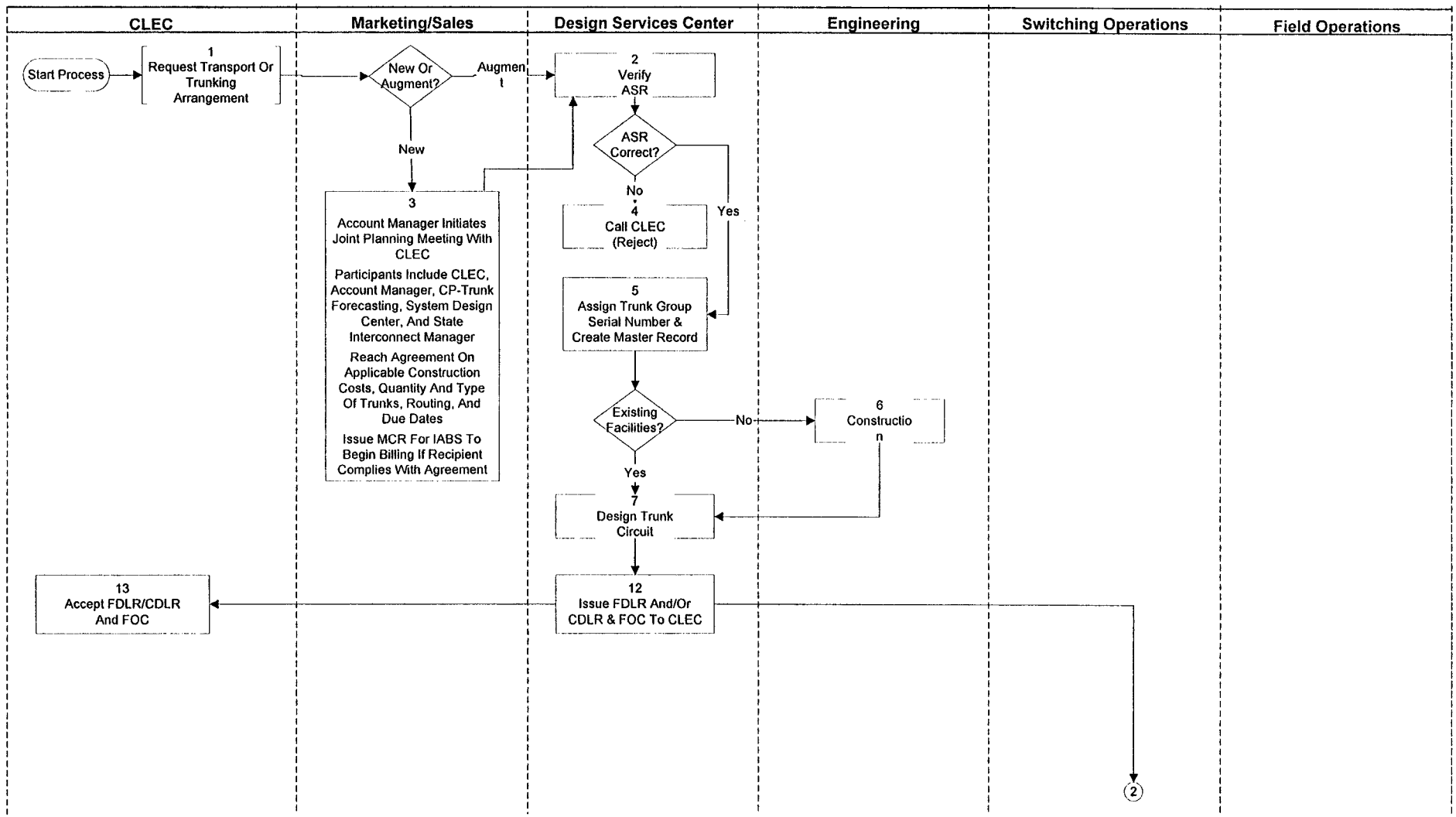
At this point, switching operations determines and opens the prefixes for the trunk groups, completes the required forms and performs the complex translations for the trunk groups and the STP for the SS7 links. Switching operations also performs test calls to ensure the provisioning flow can continue.

The implementer also communicates with the LRAC, which loads the central office technician who completes the wiring in the central office and sets up the cross connects and test wiring. After this central office work is complete, the design services center assigns trunks to trunk groups and if field wiring is required, the LRAC also loads and dispatches field technicians who perform the necessary outside field work and conformance tests. After this work is complete (or if no field wiring is required), the implementer coordinates with the CLEC to perform acceptance testing, call through testing and the activation of trunks to trunk groups. Upon the CLEC's acceptance, the implementer completes the order in WFA and IABS to establish billing.

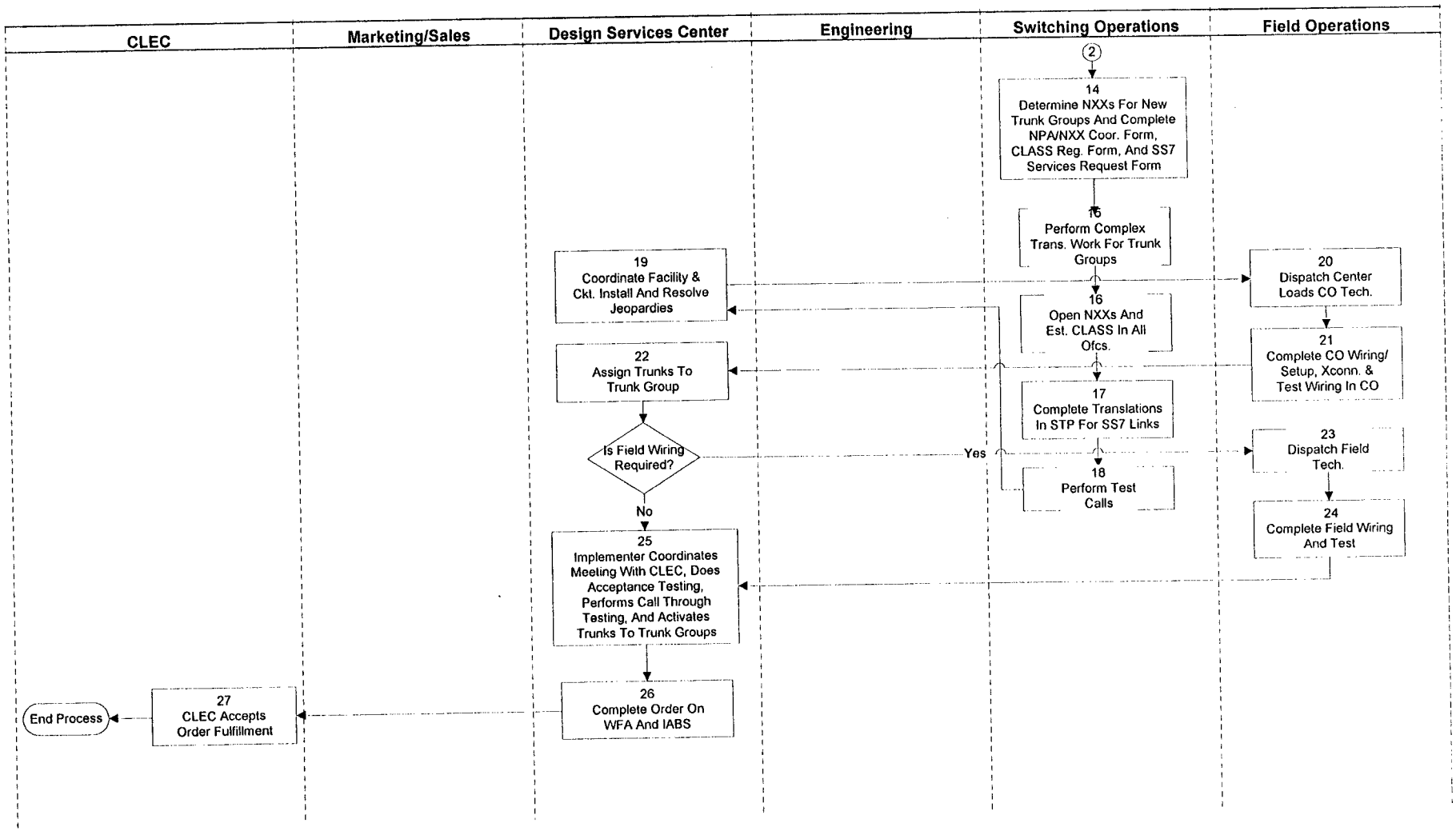
Illustration

Assume that a CLEC orders a Feature Group D trunk without coordination and that is not an augmentation. The CLEC, using EXACT, would issue 4 forms: the Access Service Request (ASR), Translation Questionnaire (TQ), Trunking Form and Additional Circuit Information Form (ACI). The SDC in the Design Service Center retrieves the request, consisting of these 4 forms, from a work list and contacts the CLEC with any errors. The SDC completes the necessary information and assigns the trunk group serial number, creates the master record and sends the order on to the service order provisioning flow and the design group to design the trunk group. At the time the service order is created, the SDC issues the FOC and DLRs to the CLEC. Switching operations determines the telephone prefixes for the Feature Group D trunk, performs the complex transactions, opens the prefixes and completes testing. Assuming no field wiring is required, the Design Services Center assigns the trunks to the Feature Group D trunks. The implementer, at this point, contacts the CLEC to perform acceptance testing and activates the Feature Group D trunk. The implementer completes the order in WFA and IABS upon acceptance by the CLEC.

LIS TRUNKING PROVISIONING FLOW



LIS TRUNKING PROVISIONING FLOW



Task Description

Task	Description
1	Request Transport or Trunking Arrangement.
2	Verify ASR – if ASR is incorrect, call CLEC and reject ASR.
3	Initiate joint planning meeting with CLEC.
4	If ASR is incorrect/incomplete, call CLEC and reject ASR.
5	If ASR is correct, build ASR/TQ
6	Assign 2-6 code and build TGMR
7	Log GOC.
8	Complete TIRKS and TAS assignments.
9	IF CFA is incorrect – build facility.
10	Build DRI & WA
11	Design Trunk Circuit
12	Issue FDLR and/or CDLR & FOC to CLEC
13	Accept FDLR/CDLR and FOC
14	Determine NXXs for new trunk groups and complete NPA/NXX coor form, CLASS reg form, and SS7 services request form.
15	Perform complex translation work for trunk groups.
16	Open NXXs and estimate CLASS in all offices.
17	Complete translations in STP fir SS7 links.
18	Perform test calls.
19	Coordinate facility and circuit installation and resolve jeopardies.
20	Dispatch center loads CO technician
21	Complete CO wiring/setup, cross-connection and test wiring in CO.
22	Assign trunks to trunk group.
23	If field wiring is required, dispatch field technician
24	Complete field wiring and test.
25	Coordinates meeting with CLEC, performs acceptance testing and call through testing, and activates trunks to trunk group.
26	Complete Order on WFA and IABS.
27	Accepts order fulfillment.

Maintenance and Repair Process for POTS

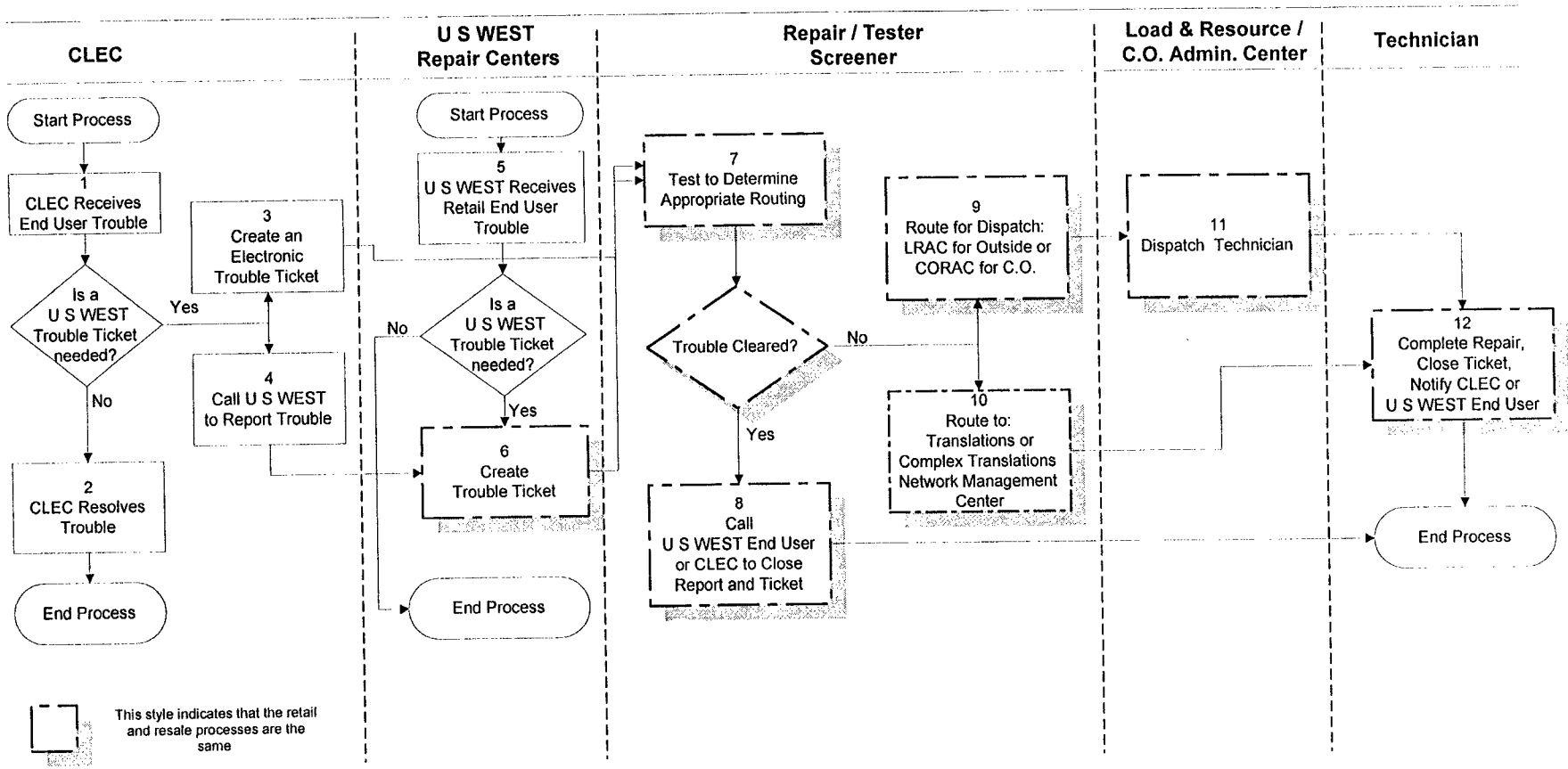
Illustration

To illustrate the POTS repair process, assume that the CLEC is contacting U S WEST about a customer's problem with Call Waiting. The CLEC representative opens a request for repair via IMA and completes all required entries which include the trouble type code, perceived severity, trouble description, circuit in use, and an indication of the public safety hazard. The CLEC can also enter the following information: trouble priority and the called number. IMA provides to the CLEC the ticket ID and any recent U S WEST service order information. The IMA screen self-populates with the reporting CLEC information. The CLEC can review the last 3 trouble tickets for the circuit ID. This IMA trouble history screen contains the disposition code and the date and time the ticket was created. Once the CLEC has gathered and entered all appropriate information, the report is submitted to U S WEST.

This step creates the trouble ticket that identifies the customer and describes the trouble as reported by the customer. The CLEC enters the POTS circuit ID, for this example it is the end-user's 10-digit telephone number, and indicates the method in which the ticket status information should be returned. CLEC choices for returned status information are e-mail, fax or neither. After the CLEC has populated all required fields, it submits the ticket to U S WEST, and the ticket automatically flows to the U S WEST repair system, LMOS. Once in LMOS, the trouble ticket is reviewed and, in this case, the information indicates that line translation information needs to be verified. The ticket is automatically sent to Recent Change Memory Administration Center

(RCMAC) for translation work. A diagnostic test is performed, the results are analyzed and the trouble is resolved. Status is provided to the CLEC to inform it the trouble is fixed and the ticket is closed in LMOS.

Resale - Checklist Item 14
Maintenance And Repair Process



Task Description

Task	Description
1	The CLEC takes a trouble report from its end user and determines if the problem is with the end user's CPE, with CLEC equipment, or in U S WEST- provided service.
2	If the CLEC determines that the problem is not a U S WEST problem then the CLEC resolves the trouble with the end user.
3	If the CLEC determines that the problem is in U S WEST's service then a trouble report is sent to U S WEST. CLEC can send an electronic report in IMA or in EB-TA. The same procedures are used to process a CLEC trouble report as are used for U S WEST retail trouble reports for the same services.
4	The CLEC can call trouble reports in to U S WEST's RCHC at 888 405-0083 for simple POTS services or the Account Management Service Center (AMSC) at 800 223-7881 for complex or designed services. The same procedures are used to process a CLEC trouble report as are used for U S WEST retail trouble reports for the same services.
5	U S WEST's residential retail end users report trouble by calling the Repair Call Handling Center (RCHC) at 800-573-1311 and business end users call 800-954-1211. Business end-users will be routed to the correct repair center based on the type of service POTS or designed services. The center determines if the problem is with the end user's CPE or in U S WEST's service.
6	The repair center opens a trouble ticket. The same process is used for U S WEST end user trouble reports and CLEC reports.

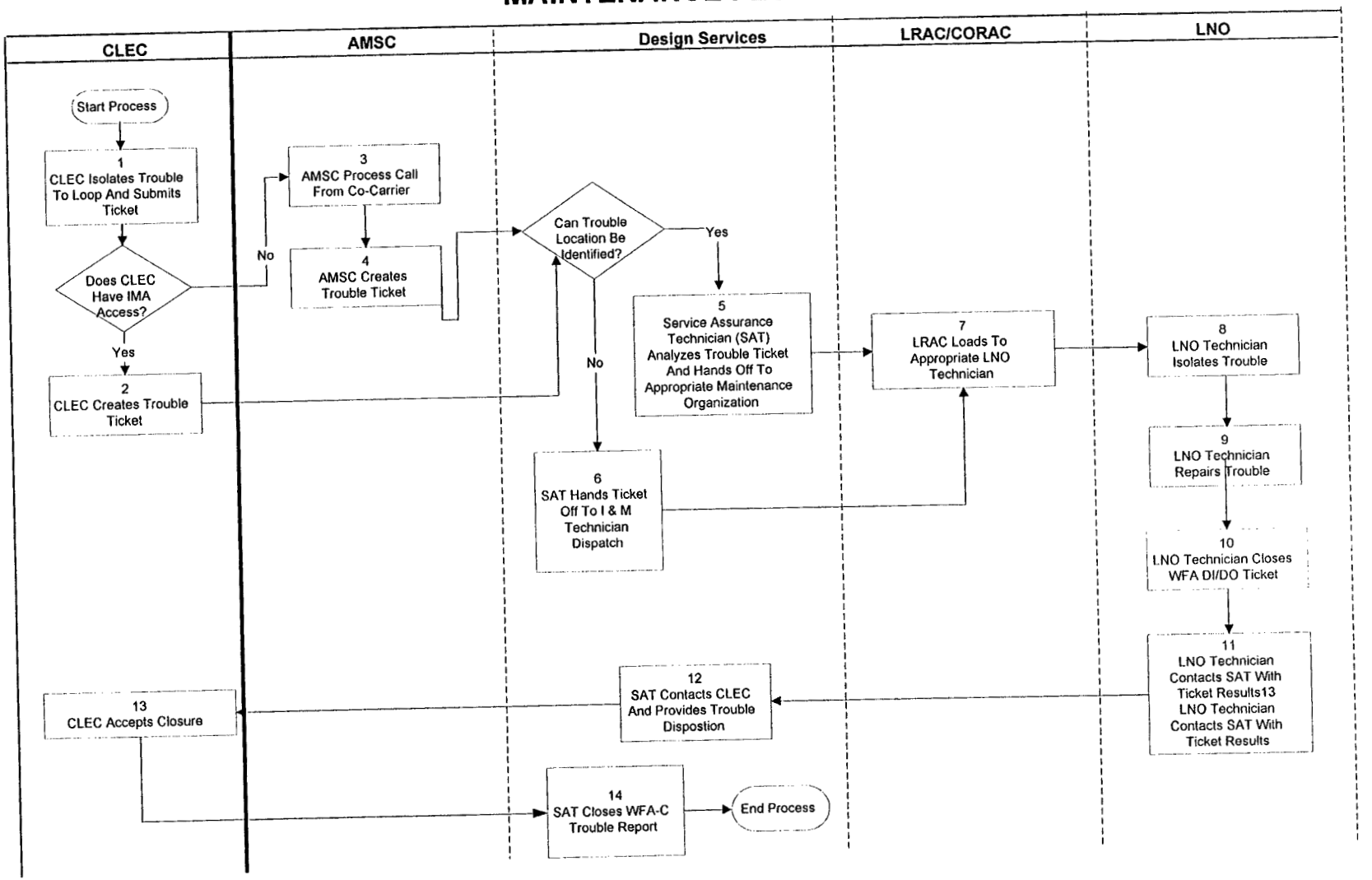
Task	Description
7	When a CLEC or U S WEST trouble report is issued the line is automatically tested. Based on the results of the tests, the trouble ticket will be routed and assigned to the appropriate U S WEST departments. The same technicians using the same procedures and the same repair intervals will process all trouble tickets for the same type of service.
8	If no trouble is found in the line test, or the trouble is cleared, the U S WEST employee will contact the CLEC or the U S WEST end user and close the trouble ticket.
9	If the trouble requires U S WEST to dispatch an outside technician, then the ticket is routed to the Load and Resource Administrative Center (LRAC) for outside technicians. If the trouble involves the central office, then it is routed to the Central Office Resource Administration Center (CORAC) for central office technicians.
10	If the trouble involves the central office translations, then it is routed to the appropriate group correct the translations. The same U S WEST employees, regardless of the origin of the trouble, handle all like troubles.
11	The trouble tickets are dispatched to a U S WEST technician. All trouble tickets are loaded based on the standard repair interval for that service on a first in, first out, basis. No distinction is made between U S WEST retail trouble tickets and CLEC trouble tickets.
12	Trouble is repaired and the ticket is closed. The CLEC is notified that the ticket has been closed according to method requested by the CLEC, (e.g., by phone call). An electronic report created by the CLEC in IMA or EB-TA will be updated to show a status of "Closed". The U S WEST end user does not always receive notification that the trouble has been resolved.

Maintenance and Repair Process for Unbundled Loop

Illustration

In this illustration, the end user experiences trouble with their line and calls the CLEC to report the trouble. The CLEC isolates the trouble to the Unbundled Loop (UL), and opens a trouble ticket using IMA. In IMA CLEC identifies the customer and reports the trouble as described by the customer. The CLEC also includes the circuit ID for the UL and indicates the method in which it wants the status returned. After the CLEC has populated all required fields, it submits the ticket to U S WEST, and the ticket automatically flows to the U S WEST repair system, WFA-C. Once U S WEST receives the trouble ticket, the ticket is reviewed in WFA-C for the following information: nature of trouble, trouble location, and remote test access/test authorization. In this example, U S WEST determines that the UL has been cut on the end-user premises. The Service Assurance Technician (SAT) forwards the ticket to the appropriate maintenance organization for repair via WFA-C to WFA-DO since an outside visit is deemed necessary. The trouble ticket is assigned to a technician who isolates and repairs the trouble. The technician closes the ticket, and contacts the SAT with the results. The SAT contacts the CLEC, provides the trouble ticket disposition and requests that the CLEC verify that the UL is functioning. The CLEC is able to verify that the UL is functioning and authorizes U S WEST to close the ticket.

UNBUNDLED LOOP MAINTENANCE FLOW



Task Description

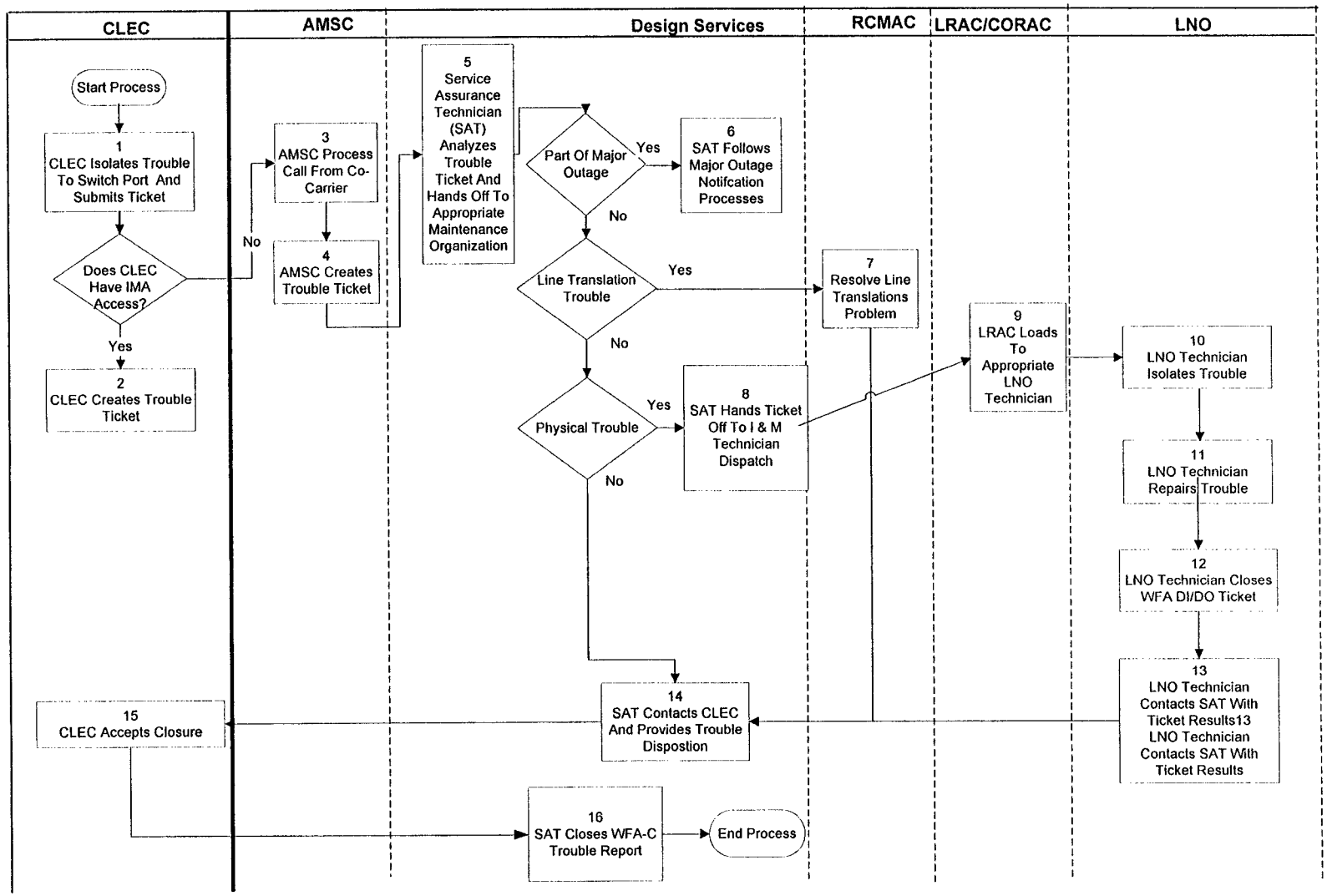
Task	Description
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 2 and 3 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	When trouble location cannot be identified, ticket assigned to Installation & Maintenance Technician
7	Trouble ticket received in Network Operations
8	Trouble is isolated
9	Trouble repaired
10	Trouble ticket updated
11	Contact SAT with ticket results
12	CLEC notified
13 and 14	CLEC accepts service and Trouble ticket closed

Maintenance and Repair Process for Unbundled Switch

Illustration

To illustrate the POTS unbundled switch process, assume that the end user experiences trouble with his line and calls the CLEC to report the trouble. The CLEC isolates the trouble to a circuit, and opens a trouble ticket using IMA. In this step they identify the customer and describe the trouble as described by the customer. They have also included the circuit ID and indicate the method in which they want the status returned. After the CLEC has populated all IMA required fields they submit the ticket to U S WEST and it automatically flows to the U S WEST repair systems. Once U S WEST receives the trouble ticket, the ticket is reviewed in WFA-C for the following information: nature of trouble, trouble location, and remote test access/test authorization. Based on the analysis performed by U S WEST, it is determined that the UPLS has been damaged. The Design Services Service Assurance Technician (SAT) forwards the ticket to the appropriate maintenance organization for repair via WFA-C to WFA-DI since an inside work is deemed necessary. The trouble ticket is assigned to a technician who isolates and repairs the trouble. The technician closes the ticket, and contacts the SAT with the results. The SAT contacts the CLEC and provides the trouble ticket disposition and requests the CLEC verify that the UPLS is functioning. The CLEC is able to verify that the UPLS is functioning and authorizes U S WEST to close the ticket.

UNBUNDLED SWITCH MAINTENANCE FLOW



Task Description

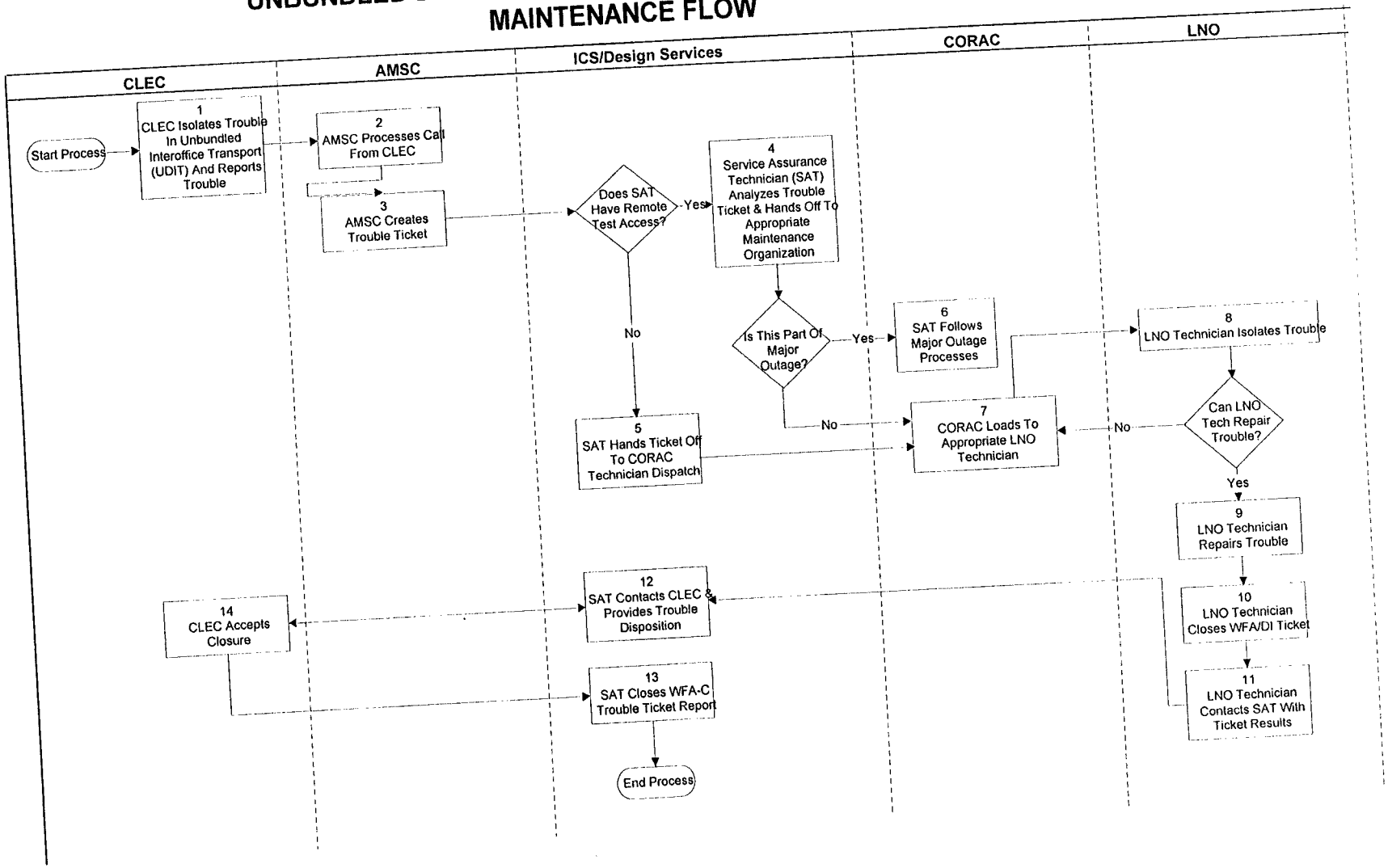
Task	Description
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 3 and 4 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	If part of major outage SAT follows major outage notification processes **Note: then skip to step 13**
7	Translations Trouble is resolved **Note: then skip to step 13**
8	SAT hands off physical trouble to network operations
9	CORAC loads to appropriate LNO Technician
10	Trouble is isolated
11	Trouble repaired
12	Trouble ticket updated
13	Contact SAT with ticket results
14	CLEC notified
15 and 16	CLEC accepts service and Trouble ticket closed

Maintenance and Repair Process for UDIT

Illustration

To illustrate the UDIT repair process, assume that the end user experiences trouble with his line and calls the CLEC to report the trouble. The CLEC isolates the trouble to the UDIT, and submits a ticket to U S WEST where it automatically flows to the U S WEST repair systems. Once U S WEST receives the trouble ticket, the ticket is reviewed in WFA-C for the following information: nature of trouble, trouble location, and remote test access/test authorization. Based on the analysis performed by U S WEST, it is determined that the problem exists inside the Central Office. The Service Assurance Technician (SAT) forwards the ticket to the appropriate maintenance organization for repair via WFA-C to WFA-DI since inside work is deemed necessary. The trouble ticket is assigned to a technician who isolates and repairs the trouble. The technician closes the ticket, and contacts the SAT with the results. The SAT contacts the CLEC and provides the trouble ticket disposition and requests the CLEC verify that the UDIT is functioning. The CLEC is able to verify that the UDIT is functioning and authorizes U S WEST to close the ticket.

UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) MAINTENANCE FLOW



Task Description

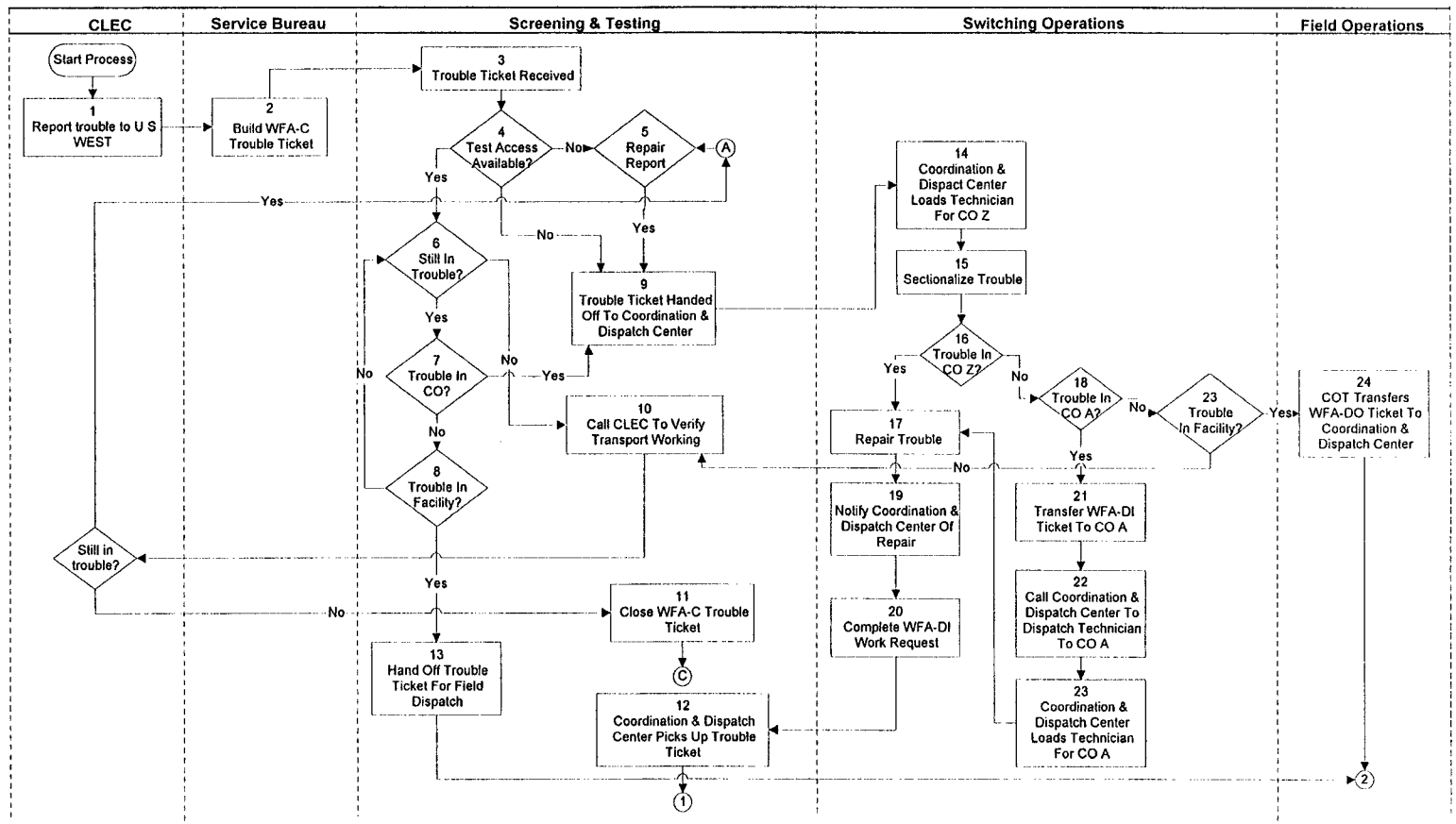
Task	Description
1 or 2	Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically. Otherwise CLEC calls AMSC to report trouble and steps 3 and 4 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	If trouble is related to a major outage SAT follows major outage notification processes
7	If trouble location can not be identified by SAT the SAT hands off tkt to CORAC to dispatch technician
8	CORAC loads to appropriate LNO Technician
9	Trouble is isolated
10	Trouble repaired
11	Trouble ticket updated
12	Contact SAT with ticket results
13	CLEC notified
14 and 15	CLEC accepts service and Trouble ticket closed

Maintenance and Repair Process for LIS

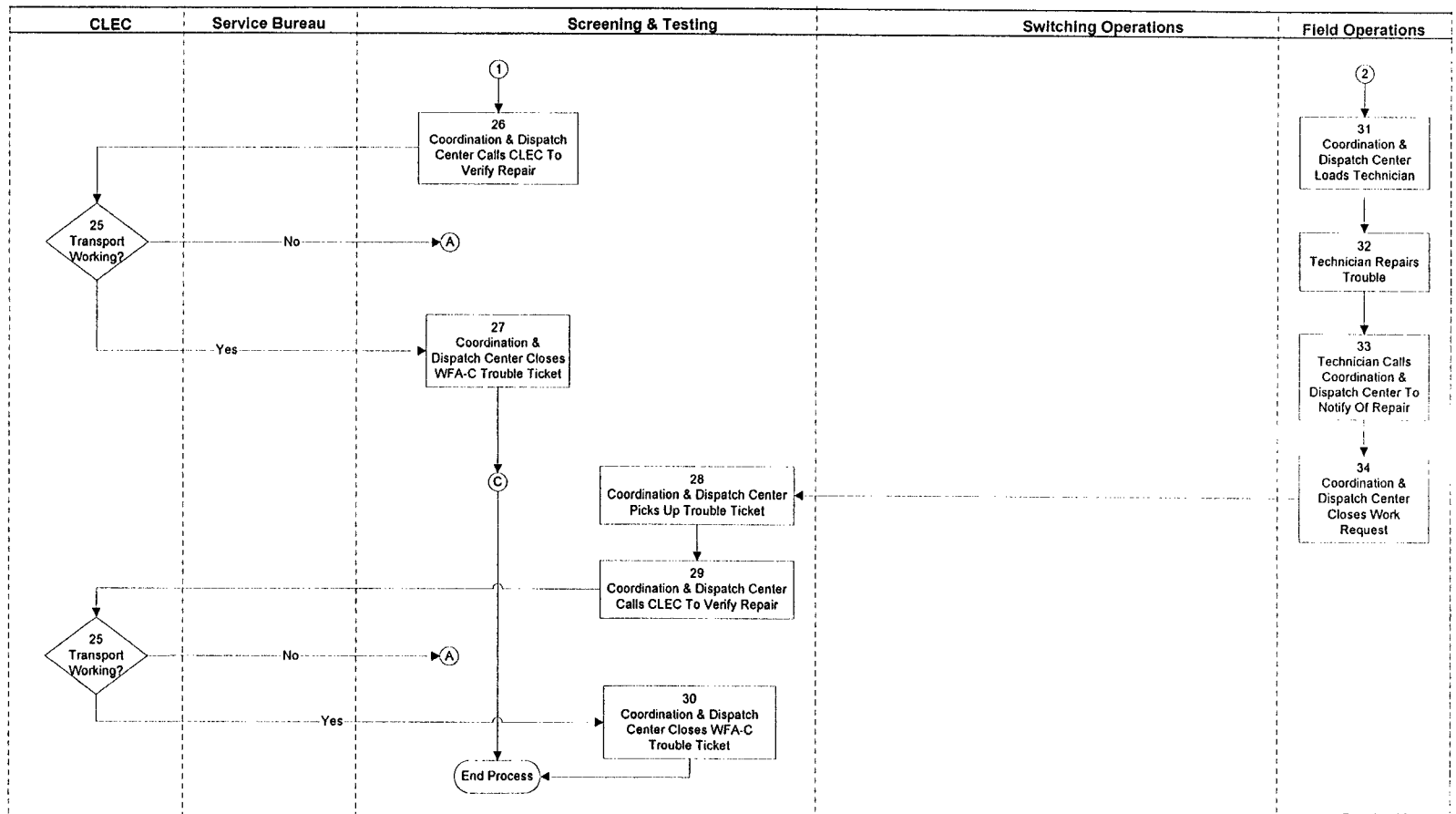
Illustration

In this example, the end user experiences trouble with his line and calls the CLEC to report the trouble. The CLEC reports the trouble to the Repair Service Bureau where a trouble ticket is built into WFA-C. Once U S WEST receives the trouble ticket, the ticket is reviewed in WFA-C for the following information: nature of trouble, trouble location, and remote test access/test authorization. In this example, based on the analysis performed by U S WEST the trouble is sectionalized to the central office. The Coordination and Dispatch Center forwards the ticket to the appropriate maintenance organization for repair via WFA-C to WFA-DI since an inside work is deemed necessary. The trouble ticket is assigned to a technician who isolates and repairs the trouble. The technician closes the ticket, and contacts the Coordination and Dispatch Center with the results. The Coordination and Dispatch Center contacts the CLEC and provides the trouble ticket disposition and requests the CLEC verify that the LIS trunk is functioning. The CLEC is able to verify that the LIS trunk is functioning and authorizes U S WEST to close the ticket.

LIS TRUNKING REPAIR FLOW



LIS TRUNKING REPAIR FLOW



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Task Description

Task	Description
1	Report trouble to U S WEST.
2	Build WFA-C trouble ticket.
3	Trouble ticket received.
4	Check for test access availability.
5	Check to see if this is a repeat reapir.
6	If test access available, test circuit.
7	Test for trouble in CO.
8	Test for trouble in facilities.
9	If trouble is in CO, send trouble ticket to coordination and dispatch center.
10	If no trouble after test access, call CLEC to verify transport is working.
11	If CLEC verifies transport is working, close WFA-C trouble ticket
12	Coordination and dispatch center receives trouble ticket.
13	If trouble is found in facilities, send trouble ticket for field dispatch.
14	Coordination and dispatch center loads technician for CO A.
15	Sectionalize trouble
16	Check for trouble in CO Z.
17	If trouble in CO Z, repair trouble
18	Check for trouble in CO A.
19	Notify coordination & Dispatch Center of repair
20	Complete WFA-DI work request.
21	If trouble is in CO LOC A, transfer WFA-DI ticket to CO A.
22	Call Coordination & Dispatch Center to dispatch technician to CO A.
23	Coordination & Dispatch Center loads technician for COA

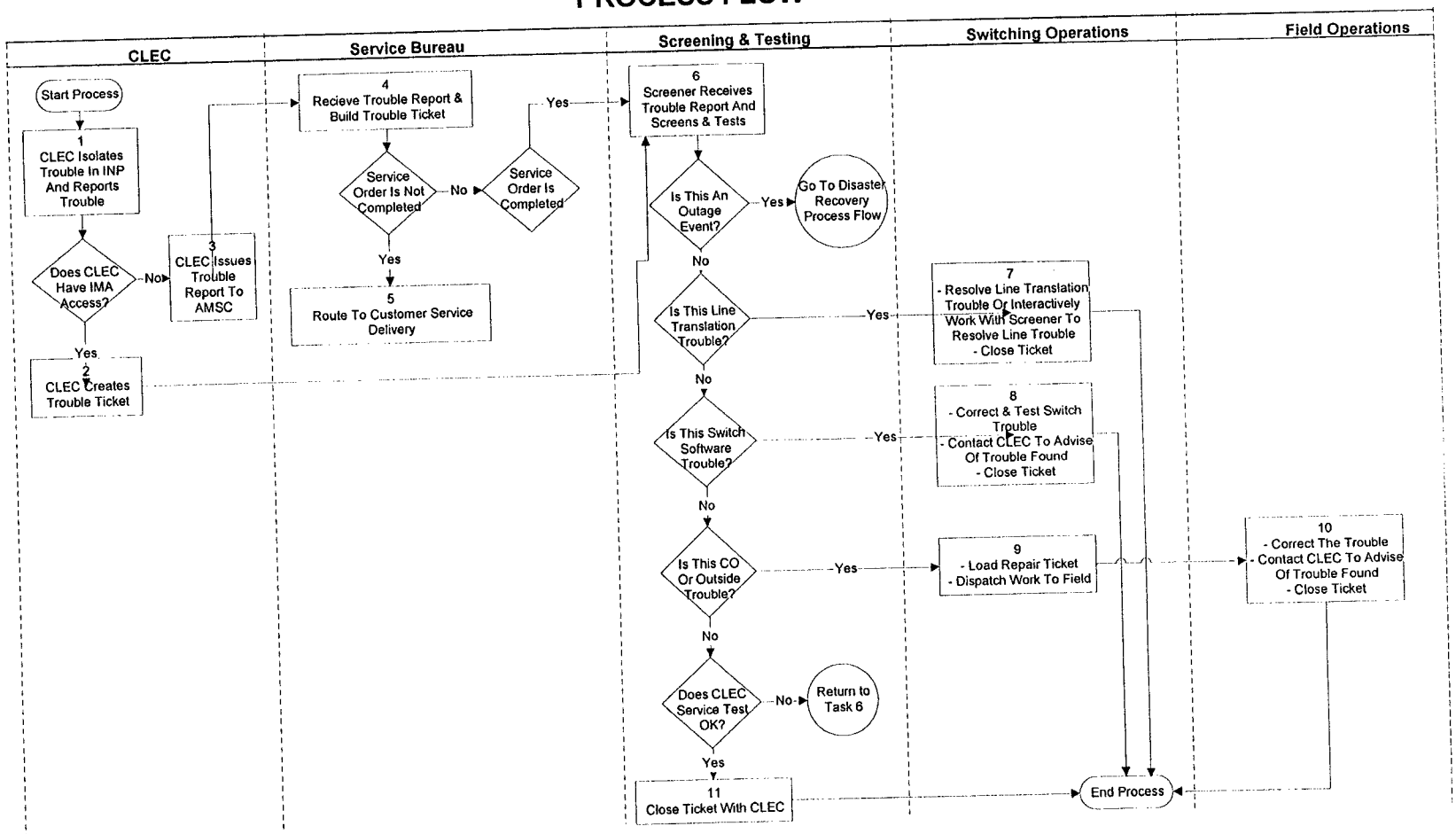
23	Check for trouble in facilities to CO A.
24	COT transfers WFA-DO ticket to Coordination & Dispatch Center.
25	Checks to verify transport is working.
26	Coordination & Dispatch Center calls CLEC to verify repair.
27	Coordination & Dispatch Center closes WFA-C trouble ticket.
28	Coordination & Dispatch Center receives trouble ticket from Field Operatio
29	Coordination & Dispatch Center calls CLED to verify repair.
30	Coordination & Dispatch Center Closes WFA-C trouble ticket
31	Coordination & Dispatch Center loads technician.
32	Technician repairs trouble.
33	Technician notifies Coordination & Dispatch Center of repair.
34	Coordination & Dispatch Center closes work request.

Maintenance and Repair Process for INP

Illustration

In this example, the end user experiences trouble receiving calls and contacts the CLEC to report the trouble. The CLEC isolates the trouble to Number Portability, and opens a trouble ticket using IMA. In this step they identify the customer and describe the trouble as described by the customer. They have also included the circuit ID , for this example it is the end-users 10-digit telephone number. After the CLEC has populated all IMA required fields they submit the ticket to U S WEST and it automatically flows to the U S WEST repair systems. After the CLEC has populated all required fields they submit the ticket to U S WEST and it automatically flows to the U S WEST repair systems. Once in LMOS the trouble ticket is screened and, in this case, the information indicates that line translation information needs to be verified. The ticket is automatically sent to Recent Change Memory Administration Center (RCMAC) for translation work. A diagnostic test is performed, the results analyzed, isolated and the trouble resolved. Status is provided to the CLEC to inform them the trouble is fixed and the ticket is closed in LMOS.

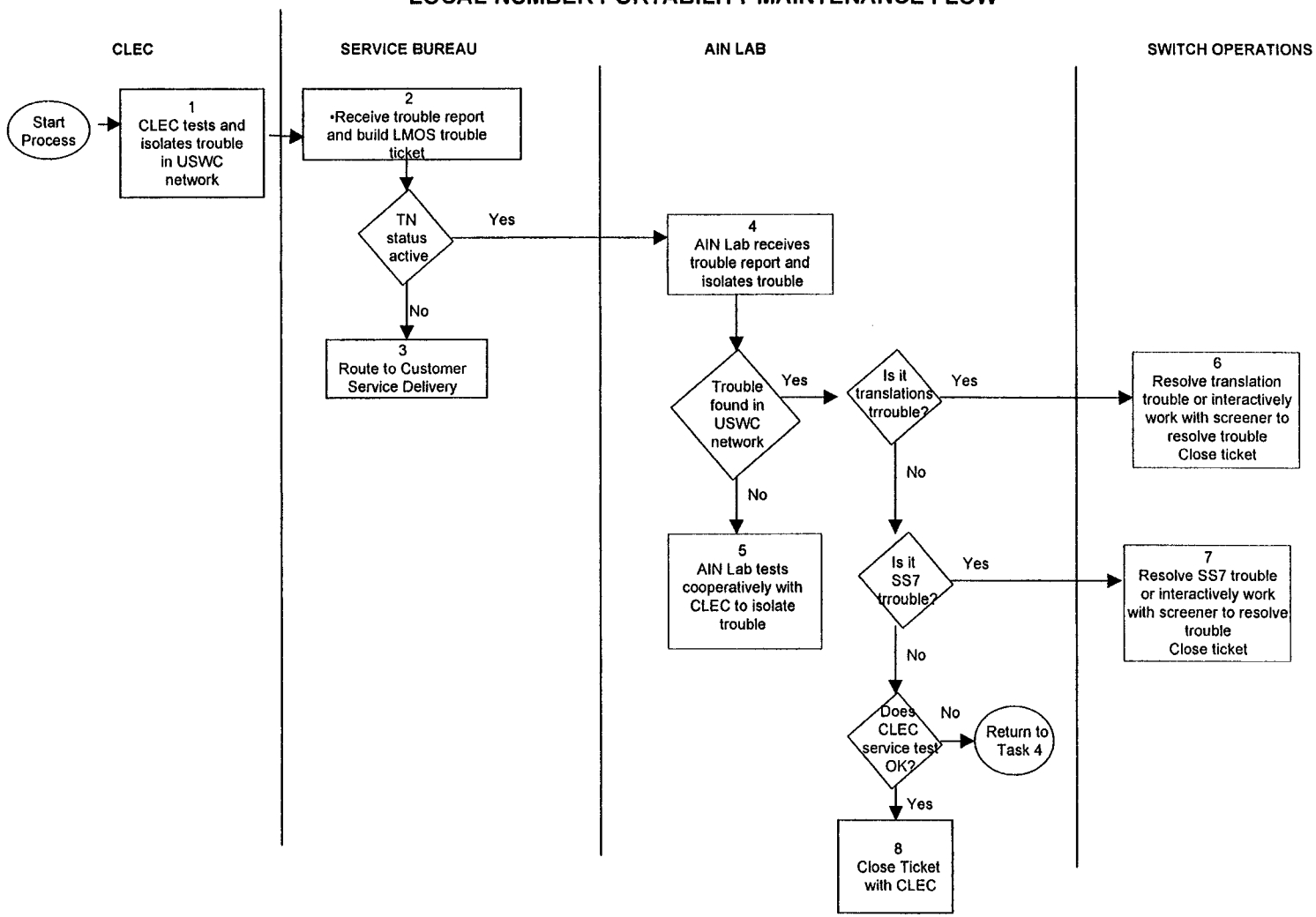
INTERIM NUMBER PORTABILITY MAINTENANCE PROCESS FLOW



Task Description

Task	Description
1	CLEC isolates trouble and reports trouble
1.1	CLEC determines if trouble is reported either manually or through IMA access
2	If CLEC is reporting trouble via IMA access, CLEC issues trouble ticket
3	CLEC issues trouble report to AMSC by call 1-800-223-7881
4	Receive trouble report and build LMOS trouble ticket
4.1	Determine if the service order status for the trouble reported is identified in the service order processor as "not completed". If service order has not completed, route to Customer Service Delivery for handling with pending service order
4.2	Determine if service order status for the trouble reported is identified in the service order processor as "completed". If "yes", route to screener
5	Route to Customer Delivery Center to process trouble report with existing service request
6	Screener receives trouble report in LMOS and screens and tests
6.1	Screener follows decision flow for isolating trouble
7	Resolve line translation trouble or interactively work with screener to resolve line translations trouble. Close LMOS ticket. Contact CLEC
8	Correct and test switch trouble. Contact CLEC to advise of trouble resolution. Close ticket with screener or via WFA/DI. Call Screener to notify of trouble resolution.
9	LRAC dispatches work to LNO via WFA/DI/DO
10	LNO corrects the trouble and closes the trouble ticket in WFA and contacts the CLEC to advise of resolution. LNO contact MPAC of OE changes
11	Close ticket with CLEC

LOCAL NUMBER PORTABILITY MAINTENANCE FLOW



Task Description

Task	Description
1	End User reports trouble to CLEC, CLEC tests and isolates trouble in USW network
2	Receive trouble report and build LMOS trouble ticket
2.1	Route to AIN Lab if TN status is active at NPAC
3	If TN does not have a status of active route call to ISC
4	AIN Lab receives trouble report, analyzes trouble, and isolates trouble found
4.1	AIN Lab analyzes trouble and isolates to USW network
5	No trouble found in U S WEST network. AIN Lab will cooperatively test with CLEC if trouble isolation is unknown
6	AIN Lab will route translation trouble to Complex Translations, RCMAC. Translations groups will resolve translation trouble or interactively work with screener to resolve trouble. Close trouble ticket once trouble is resolved.
7	AIN Lab will route SS7 trouble to SS7 group to resolve trouble or work interactively with screener to resolve trouble. Closes trouble ticket with once trouble is resolved.
8	Close trouble ticket with CLEC

Maintenance and Repair Process for Shared Transport

General Shared Transport Description

Internal processes that support the detection and resolution of problems on U S WEST's internal network equally support shared transport for the CLEC. This is because, operationally speaking, shared transport is an integrated part of U S WEST's ubiquitous network. If an end-user customer notifies its local provider of a problem with his or her service, the CLEC would create a trouble ticket for one of the unbundled network elements such as switch port and/or UL. U S WEST would determine that the problem existed in the shared transport portion of its network and resolve the problem. For this reason, no drawing and detailed tasks have been included to discuss the repair and maintenance process for shared transport.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: System Capacity Analysis for IMA

Confidential/Proprietary Designation Rationale:

This document contains sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. This document also contains competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: Hardware Procurement Flow

Confidential/Proprietary Designation Rationale:

This exhibit details an internal U S WEST processes. This information is considered proprietary because it denotes how U S WEST's does business and this information is not disclosed outside of U S WEST.

U S WEST COMMUNICATIONS

NEW CUSTOMER QUESTIONNAIRE

VERSION 8

CONFIDENTIAL

The information contained herein is confidential and should not be disclosed to unauthorized persons. It is meant for use by authorized representatives of U S WEST, Inc., and U S WEST Communications, Inc., only.

US WEST Communications
New Customer Questionnaire

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US WEST Communications
New Customer Questionnaire

Instructions for Questionnaire Completion

The New Customer Questionnaire should be completed jointly by a representative of the customer and a U S WEST representative, usually the Account Manager. The questionnaire contains many numbers in parenthesis which correspond to further field definitions located at the back of the questionnaire titled, **Questionnaire Definitions**. Use these definitions to determine the appropriate field information.

The completed questionnaire will be used to:
determine certification
determine geographical requirements
identify Client IDs
determine USWC system requirements to support
    client specific activity
collect credit information
obtain billing information
establish input and output requirements
create and distribute client contact lists
identify client hours and holidays

The New Customer Questionnaire is comprised of the following sections:
General Information: Information on person completing this form; Legal corporate name, address, email, and fax number
Certification information
Client ID numbers
Billing and Collections
    Credit information
    Billing information
    Summary billing information
Federal and State Sales Tax Information
USWC Output Reports
Input to USWC
    Method of input
    Contact Lists for Orders, Billing and Repair
    List of holidays
    Other contacts

After Questionnaire Completion

Once the form is completed, it must be forwarded to Barbara Cornwell, 1005 17th St. Rm 1730, Denver, CO 80202- E-Mail bcornwe@uswest.com. This should be done as soon as possible. Processing time necessary to establish data transfers between U S WEST and the customers can take from 30 to 60 days. During that time frame, we are concurrently establishing the RSID, USOCs, and discounted rates specific to each Reseller.

US WEST Communications
New Customer Questionnaire

GENERAL INFORMATION

(1) Today's Date: _____

Completed _____

(2) Customer Name (3) Telephone #

_____

(4) Customer Signature

_____

(5) U S WEST Representative (6) Telephone #

Provide your legal corporate name and address.

(7) Corporate Name _____

(8) Street Address _____

_____

(9) Floor (10) Room

_____

(11) City (12) State (13) Zip Code

_____

(14) Email Address (15) Fax Number

US WEST Communications
New Customer Questionnaire

GENERAL INFORMATION

(17) Indicate the state that the data in this questionnaire will represent:

Note: A separate questionnaire is required for each state or area.

Central: ___ AZ ___ CO ___ ID ___ MT ___ NM ___ UT ___ WY

Eastern: ___ IA ___ MN___ NE ___ ND ___ SD

Western: ___ ID ___ OR ___ MH ___ WA

(19) Indicate the type of service that the data in this questionnaire will represent:

Resale _____
Unbundled Loop _____
Unbundled Switching _____
Unbundled Interoffice Dedicated Transport _____
LIS Trunking _____
Collocation
Physical _____
Virtual _____

(20) Enter your Client Identification Numbers, as appropriate:

ACNA: _____	CIC: _____	OCN _ _ _ _	RSID/ZCID _____
Access Customer Name Abbreviation	Carrier Identification Code	Operating Company Number	Reseller/CLEC I.D. Number

(21) Provide type of arrangement:

___ Contract (Comprehensive Agreement) Arrangement

Date Commission Approved _____

___ Tariff Arrangement (if applicable)

(21A) Provide Directory Listing Option and Publisher name:

_____ OPTION 1 ____ USW DEX
_____ OPTION 2 ____ OTHER (List name of publisher)

US WEST Communications
New Customer Questionnaire

BILLING AND COLLECTIONS SECTION - 1
CREDIT INFORMATION

(22) Indicate your business type:

_____ Corporation
_____ Franchise
_____ Individual Ownership
_____ Partnership

(23) Enter the month and year your business was established. _____

(24) Provide the names, titles, and residential phone numbers of owners or corporate officers:

Names	Titles	Telephone Number (Area Code)

(25) Provide any current and/or previous business service telephone number(s) of a similar business type:

Telephone number (Area Code)	Status(Current or previous)

Provide the estimated monthly Service volumes by service types:

(26) Enter estimated line quantities for Resale, Unbundled Elements, and Interconnection.

Resale _____

Unbundled Elements _____

Interconnection _____

(27) Enter estimated dollar amounts for IntraLATA and InterLATA Toll Usage

IntraLATA Toll Usage _____

InterLATA Toll Usage _____

US WEST Communications
New Customer Questionnaire

(28) Financial Contact Information:

_____
Name (Area Code) Telephone Number

_____
Title

Address _____

_____
City State Zip Code

_____
Hours Available Time Zone

(29) Would you like to utilize (EDI/EFT) Electronic Funds Transfer Service? _____ Yes _____ No

BILLING AND COLLECTIONS SECTION - 1
BILLING INFORMATION

Federal and State Sales Tax Information

(30) Please provide your Tax Identification Number _____

(31) Are you requesting exemption on Federal Excise Tax ON COMMUNICATIONS SERVICES ?
____ Yes _____ No

In order for tax exemption requirements to be met, CERTIFICATE OF EXEMPTION FROM FEDERAL EXCISE TAX ON COMMUNICATIONS SERVICES form RG 31-0093 must be provided to U S WEST within **30 days.** Please forward the exemption certificate to your USWC Billing Center as soon as possible.

(32) Are you requesting to be exempt from applicable taxes and fees on the Telecommunication services purchased for Resell?
____ Yes* _____ No

*If yes, please provide the Sales Tax License, Registration or Permit number for the applicable states. This information will meet state requirements for resell tax exemption except as noted:

STATE	Sales Tax License #/ Registration #/Permit #
Arizona	
Colorado	Note # 3
Idaho	No state Sales tax on Telecommunications services
Iowa.	
Minnesota	No state Sales tax

US WEST Communications
New Customer Questionnaire

STATE	Sales Tax License #/ Registration #/Permit #
Montana	No state Sales tax
Nebraska	Note # 1
New Mexico	Note # 2
North Dakota	
Oregon	No state Sales tax
South Dakota	Note # 1
Utah	
Washington	
Wyoming	

Federal and State Sales Tax Information

EXEMPTION CERTIFICATE REQUIREMENTS:
In order for tax exemption requirements to be met, the following individual documents must be provided to U S WEST **within 30 days**. Please forward the exemption certificate(s) to your USWC Billing Center as soon as possible.

Note #1 Nebraska and South Dakota exemptions require either a UNIFORM SALES & USE CERTIFICATE- MULTI-JURISDICTION form or a Individual State specific form

Note #2 New Mexico requires SERIES 1992 - NONTAXABLE TRANSACTION CERTIFICATE - SERIES 1992

Note #3 Colorado requires a Colorado Resell Exemption **Letter** from the Department of Revenue. Write to:

William Soeckman, Head Conferee
Colorado Department of Revenue
1375 Sherman St
Denver CO 80261

Summary :

USWC accepts these statements in good faith as cause to exempt the revenues associated with these resell transactions from tax and fee calculations and remittances.

(33) Do you agree to indemnify and reimburse USWC for any assessment, penalty and interest, over these revenues on which additional taxes and fees are due? ____ Yes ____ No

Reimbursement for said costs will be due within 30 days of notification by USWC of such assessments and/ or costs.

(34) Do you have any unique taxing considerations? ___Yes___No

*If Yes, explain and provide requirements:

_____

_____

US WEST Communications
New Customer Questionnaire

BILLING AND COLLECTIONS SECTION - 1
SUMMARY BILLING

NOTE: Provide the following data necessary to support the accurate implementation and mailing of your paper Summary Bill(s). If only one type of service will be resold, fill in the appropriate account type.

Business Accounts

(35) Mailing Name: _____
Mailing Address: _____
City State Zip Code
Attention: _____

(36) When would you like to receive your bill? _____

(37) Contacts regarding payment of this Summary Bill:

Name: _____
Telephone Number (Area Code): _____
Title: _____
Hours Available: _____ Time Zone: _____

Residence Accounts

(35) Mailing Name: _____
Mailing Address: _____
City State Zip Code
Attention: _____

(36) When would you like to receive your bill? _____

(37) Contacts regarding payment of this Summary Bill:

Name: _____
Telephone Number (Area Code): _____
Title: _____
Hours Available: _____ Time Zone: _____

US WEST Communications
New Customer Questionnaire

WATS Accounts

(35) Mailing Name: _____
Mailing Address: _____
City State Zip Code
Attention: _____

(36) When would you like to receive your bill? _____

(37) Contacts regarding payment of this Summary Bill:

Name: _____
Telephone Number (Area Code): _____
Title: _____
Hours Available: _____ Time Zone: _____

Unbundled Loop/Switching

(35) Mailing Name: _____
Mailing Address: _____
City State Zip Code
Attention: _____

(36) When would you like to receive your bill? _____

(37) Contacts regarding payment of this Summary Bill:

Name: _____
Telephone Number (Area Code): _____
Title: _____
Hours Available: _____ Time Zone: _____

LIS Trunking/Collocation

(35) Mailing Name: _____
Mailing Address: _____
City State Zip Code
Attention: _____

US WEST Communications
New Customer Questionnaire

(36) When would you like to receive your bill? _____

(37) Contacts regarding payment of this Summary Bill:

Name: _____
Telephone Number (Area Code): _____
Title: _____
Hours Available: _____ Time Zone: _____

USWC OUTPUT - SECTION 2

(38) The following reports are provided as part of the standard offering to customers:
Completion Report
Daily Usage File
Electronic CRIS Bill
Electronic IABS Bill
Loss Report

Resale and Unbundled Services

REPORT NAME	SOURCE	TRANSMISSION METHOD/MEDIA TYPE
CRIS Summary Bill	CRIS	WESTERN REGION: Paper EDI via NDM (direct or dial in) or FTP EDI via Value Added Network (VAN) Diskette/billmate, at an added charge
		CENTRAL REGION: Paper EDI via NDM (direct or dial in) or FTP EDI via Value Added Network (VAN)
		EASTERN REGION: Paper EDI via NDM (direct or dial in) or FTP EDI via Value Added Network (VAN)
IABS BILL Only available for CLECs who are reselling Frame Relay, ATM, Cell Relay, Transport LANs and Unbundled Transport or LIS/Collocation.	IABS	Paper NDM (direct or dial in) or FTP Microfiche (exception basis)

US WEST Communications
New Customer Questionnaire

REPORT NAME	SOURCE	TRANSMISSION METHOD/MEDIA TYPE
Daily Usage Feed	Billing	NDM (direct or dial in) FTP (direct only) Tape or Cartridge (Paper is not an option-nor is electronic Fax)
Loss Report	Service Order	NDM (direct or dial in) FTP (direct only) Electronic Fax (Tape is not an option)
Completion Report	Service Order	NDM (direct or dial in) FTP (direct only) Electronic Fax (Tape is not an option)

US WEST Communications
New Customer Questionnaire

Verification of the transmission of the above files and reports can be developed on an individual case basis and is to be negotiated as part of the Comprehensive Agreement. If transmission verification has already been negotiated, please indicate the report types (fax, email, paper, tape, file transmission) that you wish to receive a sample transmission on the following pages.

(39) Other reports can be provided on an Individual Case Basis (ICB). **Custom request charges will be quoted at the time and billed as appropriate.** If you require an output that has not been addressed, please specify below:

_____

_____

_____

Provide the following information only for ICB requests.

Central Region:	_____	Attached:	_____
Target date:	_____	Format:	_____
Eastern Region:	_____	Attached:	_____
Target date:	_____	Format:	_____
Western Region:	_____	Attached:	_____
Target date:	_____	Format:	_____

CONTACT INFORMATION FOR DAILY USAGE FILE OUTPUT
For End User Billing

(40) Contact Name: _____
Contact Number: _____
Mailing Name _____
Mailing Address: _____
_____
City State Zip Code
Attention: _____

(41) Type of Service: _____

(42) Output Preference: check one

(43) Electronic Transfer Options:
_____ NDM (dedicated circuit)
_____ FTP (dedicated circuit)
_____ NDM (dial-up)

For Dedicated Circuit:
Circuit ID: _____
Transmission Path/Nodes: _____

US WEST Communications
New Customer Questionnaire

(44) Data Set Name(DSN)/Remote ID: _____

(45) Magnetic Tape Options: check one
_____ 9 Track Tape 1600 BPI _____ 6250 BPI _____
_____ Cartridge 36 Track

(46) Record Length Options: (applicable for all types)
Oregon, Washington, and Northern Idaho
_____ 175 byte fixed _____ 2472 byte variable _____ 10003 byte variable

Arizona, Colorado, Southern Idaho, Montana, New Mexico, Utah, and Wyoming
_____ 210 byte fixed _____ 2472 byte variable _____ 11004 byte variable

Iowa, Minnesota, Nebraska, North Dakota, South Dakota
_____ 210 byte fixed _____ 360 byte fixed
_____ 2472 variable _____ 10003 byte variable

(47) Technical Contact: _____
Technical Number: _____

CONTACT INFORMATION FOR ELECTRONIC CRIS BILL OUTPUT
Summary Bills**

(40) Contact Name: _____

Contact Number: _____

(41) Type of service: _____

(42) Output Preference (check one)

_____ Paper (automatically provided) or _____ Electronic Transfer

(43) Electronic Transfer Options: Check one:
_____ NDM (dedicated circuit)
_____ FTP (dedicated circuit)
_____ NDM (dial-up)
_____ VAN

For Dedicated Circuit:
Circuit ID: _____
Transmission Path/Nodes: _____
VAN Provider: _____

(44) Data Set Name(DSN)/Remote ID: _____

(47) Technical Contact: _____
Technical Number: _____

US WEST Communications
New Customer Questionnaire

* Electronic Format is EDI
** Resale and Unbundled / Rebundled products must be on separate Summary Bills.

US WEST Communications
New Customer Questionnaire

CONTACT INFORMATION FOR ELECTRONIC IABS BILL OUTPUT
For Facility Based Services
LIS Trunking, Collocation and Associated Products

NOTE A separate form is required for each type of service.

(40) Contact Name: _____

Contact Number: _____

(41) Type of service: _____

(42) Output Preference: check one

_____ Paper (automatically provided) or _____ Electronic Transfer

(43) Electronic Transfer Options: Check one:

_____ NDM (dedicated circuit)
_____ FTP (dedicated circuit)
_____ NDM (dial-up)

For Dedicated Circuit:
Circuit ID: _____
Transmission Path/Nodes: _____

(44) Data Set Name(DSN)/Remote ID: _____

(47) Technical Contact: _____
Technical Number: _____

(48) FICHE: Company to send to: _____

* Electronic Format is BDT (The summary portion of the bill will always be PAPER and is not available in electronic format, however, the detailed records may be provided electronically.)

CONTACT INFORMATION FOR LOSS REPORT OUTPUT

NOTE: A separate form is required for each type of service.

(40) Contact Name: _____

Contact Number: _____

(41) Type of service: _____

US WEST Communications
New Customer Questionnaire

(42) Output Preference: check one

_____ Paper (automatically provided) or _____ Electronic Transfer

(43) Electronic Transfer Options: Check one:

_____ NDM (dedicated circuit)
_____ FTP (dedicated circuit)
_____ NDM (dial-up)

For Dedicated Circuit:
Circuit ID: _____
Transmission Path/Nodes: _____

(44) Data Set Name(DSN)/Remote ID: _____

(47) Technical Contact: _____
Technical Number: _____

(49) For Paper: via Facsimile
FAX Number: _____
Attention: _____

CONTACT INFORMATION FOR COMPLETION REPORT OUTPUT

NOTE: A separate form is required for each type of service.

(40) Contact Name: _____

Contact Number: _____

(41) Type of service: _____

(42) Output Preference: check one

_____ Paper (automatically provided) or _____ Electronic Transfer

(43) Electronic Transfer Options: Check one:

_____ NDM (dedicated circuit)
_____ FTP (dedicated circuit)
_____ NDM (dial-up)

For Dedicated Circuit:
Circuit ID: _____
Transmission Path/Nodes: _____

(44) Data Set Name(DSN)/Remote ID: _____

(47) Technical Contact: _____
Technical Number: _____

(49) For Paper:
FAX Number: _____
Attention: _____

US WEST Communications
New Customer Questionnaire

INPUT TO USWC - SECTION 3

Provide this information to establish Interconnect Mediated Access (IMA).

(50) The following System Administration contact information must be provided.

ADMIN Name: _____
ADMIN Number: _____

FAX Number: _____ (For LSRC)

Mailing Address: _____
City State Zip Code
EMAIL Address: _____

(51) Estimated Number of Interconnect Mediated Access Users* _____

(52) Provide this information for manual processing of information.

Name: _____
Telephone Number: _____
FAX Number: _____ (For LSRC)

*If accessing IMA with SecurID via a modem, the maximum number of users is 20.

Facility Based Service
LIS Trunking, Collocation and Associated Products

(53) Please indicate the Method of Input:

_____ Electronic
_____ FAX
_____ Mail

(54) Electronic Input:

Are you currently using ordering software to submit ASRs to U S West?
_____ Yes _____ No

If yes, you may use your existing software to submit ASRs.

US WEST Communications
New Customer Questionnaire

If no, please indicate Method of Input

_____ Purchase ordering software from outside vendor, transmit data via NDM dedicated circuit.
Circuit ID _____
Node Name _____

_____ Purchase ordering software from outside vendor, transmit data via NDM dial up.

_____ Dial into U S West's TELIS UNIX

(55) FAX Input:
Contact Name: _____
Contact Number: _____
FAX Number: _____

(56) Mail Input:
Contact Name: _____
Contact Number: _____
Mailing Address: _____

Note: If you plan to submit ASRs, please provide a valid CCNA/ACNA in Section 1 of this questionnaire.

US WEST Communications
New Customer Questionnaire

CUSTOMIZED ROUTING

The Co-Provider may use Customized Routing to direct their end user's calls to its own:

- Or an alternate provider's operator platform
- Or an alternate provider's directory assistance platform
- Trunk groups for the transport of local calls

Customized Routing enables Co-Providers the ability to designate routing treatment for their Unbundled Switching and Resale end users to specific outgoing trunks. Customized Routing is provided through the use of Line Class Codes to direct specific traffic from the end office to a dedicated trunk group.

Should a Co-Provider wish to initiate a Customized Routing request for information, a Service Inquiry form must be completed. (Refer to page 21.) The completed Service Inquiry form must be provided to the Co-Provider's account management team.

On page 22, a Customized Routing Form is provided to request Line Class Codes. This form is not completed until a firm request is received and the Unbundled Dedicated Interoffice Transport (UDIT) and/or Local Interconnect Service (LIS) trunks are ordered.

US WEST Communications
New Customer Questionnaire

CUSTOM ROUTING SERVICE INQUIRY

CO-PROVIDER NAME:_____

CONTACT NAME: _____

TELEPHONE: _____

FACSIMILE: _____

ACCOUNT MANAGER:_____

TELEPHONE: _____

FACSIMILE: _____

WHAT TYPE OF CUSTOM ROUTING IS REQUIRED? (CHECK ONE)

- ☐ OPERATOR
- ☐ DA
- ☐ LOCAL
- ☐ OPERATOR/DA
- ☐ OPERATOR/LOCAL
- ☐ DA/LOCAL
- ☐ OPERATOR/DA/LOCAL

CITY & STATE OF REQUEST:_____
ORIGINATING CLLI(S): _____

IF OPERATOR AND DA, PROVIDE THE
TERMINATING CLLI OF THE AOS OR USWC:_____

ON A SEPARATE ATTACHMENT, PROVIDE A DETAILED VISUAL CONFIGURATION OF YOUR DIRECT OR TANDEM TRUNK ROUTING ARRANGEMENT.

US WEST Communications
New Customer Questionnaire

CUSTOMIZED ROUTING FORM

**********ADMINISTRATIVE SECTION**********

PON VER LSR DD PG

|_|_|_|_|_|_|_|_|_|_|_|_|_|_| |_|_| |_|_|_|_|_|_|_|_|_|_|_|_|_|_| |_|_|_|_|_|_|_|_|_| |_|_|

****

SERVICE DETAILS CTTD

End Office Switch Locations for Customized Routing of Local Service |_|_|_|_|_|_|_|_|_| Originating USWC Switch CLLI |_|_|_|_|_|_|_|_|_|

LATA	CRA	CLLI	TSC	ANI II	SML	CRT	BLOCK	FMM	DIR	EX GRID	NEWGRID	LCC

****

Remarks

US WEST Communications
New Customer Questionnaire

CUSTOM ROUTING FORM

1. LATA CODE - The 3 character numeric that identifies the LATA where the switch CLLI is located. The LATA code does not have to be repeated for each switch CLLI, as long as the additional CLLIs in the same LATA are grouped together.

2. CRA - CUSTOM ROUTING ACTIVITY - The activity types are:

   N-New (Establish Line Class Code (LCC))
   A-Additional (To add end off switches to an established LCC on a subsequent request)
   D-Delete (Remove LCC)

3. SWITCH CLLI - The 11 character code that identifies the end office switch where the LSP wants the Custom Routing LCC established. Tandem CLLI codes are not allowed.

4. TSC CODE - The 2/6 code of the dedicated transport to receive the custom routed traffic.

5. ANI II - AUTOMATIC NUMBER IDENTIFICATION - The 2 digit codes available for Custom Routing are:

   00-Business (POTS) local service
   01-Residence (POTS) local service
   02-Coin (ANI 27) local service
   03-Hotel/Motel (ANI 6) local service
   05-ISDN local service
   06-OUTWATS
   07-INWATS
   08-Centrex local service
   09-Coinless Coin (ANI 7) local service
   10-Customnet (ANI 7) local service
   11-Unbundled Switch Ports local service

6. SML - SINGLE OR MULTI LINE - The 1 digit codes available are:

   S-Request for Single line arrangements
   M-Request for Multi line arrangements

7. CRT - CUSTOM ROUTED TRAFFIC - The 1 digit codes available are:

   1-Operator Services (0-, 0+10D, local operator)
   2-Directory Assistance (1411, home NPA 555-1212)
   3-OS/DA-Operator Services and Directory Assistance
   4-Local-Local service (7 digit local, 10 digit local)
   5-Local/OS-Local service and Operator Services
   6-Local/DA-Local Service and Directory Assistance

US WEST Communications
New Customer Questionnaire

7-Local/OS/DA-Local Service, Operator Service and Directory Assistance

8. BLOCK - The 1 digit codes available are:

0- 0-No blocking
1- 1-Block originating calls
2- 2-Block terminating calls
3- 3-1+,0+,0-,01+,011+,411,976,900
4- 4-0-,0+,01+976
5- 5-1+,0-,0+,01+,011+,900
6- 6-900,976,960
7- 7-976 (Nebraska only)
8- 8-900 (Nebraska only)
9- 9-960 (Nebraska only)
A- 900,976 (Nebraska only)
B- 900,960 (Nebraska only)
C- 960,976 (Nebraska only)
D- 900,976,960,411
E- 011,10XXX+011
F- 0-,0+,01+976,011+
G- 976,900,011+
H- 976,900,511,011+
I- 976,011+
J- 1+,10XXX1+,976,900 (ANI 7)
K- 1+,011+,900,976
L- Station restriction - IAESS Centrex only, totally restrict incoming and outgoing
M- Station restriction - IAESS Centrex only, totally restrict incoming
N- Station restriction - IAESS Centrex only, totally restrict outgoing
O- Station restriction - IAESS Centrex only, semi-restrict restrict incoming and outgoing
P- Station restriction - IAESS Centrex only, semi-restrict restrict incoming
Q- Station restriction - IAESS Centrex only, semi-restrict restrict outgoing
R- 900,976,960,411,911
S- 976,900,411,911,011+
T- 1+,0+,0-+011+411,011,976,900

8. FMM - FLAT/MEASURED/MESSAGE - The 1 digit codes available are:

1 - Flat
2 - Measured
3 - Message

9. FMM - FLAT/MEASURED/MESSAGE - The 1 digit codes available are:

1 - Flat

US WEST Communications
New Customer Questionnaire

2 - Measured
3 - Message

11. DIRECTION - The 1 digit codes available are:

1 - One way in
2 - One way out
3 - Two way

12. EX GRID – Code assigned by the ILEC.

13. NEW GRID – Code assigned by the ILEC.

14. LCC – Code assigned by the ILEC.

15. REMARKS - Provide any appropriate information.

US WEST Communications
New Customer Questionnaire

ACCESS/BILLABLE INFORMATION WORKSHEET

The following information is required for U S WEST to provide access records to Co-carriers and billable records when requested under contract.
Please note that U S WEST uses only IBM compatible equipment.

Complete one worksheet per state.

1. State_____

2. Co-Carrier Name_____

3. Name, Address and Telephone Number of person completing form
   Name _____
   Address, City, State, Zip Code _____
   _____
   TN _____

4. Co-carrier OCN_____

5. Co-carrier NPA NXX/s and city names_____
   _____

6. Which company is your CMDS host and/or sponsored your request for an RAO?
   _____

7. Full RAO Code or Shared RAO Code?_____

8. What is Full RAO code?_____
   National_____
   State _____

9. If shared what is RAO code?_____

If this is a U S WEST shared RAO a hosting agreement with U S WEST is required? (Question 25 will be answered Yes)

10. Which company does this shared RAO code belong to?_____

US WEST Communications
New Customer Questionnaire

11. Which company submitted the NPA NXX/s, OCN and RAO codes for BRIDS/LERG input?
    Company Name_____
    Person's Name_____
    Telephone Number_____

12. What date was the information submitted?_____

13. What version of the BRIDS/LERG will reflect these NPA NXX/s, RAO and OCN information?
    _____

If the Bellcore LERG (Local Exchange Routing Guide) and the TPM (Terminating Point Masterfile) does not reflect this information it will delay distribution of access records to your company.

14. Effective Date of Interconnection Agreement_____

15. Date your switches will be activated?_____

16. Date anticipate switch will receive live traffic_____

17. Do you expect to receive billable records from U S WEST?_____

18. If you will be receiving billable records from U S WEST which record length format?

    360 byte fix blocked format_____ 175 byte variable format*_____

* 175 byte variable format not available for COMET

19. Transmission Mode Circle Desired Mode
    NDM/FTP/Tape/Cartridge/COMET
    NDM See question 20
    FTP See question 21
    9 Track Tape See question 22
    18 Track Cartridge See question 23
    COMET See question 24

20. NDM
    Is NDM link already in place?_____
    Link Protocol TCPIP Yes/No_____
    Link Protocol SNA LU0 Yes/No_____
    Your NDM Node Name_____
    Type of Operating System you have? (i.e. Mainframe/MVS, Midrange/UNIX, Workstation/WINDOWS NT, etc.)_____
    User ID (receiving end)_____
    Password (receiving end)_____

US WEST Communications
New Customer Questionnaire

Receiving Production Dataset Name/s_____
Receiving Test Dataset Name/s_____
Type of Receiving Unit_____
Do you need U S WEST to trigger the job?_____
If yes, what is the trigger?_____
Do you want to receive transmittal giving message count?_____

Access records are always sent in 210 byte fix blocked format

In Eastern if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) the access records would be the same record length as the billable records. The access record would be spaces after the access data ends.

The time frame to establish the NDM will need to be negotiated. The NDM link must be established before we negotiate the implementation of record exchange.

21. FTP
    Is private FTP link already in place?_____
    Host IP address_____
    Type of Operating System you have? (i.e. Mainframe/MVS, Midrange/UNIX, Workstation/WINDOWS NT, etc.)_____
    User ID (receiving ID)_____
    Password (receiving end)_____
    Receiving Production Dataset Name/s_____
    Receiving Test Dataset Name/s_____
    Type of Receiving Unit_____
    Dir Name (receiving end)_____
    Is ASCII format required?_____

Access records are always sent in 210 byte fix blocked format

In Eastern if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) the access records would be the same record length as the billable records. The access record would be spaces after the access data ends.

The time frame to establish the FTP will need to be negotiated. The FTP link must be established before we negotiate the implementation of record exchange.

22. 9 Track Tape
    Compressed/Non Compressed_____
    1600 BPI/6250 BPI_____
    New or used Tape (New tapes cost $50.00 each)_____
    Name, Address and Telephone Number to send tapes
    Name_____
    Address, City, State and Zip Code_____
    _____

US WEST Communications
New Customer Questionnaire

Telephone Number_____
If this a Service Bureau, what is the Service Bureau Number?_____

Access records are always sent in 210 byte fix blocked format

In Eastern if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) the access records would be the same record length as the billable records. The access record would be spaces after the access data ends.

In Central if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) you will receive 2 separate tapes.

In Western billable and access records are always sent on separate tapes.

23. 18 Track Cartridge
    Compressed/Non Compressed_____
    Name, Address and Telephone Number to send cartridges
    Name_____
    Address, City, State and Zip Code_____
    _____
    Telephone Number_____
    If this a Service Bureau, what is the Service Bureau Number?_____

Access records are always sent in 210 byte fix blocked format

In Eastern if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) the access records would be the same record length as the billable records. The access record would be spaces after the access data ends.

In Central if you request 360 byte fix blocked format or 175 byte variable format for billable records, (if billable records are applicable) you will receive 2 separate cartridges.

In Western billable and access records are always sent on separate cartridges.

24. COMET
    This is a system that requires a dial-up connection to extract messages from U S WEST. A COMET manual will be sent to you giving the specifications that are needed to use the COMET system. The U S WEST COMET contact person is identified in the manual.

The time frame to establish the COMET will need to be negotiated. The COMET link must be established before we negotiate the implementation of record exchange.

25. Frequency receive data
    Western (N ID, OR, WA)
    Tape/Cartridge choose weekly/monthly_____
    NDM/FTP/COMET will receive daily

US WEST Communications
New Customer Questionnaire

Date you want to receive End of Month report - choose one 1 7 13 19 25_____

Central (AZ, CO, MT, NM, S ID, UT, WY)
Tape/Cartridge choose weekly/monthly_____
NDM/FTP/COMET will receive daily
The End of Month report will be created around the 15th of each month

Eastern (IA, MN, ND, NE, SD)
Every 3 days/monthly choose option_____
Date you want to receive End of Month report - choose one 1 4 7 10 13 16 19 22 25 28_____

EASTERN FULL RAO STATUS COMPANIES WILL RECEIVE DATA DAILY AND THEIR END OF MONTH REPORT ON THE FIRST.

26. What address would you like your "End of Month" report (51034/5, ECS-1/2, ATT08) mailed to?
_____
_____
_____

27. Do you want to receive test media? Yes_____ No_____
If yes complete following to identify location to send test
Name_____
Address, City, State, Zip Code_____
_____
TN_____

28. Do you want to receive a statistical report of the data sent? YES_____NO_____

29. Will U S WEST be your Centralized Message Distribution System (CMDS) host?
_____

30. Will U S WEST be your Operator Services provider?_____

31. Will U S WEST be your Directory Assistance Provider?_____

PLEASE NOTE: IF ANY OF THE ABOVE INFORMATION IS INACCURATE IT WILL DELAY TIMELY DELIVERY OF THE ACCESS RECORDS TO YOUR COMPANY.

US WEST Communications
New Customer Questionnaire

CONTACT LIST - SECTION 4
Residence Accounts

Please provide your Customer Service Center business days, hours, and telephone numbers for direct referrals of end users.

Note: The telephone numbers must be 800/888 Service numbers.

(57) Orders

Location _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

(57) Billing

Location: _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

(57) Repair

Location: _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

In the space below, list the holidays your Customer Service Centers are closed.

_____
_____

Please provide any other names, addresses and/or telephone numbers that would be important to U S WEST.

_____
_____

US WEST Communications
New Customer Questionnaire

CONTACT LIST - SECTION 4
Business Accounts

Please provide your Customer Service Center business days, hours, and telephone numbers for direct referrals of end users.

Note: The telephone numbers must be 800/888 Service numbers.

(57) Orders

Location _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

(57) Billing

Location: _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

(57) Repair

Location: _____
Days: _____ Hours: _____
Time Zone: _____ Telephone number: _____

In the space below, list the holidays your Customer Service Centers are closed.

_____
_____

Please provide any other names, addresses and/or telephone numbers that would be important to U S WEST.

_____
_____

US WEST Communications
New Customer Questionnaire

DLR (DESIGN LAYOUT REPORT) - SECTION 5
LIS TRUNKING AND UNBUNDLED LOOP

(58) Will you be requesting Design Layout Reports? ____ Yes ____ No

If yes, will you be confirming the Design Layout Report? ____ Yes ____ No

How will you expect your Design Layout Reports to be sent: (check one)

____ Electronically
____ FAX
____ Mail

If electronically, please provide your Design Routing Code (DRC): _____

Will the same code be used for delivery of all Design Layout Reports? ___Yes ___No

(59) Hardware Requirements for Electronic Interface:

The following provides the minimum hardware requirements for the electronic delivery of Design Layout Reports. The type of equipment is optional. The printer may be a stand alone, a PC (personal Computer) with a software package that will simulate a printer, or minicomputer that receives the incoming reports. A 1200 baud 212 A type modem is required that is capable of sending an answerback upon connect.

The answerback programmed is chosen at the client's option, U S WEST Communications will match the answerback code. U S WEST Communications cannot distribute the Design Layout Report unless the correct answerback is given which verifies it is the correct machine. The answerback cannot be more than 19 characters in length.

Settings	7 data bytes, 1 stop byte
Parity	Even
Auto AnswerBack	
Half-duplex	
Buffer Size	8 to 10 K

NOTE: X on and X off is not supported. X must be off.

US WEST Communications
New Customer Questionnaire

NETWORK OUTAGE NOTIFICATION CONTACT INFORMATION

Contact Name: _____
(This individual should reside in your Network Organization)

Contact Number: _____

Contact email address: _____
note: notification will only be done via email.

Contact's Fax Number: _____
(in case of Emergency)

US WEST Communications
New Customer Questionnaire

Questionnaire Definitions

GENERAL INFORMATION

1. **Today's Date:** Enter the date that the questionnaire is being completed.
2. **Customer Name:** Enter the name of the customer representative completing the questionnaire.
3. **Telephone Number:** Enter the telephone number of the customer representative completing the questionnaire.
4. **Customer Signature:** Have the customer representative completing the questionnaire provide their signature.
5. U S WEST Representative: Enter the name of the U S WEST representative assisting the customer with this form. This person is usually the Account Manager assigned to this customer.
6. **Telephone Number:** Enter the telephone number of the U S WEST representative.
7. **Corporate Name:** Enter the legal corporate name of the customer.
8. **Street Address:** Enter the street address of the corporation.
9. **Floor:** Enter the floor number of the corporation, if appropriate.
10. **Room:** Enter the room number of the corporation, if appropriate.
11. **City:** Enter the city of the corporation's address.
12. **State:** Enter the state of the corporation's address.
13. **Zip Code:** Enter the zip code of the corporation's address.
14. **Email Address:** Enter the email address of the corporate representative.
15. **Fax Number:** Enter the fax number of the corporate representative.
17. **Indicate State:** Mark the state that this questionnaire represents. Each state requires a separate questionnaire.
19. **Type of service**: Enter the type of service that will be provided.
20. **Client ID Numbers**: Enter all known client identification numbers. Not all will be appropriate based on service types ordered.
    - ACNA: Access Customer Name Abbreviation-Customer must obtain from Bellcore. Required for services ordered through EXACT. Identifies the customer who will receive the bill for the services ordered.
    - CIC: Carrier Identification Code-Customer must obtain from Bellcore. Required when ordering Unbundled Switching.
    - OCN: Operating Company Number-Customer must obtain from Bellcore to meet telecommunications industry practice guidelines. Required to satisfy routing and rating requirements.
    - RSID/ZCID: Reseller/CLEC identification number. Provided by US WEST.
21. **Type of Arrangement:** Indicate if a Contract or Tariff arrangement and date commission approved.

21A. **Directory Listing Information:** Information is **required** to assure correct handling of Directory listings for end users of CLEC/Reseller. Option is contained in Contract/Agreement.

Option 1: End User Listings will be released to USW DEX, Other Directory Publishings and be available through Directory Assistance. (same as US WEST customer)
Option 2: Restricts the data to Directory Assistance only. The Co-Provider must negotiate their own agreements with US WEST DEX and or other directory publishers.

CREDIT INFORMATION - SECTION 1

22. **Type of Business:** Mark the customer's type of business ownership.

US WEST Communications
New Customer Questionnaire

23. **Date Business Established:** Enter the month and year that the customer's business was established.
24. **Information Regarding Business Owners/Officers:** Provide names, titles and residential telephone numbers of owners or corporate officers.
25. **Previous Business Telephone Numbers:** Provide any current and/or previous business service telephone numbers of a similar business type. Include the area codes of those numbers. If there are no numbers to provide, enter NONE.

BILLING INFORMATION - SECTION 1

26. **Estimated Service Volumes:** Provide the estimated monthly service volumes by state and number of lines for the following service types:
    Resale
    Unbundled Elements
    Interconnection
27. **Estimated IntraLATA and InterLATA Toll**: Provide the estimated dollar amounts for IntraLATA and InterLATA Toll Usage.
28. **Financial Contact Information**
    Financial Contact Name: Enter the name of the financial contact.
    Financial Contact Telephone Number: Enter the telephone number of the financial contact.
    Financial Contact Title: Enter the title of the financial contact.
    Financial Contact Address: Enter the address of the financial contact.
    Financial Contact City: Enter the city of the financial contact's address.
    Financial Contact State: Enter the state of the financial contact's address.
    Financial Contact Zip Code: Enter the zip code of the financial contact's address.
    Financial Contact Hours Available: Specify the hours that the financial contact is available.
    Financial Contact Time Zone: Specify the time zone of the hours available.
29. **Electronic Funds Transfer Service:** Mark, as appropriate. If the answer was marked as **YES**, refer to the Electronic Funds Transfer Customer Guide or contact Dennis Martinez on (303) 965-4357 for assistance.
30. **Tax ID Number:** Provide the corporation's Tax Identification Number.
31. **Exemption Federal Excise Tax:** Every customer will be billed all applicable taxes unless a valid Federal Exemption certificate is on file.
32. **Exemption Applicable Taxes and Fees:** Most states, counties and cities impose a sales tax on Telecommunication services. In addition, some states and or cities may access fees on U S WEST which are passed on to our customer. These fees are subject to Federal Excise and State Sales and are generally non exemptable.
33. **Indemnify:** A YES answer to this statement will allow US WEST to process exemption status on accounts prior to actual certificates being submitted. A NO answer may delay tax exemption processing.
34. **Identify Unique Taxing Considerations:** Mark, as appropriate. If the previous question was marked as **YES**, provide specific requirements in the space provided.

SUMMARY BILLING - SECTION 1

There are three pages with identical questions regarding summary billing. There are separate pages for Business, Residence and WATS accounts. Each account type requires a summary bill specific to that account type. If only one type of service will be resold, only fill in that appropriate account type.

35. **Company Mailing Information**
    Company Mailing Name: Enter the company mailing name.

US WEST Communications
New Customer Questionnaire

Mailing Address: Enter the company mailing address.
City: Enter the city of the company address.
State: Enter the state of the company address.
Zip: Enter the zip code of the company address.
Attention: Enter the name of person this bill should be directed to, if appropriate.

36. **Requested Bill Date:** Enter the day of the month that the customer wants to **receive** their bill.
37. **Summary Bill Contact Information**
    Name: Enter the name of the contact for the Summary Bill.
    Telephone Number: Enter the telephone number of the contact for the Summary Bill.
    Title: Enter the title of the contact for the Summary Bill.
    Hours Available: Specify the hours that the financial contact is available.
    Time Zone: Specify the time zone of the hours available.

USWC OUTPUT - SECTION 2

38. This section defines standard reports available to the customer.
    Daily Usage File - provides EMR (Exchange Message Record) formatted usage records generated by the Reseller's sub accounts on a daily basis. Items which are discounted will have no charge on the record. Items which are not discounted will show the full charge amount. Records for both Resale and Unbundled products will be contained on the same file.
    Electronic CRIS Bill - provides billing for all ISPNP, unbundled, rebundled, and resold services, excluding those billed in IABS.
    Electronic IABS Bill - provides billing for Frame Relay, ATM Cell Relay, Transparent LAN, and LIS trunking/Collocation
    Loss Report - provides a list of service orders with a change of RSID or outward movement of a line.
    Completion Report - provides all completed service orders per Reseller.
39. **ICB/Custom Report Requests:** Specify the custom output that the customer requires.
    Region: Mark the region testing has been negotiated for, if appropriate.
    Attached Testing Requirements: Mark if test data is attached to this questionnaire.
    Target Date: If testing is required but no data is attached, indicate the date that the data will be available.
    Format: Indicate the format the test data will be provided in (i.e., fax, email, paper, tape, or transmission).
40. **Contact Name:** Enter the name of the person responsible for receiving USWC output.
    Contact Number: Enter the telephone number of the person responsible for receiving USWC output.
    Mailing Name: Enter the mailing name, if different than the contact name, of the person responsible for receiving the Daily Usage File, if the tape or cartridge option has been selected.
    Mailing Address: Enter the mailing address of the person responsible for receiving USWC output.
    City: Enter the city of the mailing address of the person responsible for receiving USWC output.
    State: Enter the state of the mailing address of the person responsible for receiving USWC output.
    Zip: Enter the zip code of the mailing address of the person responsible for receiving USWC output.
41. **Type of Service**: i.e. Resale, Unbundled, etc.
42. **Output Preference:** Each report mentioned above will display different choices based on the specific report.
43. **Electronic Transfer Options:** If elected option is electronic transfer, check one of the applicable options. If elected option uses a dedicated circuit, provide the Circuit identification code (Circuit ID) and the name of the node to which U S WEST should transfer data.
44. **Data Set Name:** This is the name of the file that will be received if electronic transfer option has been selected.

US WEST Communications
New Customer Questionnaire

45. **Magnetic Tape Options:** 9 Track Tape, this option is available in 1600 BPI and 6250 BPI or Cartridge, this option is available in 36 track.
46. **Record Length Options:** The Daily Usage File is available in either fixed(which means the file will always be the same length) or variable (which means length of the file will vary according to the record content but will never be more than the specified byte length). These files do vary according to region.
47. **Technical Contact Name:** Enter the name of the contact person responsible for receiving transmission of USWC output.
    Contact Telephone Number: Enter the telephone number of the contact person responsible for receiving transmission of USWC output..
48. **Fiche:** This option is available for an additional charge. It is the customer's responsibility to negotiate with the company that will produce the fiche.
49. **For Paper:** Enter the FAX number and the contact name for the paper output reports

INPUT TO USWC - SECTION 3

50. **Interconnect Mediated Access Information**
    Admin Name: Provide the name of the person who will be responsible for the administration of Interconnect Mediated Access to USWC.
    Admin Telephone Number: Provide the telephone number of this person.
    Fax Number: Provide the fax number of this person.
    Mailing Address: Provide the mailing address of the Admin person.
    City, State, Zip: Provide the city, state, zip of the Admin person.
    E-MAIL Address: Provide the EMAIL address of the Admin person.
51. **Mediated Access Users**: Provide total number of authorized users.
52. **Manual Processing Information**
    Name: Provide the name of the person to direct faxes to for manual order input.
    Telephone Number: Provide the telephone number of the person faxes are directed to.
    FAX Number: Provide the FAX number for faxing of Firm order confirmations Etc.
53. **Method of Input:** Check the applicable method for ordering LIS Trunking, Collocation and associated products.
54. **Electronic Input:** If already using software to submit Access Service Requests (ASRs), the LSP can use its existing software. Otherwise, check preferred method for submitting ASRs to U S WEST.
55. **FAX Input:** If submitting ASRs via FAX, provide contact name, contact number and FAX number. The contact name should be the name of the person who can answer questions regarding ASRs. The contact number should be the telephone number of the contact person. The FAX number is the number to which order confirmation can be sent.
56. **Mail Input:** If submitting ASRs via FAX, provide contact name, contact number and Address. The contact name should be the name of the person who can answer questions regarding ASRs. The contact number should be a number the telephone number of this person. Provide address where ASR confirmations should be sent.
57. Customized Routing

US WEST Communications
New Customer Questionnaire

58. **Access/Billable Information Worksheet:** Provides U S WEST with the information necessary to prepare our systems to send the CLEC/ILEC billing information (such as category 11-01, Carrier Access Usage records). Without this necessary information there could be delays in U S WEST's ability to deliver this information which could result in the CLEC/ILEC not being able to bill their customers appropriately.

CONTACT LIST - SECTION 4

There are two pages with identical questions regarding contact information for your Order, Billing and Repair centers. There is a separate page for Business accounts and Residence accounts.

Orders, Billing, Repair:

- Enter the city or state name(s) of the center.
- Specify the days the center is open.
- Specify the hours the center is open.
- Specify the time zone of the hours provided.
- Provide the telephone number(s) of the Customer Service Center(s) for direct referrals of end users. The telephone numbers must be 800/888 Service numbers.

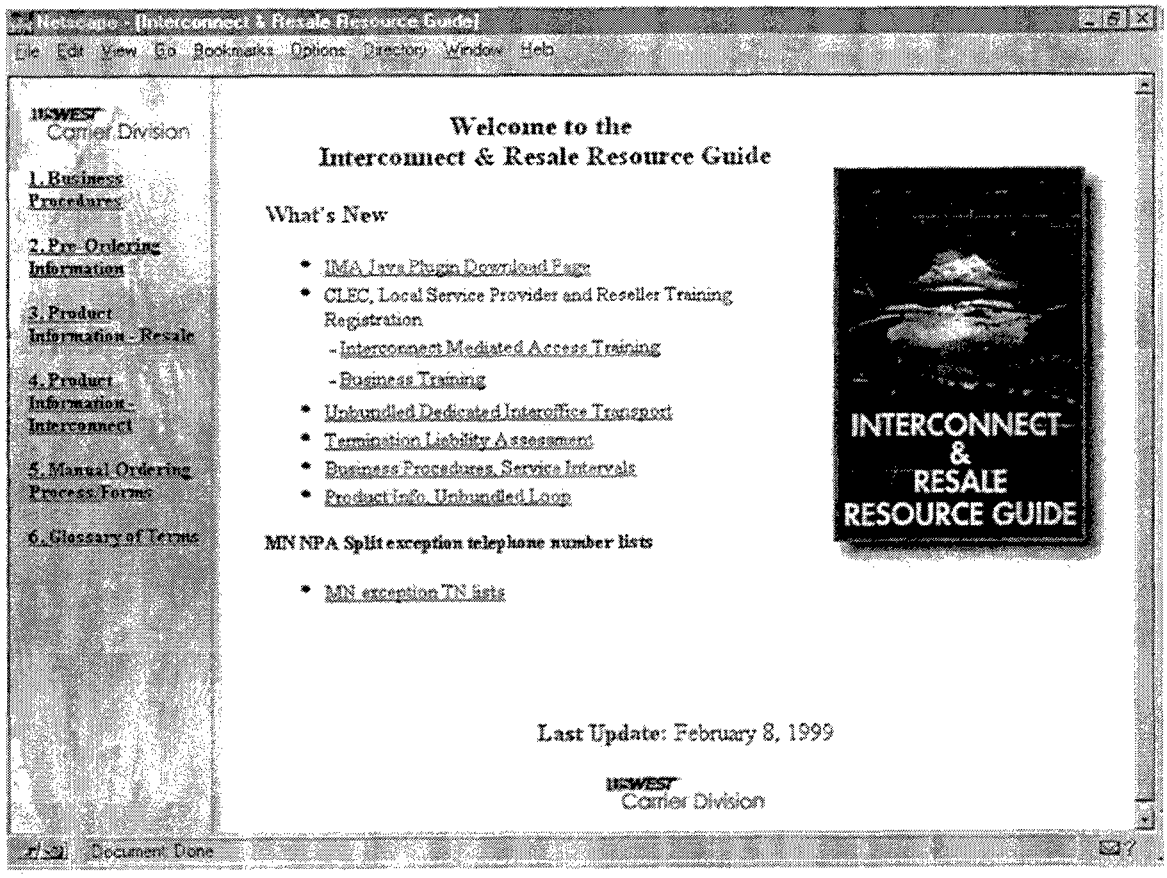
Holidays: List the holidays the Customer Service Centers are closed.

Other Important Numbers: Provide any other names, addresses and/or telephone numbers that would be important to U S WEST.

DLR-SECTION 5

59. **DLR INFORMATION:** Required when ordering Unbundled Switching and any "designed" services.
    DRC (Design Routing Code) is assigned by US WEST TIRKS Administration. Bellcore approves/registers Design Routing Codes
60. **Hardware Requirements:** Required for electronic delivery of the DLR.

World Wide Website
For
Interconnect and Resale Resource Guide



The Interconnect and Resale Resource Guide portion of this website is attached as hard copy.

USWEST Carrier Division

1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

6. Glossary of Terms

Welcome to the Interconnect & Resale Resource Guide

What's New

- IMA Java Plugin Download Page
- CLEC, Local Service Provider and Reseller Training Registration
  - Interconnect Mediated Access Training
  - Business Training
- Unbundled Dedicated Interoffice Transport
- Termination Liability Assessment
- Business Procedures, Service Intervals
- Product Info, Unbundled Loop

MN NPA Split exception telephone number lists

- MN exception TN lists

Last Update: February 8, 1999

USWEST Carrier Division

1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Java™ Plug-in 1.2 Download Page

Java™ Plug-in 1.2 Download Page

Introduction

The Java Plug-in is a new product from Sun Microsystems' Java software division. The Java Plug-in delivers full Java Compatible™ support for JDK™ 1.2, enabling enterprises to develop and deploy Java applets that take full advantage of the latest capabilities and features of the Java platform and be assured that their applets will run reliably and consistently.

Your browser requires the Plug-in in order to run the following applets from U S WEST:

- Interconnect Mediated Access
- Feature Verification

Downloading the Java Plug-in 1.2 Release

Download by Clicking Here...

Installation Instructions for Windows

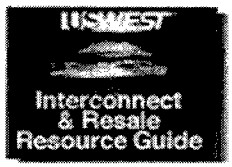
After downloading Java Plug-in for Windows:

1. Double-click on the downloaded executable file and give the default responses to all prompts during the installation.
2. Shutdown ALL Netscape products including the mail notification utility.

System Requirements

The compressed Java Plug-in download is approximately 10 MB. After decompression and installation, Java Plug-in uses approximately 20 MB of hard disk space.

This Page Last Updated: February 4, 1999



1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Interconnect Mediated Access Training
January 1999 - March 1999
(Revised 3/9/99)

Business Training | **Interconnect Mediated Access Training**

COURSE	DATE	LOCATIONS
Interconnect Mediated Access Training	3/12/99	Denver
Interconnect Mediated Access Training	3/19/99	Denver
Interconnect Mediated Access Training	April 9	Minneapolis
Interconnect Mediated Access Training	April 23	Denver

REGISTRATION INFORMATION

Name:

Full Name (for badge):

Title/Department:

Role:

Company:

Address:

City:

State:

Zip:

Phone: **ext.**

FAX:

COMPANY PROFILE
(Please check applicable information)

☐ Reseller

☐ Facility-based CLEC or LOCAL SERVICE PROVIDER and Reseller

What is your primary service area?

Who's your U S WEST Account Manager?

Class You Are Registering For:

Class Date:

Class Location:

submit clear form

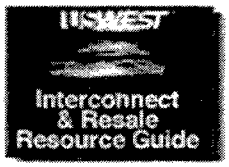
You should receive a confirmation once your registration has been accepted. If you have questions or problems please contact:

Dawn Snyman

1005 17th Street, Room 1690
Denver CO 80202
or
Fax: 303-965-1908
Phone: 303-896-1950
e-mail: dsnvman@uswest.com

This Page Last Updated: March 9, 1999

Carrier Home



1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

CLEC LOCAL SERVICE PROVIDER AND RESELLER TRAINING
January - March 1999
(Updated March 10, 1999)

Please hurry and register for our TRAIN THE TRAINER SESSIONS !!!!!

Business Training | IMA Training

Class size must be 20 - 25 Students or CLASSES will be in jeopardy status.

*NOTE: EFFECTIVE 1/1/99 a TUITION fee will be reinstated for classes.

COURSE	DATE	LOCATIONS	TUITION*
Basic Exchange Services CANCELLED (agenda)	3/8/99 thru 3/10/99 (9:00am to 4:30pm each day)	Holtz Executive Place 818 17th Street Denver, CO Click for more info	$200.00 per day
Facility Based Listing CANCELLED DUE TO WEATHER RESCHEDULED FOR APRIL (agenda)	3/9/99 thru 3/10/99 RESCHEDULED FOR 4/13/99 9:00am to 4:30pm 4/14/99 8:30am to 12:30pm	U S WEST 200 S. 5th St. 1st Floor Conference Room Minneapolis, MN Click for more info	No charge
POTS LSR Order Process CANCELLED (agenda)	3/11/99 (8:00am to 12:00pm)	Holtz Executive Place 818 17th Street Denver, CO Click for more info	No charge
POTS LSR Order Process CONFIRMED (agenda)	3/12/99 (8:00am to 12:00pm)	U S WEST 200 S 5th St, 1st Floor Conference Room, Minneapolis, MN Click for more info	No charge
Complex Business Services CONFIRMED CLOSED (agenda)	3/15/99 thru 3/17/99 (8:00am to 5:00pm)	Holtz Executive Place 818 17th Street Denver, CO Click for more info	$200.00 per day
Listings for Resellers CANCELLED (agenda)	3/18/99 (9:00am to 5:00pm)	U S WEST 1005 17th Street Conference Rm #1150 Denver, CO Click for more info	No charge
Frame Relay for	3/18/99	Denver location Please call Janet Colberg for	

Frame Relay for Resellers	(8:00am to 12:00pm)	Contact for location and status information, 303-896-3656	$100.00

REGISTRATION AND BILLING INFORMATION

Name:

Full Name (for badge):

Title/Department:

Role:

Company:

Address:

City:

State:

Zip:

Phone: **ext.**

FAX:

Email:

COMPANY PROFILE

(Please check applicable information)

☐ Reseller

☐ Facility-based CLEC

What is your primary service area?

Who's your U S WEST Account Manager?

Class You Are Registering For:

Class Date:

Class Location:

submit clear form

You should receive a confirmation once your registration has been accepted. If you have questions or problems please contact:

Leona Gomez

Phone#: (303)896-5835
Email: lmgomez@uswest.com

Last Update: March 10, 1999

USWEST
Carrier Division

1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

I. Welcome to Training

- Housekeeping
- Expectations

II. Review Agenda

III. Tools for Resale

- Information Sources and Training Classes
- Helpful URL's and Telephone Numbers to Call
- SAG or FAM
- ICONN database and LERG
- Public DMP

IV. Network Neighborhood

V. Central Office Types and Regional Boundaries

VI. Products that are Resellable and Not Resellable

- Custom Calling Features
  Call Waiting
  Threeway Calling
  Speed Calling 8 & 30
  Call Transfer
  Intracall
  Custom Ringing
  Call Forward Variable
  Directed Call Pickup
  Hot Line Warm Line
- Class Features
  Caller ID
  Call Waiting ID
  Call Rejection
  Continuous Redial
  Prioity Call
  Call Trace
  Last Call Return
  Selective Call Fowarding
  Feature Interaction
  User Instructions
- Call Fowarding All Types
  Call Forward Busy
  Call Forward Don't Answer

Intraoffice Overflow
Call Forward Busy and Don't Answer
Call Forward Variable
Selective Call Forwarding
Remote Access Forwarding
Scheduled Forwarding

- AIN Advanced Intelligent Network Features
  Lab Description and Lab Hours
  Non Standard Repair Process
  Do Not Disturb
  Scheduled Forwarding
  Remote Access Forwarding
  Call Curfew
  Dial Lock
  Continuous Redial Deluxe for 5ESS
  I Called
  No Soliciation Service
- Pay Per Use Features and Blocking Job Aid
- All Feature Interactions
- User Instructions

VII. Miscellaneous Products

- Feature Packages
  Hunting
  Intercept or Transfer of Calls
  Dual Service
  Toll Blocking
  800/888 ServiceLine
  Stand By Lines
  Market Expansion Lines
  Custom Number Service
  Voice Messaging
  Wire Maintenance
  Telephone Assistance Plans
  CPE Process
  Annoyance Call Handling
  Operator Services
  Optional Calling Plans
  Suspend and Restore (Vacation Service)

VIII. Ordering Process Overview

- Order Flow Diagram
- Escalation Process
- CSR Examples
- FOC example

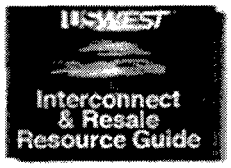
IX. Repair Tools

- Telephone Numbers to Call
- Scripts to Telephone Numbers
- Troubleshooting Tips to Common Service Problems
- Trouble Codes for IMA
- Glossary of Telecommunications Terms

X. Wrap up

Last Update: January 18, 1999

USWEST
Carrier Division



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5. Manual Ordering Process/Forms

Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

This class is confirmed.

If you wish to stay at the Holtze please call 1-800-422-2092 and ask for the U S WEST rate of $129.00.

Nearest hotels (approximately 2 blocks) would be the the Denver Marriott City Center at 1701 California Street or the Embassy Suites Hotel and Athletic Club at 1881 Curtis Street or (within 4 blocks) the Westin Hotel, Tabor Center, 1672 Lawrence Street.

Reservations Numbers:

Westin	1-800-228-3000
Embassy Suites	1-800-733-3366
Marriott	1-800-228-9290

Please check with your personal travel agent for additional locations.

Last Update: February 23, 1999

USWEST
Carrier Division

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CLEC LOCAL SERVICE PROVIDER AND RESELLER TRAINING
JANUARY 1999
(Updated February 23, 1999)

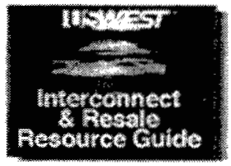
This class is confirmed. Class will be held as scheduled.

Refer questions about cancellations or confirmations to Lee Gomez 303-896-5835.

Listings- Facility Based
Listing Process Overview
Listing Definitions - Caption, Straight Line, Straight Line with Indents
Types of Listings, i.e. Cross Reference, Alternate Call, 800/888, etc.
Listing Rules, Formats, and Requirements
Interpreting CSR - Listing Section
OBF Directory Forms - DSR, DL, DSCR
Listing Scenarios

Last Update: February 23, 1999

USWEST Carrier Division



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Basic Resale: Residence and Business Product Training Agenda

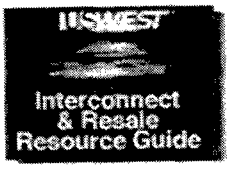
Business Training | IMA Training

Nearest hotel (approximately 2 blocks) would be the Crown Plaza Holiday Inn at 618 2nd Avenue South. Reservation number is 1-800-556-7827.

Please check with your personal travel agent for additional hotel information.

Last Update: February 23, 1999

Carrier Division



1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Basic Exchange Order Process

Business Training| IMA Training

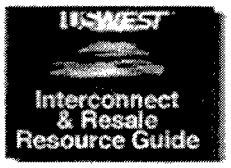
This class is confirmed.

Refer questions about cancellations or confirmations to Scott Ellefson 602-630-5265.

8:00 - 9:45	Review required fields for LSR Resale Forms
9:45 - 10:00	Break
10:00 - 12 :00	Complete LSR forms for specific Resale Scenarios

Last Update: February 23, 1999

USWEST Carrier Division



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Business Training | IMA Training

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Please check with your personal travel agent for additional locations.

Last Update: February 23, 1999

USWEST Carrier Division

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Last Update: February 23, 1999

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Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

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Please check with your personal travel agent for additional hotel information.

Last Update: February 23, 1999

USWEST Carrier Division

Complex Business Training

Business Training | IMA Training

This class is confirmed. Class will be held as scheduled.

Refer questions about cancellations or confirmations to Sandy Pancoast 602-630-5434.

Day 1:

Centrex Products (Centrex 21, Centrex Plus, Centrex Prime, CCMS)
Analog PBX Trunking (Includes DID services)

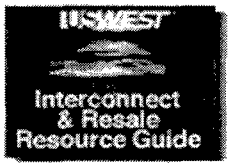
Day 2:

Designed Services
Point-to-Point Analog and Digital Services
Multipoint Analog and Digital Services
Switchnet 56
DS1/DS3
Contingency Services -(SHARP, SHNS and Command-A-Link)

Day 3:

DSS (Digital SwitchedServices)
Single Line ISDN
PRI (Primary Rate Interface - also known as PRS - Primary Rate Service)

Last Update: February 23, 1999



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Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

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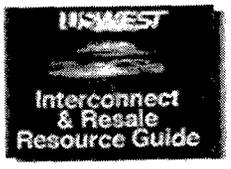
Please check with your personal travel agent for additional locations.

Last Update: February 23, 1999

USWEST Carrier Division



1. Business Procedures

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CLEC LOCAL SERVICE PROVIDER AND RESELLER TRAINING
JANUARY 1999
(Updated February 23, 1999)

This class is confirmed. Class will be held as scheduled.

Refer questions about cancellations or confirmations to Lee Gomez 303-896-5835.

Listings- Facility Based
Listing Process Overview
Listing Definitions - Caption, Straight Line, Straight Line with Indents
Types of Listings, i.e. Cross Reference, Alternate Call, 800/888, etc.
Listing Rules, Formats, and Requirements
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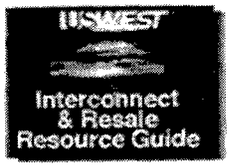
Listing Scenarios

Last Update: February 23, 1999

USWEST Carrier Division



1. Business Procedures

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Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

This class is in jeopardy of cancellation due a low attendance rate. When enough requests are received we will show "confirmed" next to the course name. A cancellation decision will be made by March 1st for this class.

Refer questions about cancellations or confirmations to Lee Gomez 303-896-5835

Nearest hotels (approximately 2 blocks) would be the Westin Hotel, Tabor Center, 1672 Lawrence Street or the Embassy Suites Hotel and Athletic Club at 1881 Curtis Street or (within 4 blocks) the Holtze Executive Place at 818 Seventeenth Street or the Denver Marriott City Center at 1701 California Street.

Reservation Numbers:

Westin	1-800-228-3000
Embassy Suites	1-800-733-3366
Holtze	1-800-422-2092
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Please check with your personal travel agent for additional locations.

Last Update: February 23, 1999

USWEST Carrier Division

1. Business Procedures

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Termination Liability Assessment

This page was created to provide easy access to the following information:

- Information that will help you determine what options a U S WEST end-user customer or a Reseller/Alternate Local Service Provider has when a service agreement with U S WEST is terminated early.
- Information to assist you in the calculation of the charges that U S WEST will assess for Termination Liability.

U S WEST End User Customer - Complete Termination

U S WEST end user customers choosing to completely terminate their U S WEST service agreement(s) are subject to a Termination Liability Assessment (TLA) on the remaining value of the service agreement. That is to say if a U S WEST end user customer (with a U S WEST service agreement) migrates to any provider's service the U S WEST end user customer will be assessed TLA. Refer to the Minimum Service Periods, Minimum Billing Levels, & Termination Liability Multipliers listed below).

U S WEST End User Customer - Partial Disconnect

U S WEST end user customers choosing to migrate a portion of a service agreement, TLA will apply. However, if the service agreement contains a threshold (e.g. Centrex products), termination liability will apply only to the portion that is terminated below the threshold. Refer to the Minimum Service Periods, Minimum Billing Levels, & Termination Liability Multipliers listed below).

Reseller/Alternate Local Service Provider - Complete Termination

Resellers/Alternate Local Service Providers choosing to completely terminate their U S WEST service agreements(s) are subject to a Termination Liability Assessment (TLA) on the remaining value of the service agreement. That is to say if a Reseller/Alternate Local Service Provider disconnects their entire U S WEST service agreement the Reseller/Alternate Local Service Provider will be assessed TLA. Refer to the Minimum Service Periods, Minimum Billing Levels, & Termination Liability Multipliers listed below).

Reseller/Alternate Local Service Provider - Partial Disconnect

Resellers/Alternate Local Service Providers choosing to migrate a portion (end user sub account level) of a service agreement, TLA will apply. However, if the service agreement contains a threshold (e.g. Centrex products), termination liability will apply only to the portion that is terminated below the threshold. Refer to the Minimum Service Periods, Minimum Billing Levels, & Termination Liability Multipliers listed below).

Methods & Procedures

Minimum Service Periods, Minimum Billing Levels and Termination Liability Multipliers i.e. Factors Tables are listed below.

Questions

For questions please contact your Account Manager.

Minimum Service Periods, Minimum Billing Levels, & Termination Liability Multipliers

!NTERPRISE
Intrastate Network Services

Product	Minimum Service Period (MSP)	Minimum Billing Level (MBL)	TLA Multiplier
ATM Cell Relay Service	6 months	100%*	40%
Frame Relay Service (FRS)	6 months	100%*	25%
ISDN Basic Rate Service (ISDN-BRS)	none	60%	15%
ISDN Primary Rate Service (ISDN-PRS)	12 months	100%	25%
Transparent LAN Service (TLS)	12 months	100%	40%

* See tariff for additional information

Private Line Transport
Intrastate Services

Product	Minimum Service Period (MSP)	Minimum Billing Level (MBL)	TLA Multiplier
Analog Private Line	none	80%	40%
Command-A-Link	none	100%	40%
Digital Data Service (DDS)	none	80%	40%
DS1	none	100%	40%
DS3	12 months	100%	70%
Self-Healing Network Service (SHNS)	12 months	100%	70%
Synchronous Service Transport (SST)	12 months	100%	70%

Voice Services
Intrastate

Product	Minimum Service Period (MSP)	Minimum Billing Level (MBL)	TLA Multiplier
Centrex 21	none	60%	25%
Centrex Plus	none	60%	40%
Centrex Prime	none	60%	25%
Centron	none	80%	40%
CO-ACD	none	60%	25%
Digital Switched Service (DSS)	none	80%	25%
Universal Access Solution Service(UAS)	none	80%	25%

Last Update: July 31, 1998

USWEST Carrier Division

1. Business Procedures

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6. Glossary of Terms

Nearly all of the telephone numbers in the "duplicated" prefixes (those that appear today under both the 612 and 651 area codes--listed below) reflect the correct area code in company records and in the provision of services such as Caller ID.

There are a few remaining changes to be made before February 28, 1999 (MN Public Utility Commission ordered date), and processing time might delay the appearance of the correct area code in bills for a few weeks.

Prefixes appearing in both 612 and 651:

405	406	452	454	456
681	683	686	687	688
707	717	780	783	784
785	786	792	795	808
882	890	894	895	905

The correct final NPA for numbers in these prefixes, based on the city in which the SERVICE address is located (not necessarily the same as billing address):

612:

Apple Valley, Blaine, Burnsville, Circle Pines,
Columbia Heights, Fridley, Ham Lake,
Lexington, Mounds View, Spring Lake Park

651:

Eagan, Inver Grove Heights, Lino Lakes, Mendota,
Mendota Heights, New Brighton, Shoreview

Last Update: February 8, 1999

USWEST Carrier Division

Interconnect and Resale Resource Guide

INTERCONNECTION & RESALE RESOURCE GUIDE

1. Business Procedures

- Welcome/Table of Contents
- Introduction/How to Get Started
- Account Managers
- CLEC Customer Assignment - Carrier Centers
- Center Status, Query and Escalation
- Directory Ordering
- Jointly Provided Access Services - Meet Point Billing
- Order Processing
- Service Intervals
- Summary Bills/ Resellers
- Tariff Locations
- Repair
- Customer Questionnaire Overview
- Billing Percentage (BIP) Worksheet
- Calling Card and Line Information Database (LIDB)
- Media Type Outputs/Reports
- Formal Complaint Process
- Tax Exemption Criteria
- Manual Interfaces

2. Pre-Ordering Information

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4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Dear U S WEST Communications Customer:

Welcome to U S WEST's family of telecommunications customers. We look forward to doing business with you, and we hope that this initial contact opens the door to a mutually beneficial business relationship.

As you are aware, the Telecommunications Act of 1996 opened up the field of competition for telecommunications carriers. U S WEST welcomes the opportunities that the legislation provides. U S WEST believes these are exciting times both for customers and for companies that participate in this dynamic industry of telecommunications.

The Interconnect and Resale Resource Guide explains the steps you need to take in order to do business with U S WEST. The types of business explained in the guide are as a Facility-Based Provider, also known as a Competitive Local Exchange Carrier (CLEC), and a Reseller.

Before we can sit down together and do business, there are initial steps you must take on your own, chiefly: Obtain the necessary certification from the state regulatory commission in the state in which you want to do business with U S WEST. Meanwhile, as that process moves along, you also can contact us so that, together, we can begin our negotiated agreement process.

Thank you for your interest in doing business with U S WEST. We look forward to hearing from you.

Sincerely,

U S WEST's Interconnection & Resale Team

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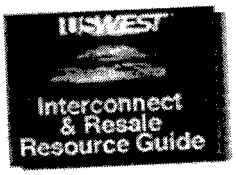
INTERCONNECTION & RESALE RESOURCE GUIDE



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U S WEST INTERCONNECT AND RESALE RESOURCE GUIDE

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1-7 SUMMARY BILLS/RESELLERS

1-8 TARIFF LOCATIONS

1-9 REPAIR

1-10 CUSTOMER QUESTIONNAIRE OVERVIEW

1-11 FUTURE USE

1-12 CALLING CARD AND LINE INFORMATION DATABASE (LIDB)

1-13 MEDIA TYPE OUTPUTS/REPORTS

1-14 FORMAL COMPLAINT PROCESS

1-15 TAX EXEMPTION CRITERIA

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2-2 SS7 CERTIFICATION TESTING - CLEC

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3-D CENTRAL OFFICE AUTOMATIC CALL DISTRIBUTION (CO-ACD)

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3-H PRIVATE LINE SERVICES

3-I PUBLIC ACCESS LINE SERVICE - BASIC AND SMART3-JSINGLE LINE/CENTREX 21 ISDN

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4-L LOCAL NUMBER PORTABILITY

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4-Q VIRTUAL COLLOCATION

4-R VOICE DIRECTORY ASSISTANCE FOR FACILITY BASED CLECS

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4-T WHOLESALE DIRECTORY LISTINGS

4-U WHOLESALE OPERATOR SERVICES

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5-11 LOCAL SERVICE REQUEST CONFIRMATION FORM

5-12 DIRECTORY SERVICE REQUEST FORM

5-13 DIRECTORY LISTING FORM

5-14 DIRECTORY SERVICE CAPTION REQUEST FORM

5-15 DIRECTORY SERVICE REQUEST COMPLETION NOTICE

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Last Update: July 31, 1998

USWEST
Carrier Division

Interconnect and Resale Resource Guide

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INTRODUCTION

This Resource Guide was created to provide you with essential information you will need to implement certain product and service provisions as provided for in the Telecommunications Act of 1996, CC Docket No. 96-98.

What is Interconnection all about

It's simple, really. Basically, the Telecommunications Act of 1996 requires that U S WEST Communications allows other telecommunications carriers to connect to U S WEST's network.

That means that if you're in the business of providing telephone and other types of telecommunications services to your customers and want to connect to

U S WEST's network, you can do so. But first you must complete some basic regulatory requirements that are explained in this section.

We welcome your business

Open competition in the marketplace is the cornerstone of the Telecommunications Act. We at U S WEST believe that competition makes life better for the consumer. We welcome competition. We also welcome the opportunity to do business with you, our customer and our competitor.

You can be a Reseller, too

The Telecommunications Act requires U S WEST Communications to allow you to resell our retail products and services to your

customers, too. Again, there are some preliminary steps you must take before you can become a Reseller. We've listed these steps in this section.

What's the first step?

Your answer to this question depends upon how you do business or how you want to do business, not who you are.

Simply, there are two main categories of how you do business, or how you want to do business.

Facility-Based Provider

A Facility-Based Provider is commonly referred to in business as a "CLEC"--Competitive Local Exchange Carrier.

A Facility-Based Provider, or a CLEC, is a company that offers telephone products and services from its own facilities and network. CLECs provide business and residential service via their own switches or facilities to the end user, or telephone customer. The CLEC uses its own network and has its own phone numbers, switching, and dialtone.

Reseller

A Reseller resells U S WEST's products and services at a resale rate, either through a separate, negotiated agreement with U S WEST Communications or a tariff. For example, a Reseller might purchase business or residential lines from U S WEST to provide services to its customers.

Initial Requirements Facility-Based Provider

1. Obtain certification as a telecommunications provider from the state public utility commission or agency in the state in which you intend to do business with U S WEST.

There are 14 states in which U S WEST does business as a telecommunications carrier.

2. Negotiate an agreement with U S WEST Communications. You can begin the certification and negotiation processes simultaneously. To begin the negotiation process with U S WEST, just contact Heidi Heiger at 303-965-3029, and you'll be put in touch with U S WEST's negotiation team.

Initial Requirements A Reseller

1. In all U S WEST's 14 states, obtain certification as a Reseller from the state public utility commission or agency in the state in which you intend to do business with U S WEST Communications. Begin the negotiation process with U S WEST by contacting Heidi Heiger at 303-965-3029, who will set you up with a U S WEST negotiation team.

2. In Colorado, which is the only state in U S WEST's 14-state region governed by a tariff that establishes the discount of products and services, a Reseller does not need to negotiate an agreement with U S WEST. The Reseller may begin to do business with U S WEST simply by contacting and account manager.

This guide provides the general details on the requirements for the CLEC (Competitive Local Exchange Carrier) and Resellers to interface with U S WEST. Some individual arbitrated contracts may vary in certain states with terms that are inconsistent with this Resource Guide. We hope this information will answer many of your questions in advance.

This guide provides the product information on U S WEST resale and interconnect products and services. It also includes manual procedures for interfacing with U S WEST. If you wish to interface with U S WEST utilizing Mediated Access, which provides the automated procedures to perform pre-ordering, ordering and trouble reporting, you will receive separate Mediated Access User Guides.

PRODUCT AND PROCESSES

Information included in this guide includes:

BUSINESS PROCEDURES
- Information about doing business as a CLEC OR RESELLER. It includes addresses and telephone numbers for your service centers and repair telephone numbers. Information on the initial questionnaire you need to complete prior to doing business with U S WEST as a CLEC or Reseller is also provided. It also details billing and ordering processes.

PRE-ORDERING INFORMATION
- This section of the guide will cover the information required prior to ordering U S WEST products and services. It includes an example of the Proof of Authorization (POA)/Letter of Authorization(LOA) required from your customers, SS7 certification testing, and directory listing information.

PRODUCT INFORMATION FOR RESALE AND INTERCONNECT
- These sections of the resource guide will provide specific product information, product features, tariff

references and manual ordering guidelines. It will also indicate whether the service can be ordered through Mediated Access.

MANUAL ORDERING PROCESS/FORMS
- This section of the guide provides the details on the forms required to manually interface with U S WEST. Each field on the form is described to make doing business with U S WEST as easy as possible.

In this guide, you will see U S WEST referred to as:

U S WEST U S WEST Communications USWC

HOW TO GET STARTED AS A CLEC

STEP ONE

A Comprehensive Agreement for interconnection must be negotiated with U S WEST and approved by state commissions. Provide U S WEST with a Interconnection Proposal, written on your company's letterhead:
The Proposal should include:

- geographic area(s) in which you will provide services
- ACNA and CIC, if assigned by Bellcore
- NXXs assigned to you
- CLLIs for your switch(es) and type of switch(es)
- a copy of any filings you have made in NECA Tariff FCC 4
- certification of tax exempt status, if appropriate
- brief corporate history, organizational chart of your company
- five-year forecast of interconnection needs

a preliminary outline of your desired network configuration
the desired signaling arrangement, including identification of SS7 hub provider, any database providers, your point code(s)
the name of your CMDS host.

Your account manager will request your Interconnection Proposal and assemble a negotiations team to establish your needs, forecasts, and all information necessary for interconnection.

STEP TWO

Complete the New Customer Questionnaire. This questionnaire will be provided by the account manager, and it details for U S WEST all of your company information required to do business as a Reseller or CLEC. An overview of the questionnaire is located in Section 1.10 of this resource guide.

STEP THREE

Obtain any additional facilities from U S WEST in order to do business as a CLEC or Reseller. Additional facilities would have been determined as you and your account manager completed the New Customer Questionnaire. Your billing needs and Readiness Testing will then be established with U S WEST.

STEP FOUR

Determine how you will place end user orders with U S WEST. Manual ordering of products and services are faxed to U S WEST via the forms detailed in Section 5. Certain products and services can be ordered via the mechanized system, Mediated Access. Mediated Access User

	Guides an training will be provided to you along with System IDs.
STEP FIVE	Review the information in this Resource Guide for details on products, business procedures and ordering information.
STEP SIX	Obtain any additional reference materials which are not provided to you by U S WEST. Recommended items may be technical publications, copies of tariffs, Local Exchange Routing Guide (LERG), Access Services Ordering Guide (ASOG), and manual ordering forms from Bellcore (EMR and EDI specifications for billing outputs).
STEP SEVEN	Verify you have a Carrier Identification Code (CIC), an Access Customer Name Abbreviation (ACNA), and an OCN (Operating Company Number) used to identify you as a CLEC in many U S WEST systems. Verify you have a ZSID.
STEP EIGHT	Perform Operational Readiness Testing to ensure that the data links are in place for Mediated Access connectivity, receipt of chosen Billing Media options, etc.
STEP NINE	Obtain Proof of Authorization/Letter of Agency from your end users. Section 2.1 of this guide provides details on this requirement.
STEP TEN	Review directory listings requirements in Section 2.3 of this document.
STEP ELEVEN	Order products and services detailed in Sections 3 and 4 of this guide by providing the

manual forms detailed in Section 5 or using Mediated Access.

STEP TWELVE Contact your account manager for any additional information, and a customized USOC list which meets your specific product and services needs.

HOW TO GET STARTED AS A RESELLER

STEP ONE Certification is the process by which the state commission authorizes you to conduct business in a particular state. Comprehensive Agreements may also be negotiated with U S WEST, and approved by the state commissions. You will need to provide U S WEST evidence of your certified status in the state(s) in which you will resell.

STEP TWO Complete the New Customer Questionnaire. This questionnaire will be provided by the account manager, and it details for U S WEST all of your company information required to do business as a Reseller or CLEC. An overview of the questionnaire is located in Section 1.10 of this resource guide.

STEP THREE Obtain any additional facilities from U S WEST in order to do business as a CLEC or Reseller. Additional facilities would have been determined as you and your account manager completed the New Customer Questionnaire. Your billing needs and Readiness Testing will then be established with U S WEST.

STEP FOUR Determine how you will place end user orders with U S WEST. Manual ordering of products and services are faxed to U S WEST via the

	forms detailed in Section 5. Certain products and services can be ordered via the mechanized system, Mediated Access. Mediated Access User Guides will be provided to you along with System IDs.
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STEP SIX	Obtain any additional reference materials which are not provided to you by U S WEST. Recommended items may be technical publications, copies of tariffs, Local Exchange Routing Guide (LERG), Access Services Ordering Guide (ASOG), and manual ordering forms from Bellcore (EMR and EDI specifications for billing outputs).
STEP SEVEN	Verify you have your Reseller Identification (RSID) code used to identify you as a Reseller in many U S WEST systems (RSID is assigned by USWC to the Reseller and provided by the Account Manager). Obtain an OCN (Operating Company Number).
STEP EIGHT	Perform Operational Readiness Testing, jointly with USWC, to ensure that the data links are in place for Mediated Access connectivity, receipt of chosen Billing Media options, etc.
STEP NINE	Obtain Proof of Authorization/Letter of Agency from your end users. Section 2.1 of this guide provides details on this requirement.
STEP TEN	Review directory listings requirements in Section 2.3 of

	this document.
STEP ELEVEN	Order products and services detailed in Sections 3 and 4 of this guide by providing the manual forms detailed in Section 5 or using Mediated Access.
STEP TWELVE	Contact your account manager for any additional information, and a customized USOC list which meets your specific product and services needs.

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The Interconnect Account Team acts as your first point of contact with U S WEST Communications, and will assist you with conducting business with U S WEST as a service provider. Your Account Team performs the following tasks on your behalf:

Acts as your first point of contact with U S WEST after your agreement is approved

Answers your telecommunications questions

Works with you to develop and implement your deployment plan for network interconnection and/or resale

Receives your long-range forecasts by city for quantities of lines, trunks, and other products and services

Provides single point of contact for investigation of problems or unusual requests pertaining to products and services or repair and provisioning processes

Keeps you informed of the status of any solutions to problems you may experience with products or services

Offers assistance with billing questions

Provides you with your Reseller Identification (RSID) code or ZCID (CLEC identification) code.

If you are interested in entering into an interconnection or resale agreement with

U S WEST, you should first contact:

Heidi Heiger
303-965-3029

An account manager will be assigned once you have negotiated an agreement.

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CLEC/RESELLER CUSTOMER CONTACTS - CARRIER CENTERS

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Many of our CLEC/ Reseller Customers utilize a mechanized means of sending order requests to U S West (example: IMA or EXACT). However, there are many instances where a request or associated information needs to be faxed to the appropriate Center for processing. Regardless of the method used to submit these orders, all Customers have a need to contact our Centers to discuss order processes and status's. U S West invites the Customer to use the following numbers when dealing with any Center issues.

The Center contacts and fax numbers are based on five categories:

CATEGORY 1 - LSR Requests

LSR Requests for Interconnect Resale services, Number Portability, Interim Number Portability, Unbundled Loops and Elements should all be faxed to the following number:

1-888-796-9089

To contact a representative in this Center to answer questions or concerns about your requests please call :

1-888-796-9087

CATEGORY 2- ASR and Designed Services Requests

There are three major Centers which handle ASR Requests for LIS, SS7 andSTS and LSR Requests for Designed Services. Mechanized LSR requests will automatically be sent to the appropriate Center. The Manual LSR should still be faxed to the LSR fax number 1-888-796-9089 to be initially reviewed by the Screening Group. These requests are then forwarded to the correct Center.

Customers who issue these types of requests are assigned a Center after initial discussions with their U S West Account Team. Customers who are unsure of their assigned Center should interface with their Account Team.

If your account is assigned to the Minneapolis Center please use the following numbers:

FAX 1-800-636-8721

QUESTIONS OR CONCERNS 1-800-285-8383

If your account is assigned to the Salt Lake Center please use the following numbers:

FAX 1-801-239-4070

QUESTIONS OR CONCERNS 1-800-335-5676

If your account is assigned to the Des Moines Center please use the

following numbers:

FAX 1-888-849-9376
or
1-515-286-8491
or
1-515-286-6160

QUESTIONS OR CONCERNS:

LIS 1-888-537-0002

Feature Group 1-800-261-9838

DSO, Analog/Digital 1-800-261-9835

Hi Cap Services (DS1, DS3, Sonet, SS7, SHARP, SHNS etc)
1-800-244-1271

All Other Complex Services 1-800-261-9837

CATEGORY 3- Centrex Resale LSR's

Please fax requests for Centrex Resale to the following number:

1-800-328-1874 (Central U S West Region, AZ, NM, UT, CO, MT, Southern ID, WY)

1-800-339-0505 (Eastern U S West Region, IA, MN, SD, ND, NE)

1-800-328-1874 (Western U S West Region, WA, OR, Northern ID)

To contact a representative in this Center to answer questions or concerns about your requests please call:

1-800-421-0079 (Central U S West Region, AZ, NM, UT, CO, MT, Southern ID, WY)

1-800-279-8806 (Eastern U S West Region, IA, MN, SD, ND, NE)

1-800-662-2895 (Western U S West Region, WA, OR, Northern ID)

CATEGORY 4- Billing and Collections

Your Carrier Wholesale Markets Account Manager will advise you which of the two offices you should call for all billng and collections questions. The number are:

either 1-800-559-0634 (Salt Lake City)
or 1-800-452-9716. (Des Moines)

This number is assigned to each CLEC/ Reseller account when the summary bills are established.

CATEGORY 5- Requests for CSR's (Customer Service Records)

To obtain a CSR fill out the LSR request and use request type EA. The Center should send you this information within 3 to 10 business days. Please fax these requests to:

1-800-236-6992

To contact a representative in this Center to answer questions or concerns about your requests please call:

1-800-497-7539

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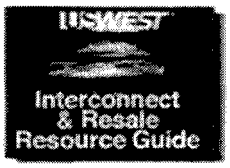

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U S WEST INTERCONNECT CENTER - **NON DESIGN SERVICES**

CRITERIA AND EXPECTATIONS FOR CALLS, ESCALATIONS AND QUERIES

1. **CALL CENTER HANDLED**	2. **REFER TO SERVICE ORDER POSTING RESOLUTION WITHIN 2 BUSINESS DAYS**
Service order has not posted and the completion date is less than 30 days past	Service order has not posted and completion date is more than 30 days past
Customer is checking status of pending service order	Co-Provider is receiving bills or correspondence for an end-user from other providers
Customer is requesting an FOC on previously FOC'd order	CSR is not reflecting changes made from a service order with the completion date more than 30 days past
Customer needs the completion date of a completed order	Incorrect billing name and/or address on CSR
Customer wants a status of a held order which has a call center ticket established	

3. ESCALATE HOT, RESOLUTION WITHIN 2 HRS	**4. REFER TO REPAIR**
Out of service condition anytime up to 3 business days past due date completion	Out of service conditions beyond 3 business days of due date completion
Due date change on order with the due date within 24 hours (Sup must be set to follow up the request)	Optional features are not working as ordered beyond 3 business days of due date completion
Expedite an order because of a critical medical emergency	
Expedite an order because of a natural disaster (fire, flood, national security, Police, Sheriff, 911, etc)	

5. **ESCALATE REGULAR, RESOLUTION** **WITHIN 24 HOURS**	**4. REFER TO REPAIR**
Optional features are not working anytime up to 3 business days past due date completion	Optional features are not working as ordered beyond 3 business days of due date completion
Additional line in not working anytime up to 3 business days past due date completion	Additional line is not working beyond 3 business days of due date completion
PIC was not changed on a service order anytime up to 3 business days past due date completion	PIC was not changed on a service order beyond 3 business days past due date completion
Posted service order does not reflect what was ordered on the LSR	Posted service order does reflect what was ordered on the LSR beyond 3 business days past due date completion

6. **ESCALATE REGULAR, RESOLUTION** **IN 2 BUSINESS DAYS**	**7. REFER TO HELD ORDERS, RESPONSE IN** **24 HOURS, RESOLUTION WITHIN 30 DAYS**
Listing is incorrect as ordered on the LSR	Service order is held due to a facility shortage
Directory listing is incorrect as ordered on the LSR	Status of a held order. No existing call center ticket yet established

EXPECTATIONS

1. CALL CENTER HANDLED: The expectation is the call center will handle the call to completeness without referring the call on to escalations, billing, held orders, or repair.

2. SERVICE ORDER POSTING, RESOLUTION WITHIN 2 BUSINESS DAYS: The expectation is a billing representative will contact the Co-Provider with resolution within 2 business days.

3. ESCALATE HOT, RESOLUTION WITHIN 2 HOURS: The expectation is an escalation representative will contact the Co-Provider within 2 hours with the anticipated resolution time.

4. REFER TO REPAIR BEYOND 3 BUSINESS DAYS: Repair commitment will be 24 hours.

5. ESCALATE REGULAR, RESOLUTION WITHIN 24 HOURS: The expectation is an escalation representative will contact the Co-Provider

with the resolution within 24 hours.

6. ESCALATE REGULAR, RESOLUTION WITHIN 2 BUSINESS DAYS: The expectation is an escalation representative will contact the Co-Provider with resolution within 2 business days.

7. HELD ORDERS, CALL BACK WITHIN 24 HOURS: The expectation is a held order representative will contact the Co-Provider within 24 hours with an anticipated resolution date of no greater than 30 days.

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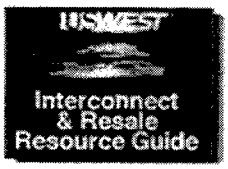
USWEST
Carrier Division



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INTERCONNECT SERVICE DELIVERY CENTERS STATUS, QUERY AND ESCALATION PROCESS

EFFECTIVE DATE - DEC. 9, 1998

Center Hours are 7AM TO 7PM, Monday through Friday, Mountain Time

TIER	NAME, GROUP/TITLE	PHONE NUMBER	FUNCTION
0	**Call Center Representatives**	**888-796-9087**	LSR/Order Status, Queries on Completion, Due Dates, FOC's, Assisting with LSR Prep, Re-send FOC's/Rejects
1	**Escalation Representatives -OR- For Out of Service Conditions within 72 hours of installation, incorrect transfer of calls, or missed due date. Please page our Escalation Representative at 303-852-5122, between 5AM and 7AM or between 7PM and 9PM, Monday through Friday between 7PM and 9PM, Monday through Friday -OR- Out of Service conditions beyond 72 hours or outside of the hours listed above are**	**888-796-9087**	Missed FOC Intervals, Due Date Expedites, Cut Overs, Out of Service, Emergency Cancels or Due Date Changes, Missed Due Dates, Feature Discrepancies

	handled by the Repair Office For Resale service please call 888-405-0083 For INP/UBL services please call 800-223-7881		
2	**Escalation Managers**		
	Duty Pager Ramona Zamora Debbie Drew Bernadette Gutierrez	**303-201-4939 303-298-2510 303-298-2204 303-298-2511**	Missed Commitments of Escalation Reps, Assist Team with issues and Escalations
3	**Team Leader - Terry Simmons**	**303-298-2432 Pager 800-759-7243 Pin# 837-9481**	Missed Commitments of Escalation Managers
4	**Director - Ken Beck**	**303-896-8805 Pager 800-759-7243 Pin# 220-3503**	Missed Commitments by Team Leader
5	**Vice President - Christie Doherty Mary Beer**	**303-896-0848 303-965-0984**	

The Call Center handles out of service conditions and other service problems within 72 hours of installation.

The Call Center will handle all general calls and call backs around activity and business processes.

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DIRECTORY ORDERING

DIRECTORY ORDERING

The U S WEST DEX Liaison for all CLEC and Reseller issues and questions including contracts, customer guide information, and directory delivery is:

NAME	OFFICE NUMBER	FAX NUMBER
Linda Clydesdale Regional Manager Listing Acquisition 198 Inverness Drive West 5th Floor Englewood, CO 80112	303-784-2489	303-784-1774

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USWEST Carrier Division

USWEST
Interconnect & Resale Resource Guide

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2. Pre-Ordering Information

3. Contact Information - Resale

4. Product Information (Interconnect)

5. Manual Ordering

Jointly Provided Access Services

When an interexchange carrier (IXC) receives access service which is co-provided by more than one carrier, arrangements must be in place between the co-providers for the ordering, rating and billing of these access services. This co-provided service is referred to as jointly provided access. The industry and regulatory approved method of billing the IXC for this jointly provided switched access is referred to as meet point billing.

The standards for billing these access services are described in the Multiple Exchange Carrier Access Billing (MECAB) document (Technical Reference SR-BDS-000983). This document, developed by the Billing Committee of the Ordering and Billing Forum (OBF) describes meet point billing standards which apply to both usage-sensitive and flat-rated access services.

The general concept of meet point billing is that when access service is provided to an IXC by more than one provider, the access charges paid by the IXC will be apportioned among the co-providers based upon ownership of the facilities.

The standards for processing orders for these access services are described in the Multiple Exchange Carrier Ordering and Design Guidelines (MECOD) document (Technical Reference SR-STS-002643). These guidelines cover the ordering and design process from submission of an Access Service Request (ASR) through issuance of work documents. These guidelines are based on the concept of one of the co-providers being placed in an Access Service Coordinator (ASC) role.

Before either provider can meet point bill IXCs for jointly provided switched access, a number of work activities must occur. This document lists some of the primary functions both providers must perform in order to bill IXCs. The activities described are well established and documented under various industry guidelines, including MECAB/MECOD and federal and state tariffs.

General

Both providers should work cooperatively to reach agreement on which provider will function as the Access Service Coordinator (ASC) as defined in the Multiple Exchange Carrier Ordering and Design Guidelines (MECOD). The ASC company will provide the operational, technical and administrative support required in the planning, provisioning and maintenance involved in the joint access provisioning process. U S WEST will assume the responsibility as the ASC unless the providers reach an alternative agreement.

Each provider will be responsible for obtaining regulatory approval of tariffs for any access services jointly provided by them.

The provisioning and operation of the access network used to furnish access services will be in accordance with the rules and regulations of the lawfully

established tariffs applicable to the access services provided. Billing and data exchange will be in accordance with MECAB guidelines.

Each provider will cooperate with the other provider to construct, equip, maintain and operate its portion of the jointly provided facilities so that reliable and quality service will be furnished to IXC's at all times.

Neither provider will rearrange or change jointly provided access facilities without the prior written consent of the other provider, where such change or rearrangement, if not concurred in by the other provider, would impair the access services provided to the IXCs.

Meet Point Billing

The Multiple Exchange Carrier Access Billing (MECAB) and the Multiple Exchange Carrier Ordering and Design Guidelines (MECOD) are the standards on which the meet point billing guidelines in this document are based. These standards determine the ordering, rating and billing for access services when the service is provided by more than one provider. All information necessary for billing, ordering and design coordination will be provided based upon the MECAB and MECOD guidelines to ensure that jointly provided access services are installed, tested and turned up in a timely manner.

The providers will use industry standards developed for the provision and billing of jointly provided switched access (MECAB, MECOD and the provider's FCC and state access tariffs). USWC will provide the one-time notification to the co-provider of the billing name, billing address, and carrier identification codes of the IXCs subtending any U S WEST tandem in which the co-provider directly connects.

Both providers will each render a separate bill to the IXC customer.

The providers will agree on a Billing Percentage (BP) to enable the joint provisioning and billing of Switched Access Services in conformance with the Meet Point Billing guidelines adopted by and contained in MECAB and MECOD documents and referenced in U S WEST's Switched Access Tariffs.

BPs are listed by service type for each A + Z location between which access services are provided on a Meet Point basis. The sum of the BPs filed for each route must equal 100%. For each A + Z location, the involved providers must agree in writing to their respective BPs. The industry reference for listing end point locations, BPs, and the providers involved in a MPB environment is NECA Tariff FCC. No. 4. The information contained in this tariff specifies the apportionment of local transport or channel mileage rate element(s) among the providers and/or jurisdictions involved in an access service based on billing percentages. Each route, the related BPs, and the providers involved must be filed in NECA Tariff FCC. No. 4 by the first of the month, to be effective the first day of the following month.

The providers should maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff, sufficient to reflect this MPB arrangement, including BP percentages.

As detailed in the MECAB document, the co-provider and USWC will exchange all information necessary to bill IXC customers for jointly provided

Switched Access Services. For Usage-Sensitive Access services under MPB, the exchange of usage data among providers plays a critical role in providing the customer with an accurate, timely, and auditable bill. Various providers can be involved in recording the usage data for a single End Office location depending upon the network architecture, type of office, feature group, and type of traffic.

The Exchange Message Record (EMR), as defined in Bellcore document *BR-010-200-010 CRIS Exchange Message Record*, provides mechanized record formats that should be used to exchange access usage information among providers. Category *11-01* series access usage records (AURs) are used to exchange detailed access usage information. Category *11-50* series summary usage records (SURs) are used to exchange summarized meet point billed access minutes-of-use.

In the multiple bill environment, detailed usage records are forwarded, from the Subsequent Billing Company (SBC) to the Initial Billing Company (IBC). When an 'Interconnection Agreement' has been signed by all providers and received by U S WEST; and the Access/Billable Information Worksheet has been provided to U S WEST with complete and accurate information, as agreed upon by both providers, U S WEST will proceed with the implementation process for the distribution of the Category 11-01 access usage records to the co-provider. Upon completion of implementation by U S WEST, the access usage records will then be distributed to the co-provider.

In the multiple bill environment, summary usage records are forwarded from the IBC to the SBC. Daily or monthly SURs contain total usage (factored as appropriate) by End Office and by carrier for each traffic type. If the IBC provides daily SURs, then the IBC and the SBC must use these daily SURs for billing to ensure that the IBC and the SBC are billing the same MOUs. Likewise if the IBC provides monthly SURs to the SBC, the IBC must use the same monthly SURs for billing.

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ORDER PROCESSING

The following are the steps for processing an order:

Request for CSR Only:

- CSR requested manually or electronically
- Verify Letter of Agency entry
- Edit for reject reasons *
- Reject if necessary
- Process CSR request via facsimile or electronically

Request for Service Order:

- Service Order requested manually or electronically
- Verify Letter of Agency entry
- Edit for reject reasons*
- Reject if necessary
- Hold for Resolution and Re-submission of LSR's++
- Issue Service Order
- Correct any Service Order errors
- Note account record
- Send and file Firm Order Confirmation
- Send and file Change Notification

***Reject Reasons:**

- The end user authorization information is not completed.
- Name, telephone number, and address do not match, or are incomplete
- Resold account is not in U S WEST territory or is a non working account.
- Pending service orders are present which are service impacting (e.g., additional line, transfer of service, disconnect, voice messaging).
- Forms are missing or incomplete
- Activity requested has already or is in the process of being completed.
- An attempt has been made by telephone to clear up the question, and we have received no response by the Co-Carrier. If the initial attempt is a message left for Co-Carrier, the Co-Carrier has one hour (INP, unbundled loop) or two hours (resale) to respond.

++Hold for Resolution and Resubmission of LSR's:

- Sum Does not yet have certification for the state
- Sum Does not have a contract with U S WEST

These requests will be held and referred to the account manager for handling.

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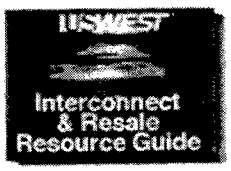
USWEST
Carrier Division



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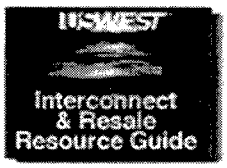
U S WEST® COMMUNICATIONS

RESALE AND INTERCONNECTION SERVICES SERVICE INTERVAL GUIDE

The guide is available as an Adobe Acrobat file or MS Word File. The Acrobat file requires the Free Adobe Acrobat Reader. If you don't have the Acrobat Reader on your computer, click this link to download it from Adobe's Web site.

- SERVICE INTERVAL GUIDE MS Word File 3/1/99
- SERVICE INTERVAL GUIDE Acrobat File 3/1/99

5. Manual Ordering Process/Forms



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SUMMARY BILLS/RESELLERS

What it is U S WEST uses customized bills for certified resellers. They are called Summary Bills. These monthly Summary Bills provide one bill and one payment document for a reseller. They are segmented by state and bill cycle. See the following matrix for product and region specific information.

	Wholesale -Resale (RSID) (CRIS)	-Unbundled Loop/Port/ Switch -Rebundled -Interim Number Portability (ZCID) (CRIS)	OTHER..... -Centrex resale -PAL -Third Party -Shared Tenant (Retail) (CRIS)	IABS
Mix with other sub accounts on the same bill.	NO	NO	YES, if accounts are serviced from the same office.	YES, if service billed out of IABS
Maximum number of sub accounts to a summary bill. (CRIS)	Eastern - N/A Central/ Western 2,000	2,000	9,999	N/A
Recommended number of summary bills per state. (CRIS)	Eastern - 1 per bill period, per state.* Central - 10 per state Western - 10 per state	Eastern - 10 per state. Central - 10 per state Western - 10 per state (residence and business are separated)	N/A	1 bill per state, (minimum)
Bill Periods	1, 4, 7, 10, 13, 16, 19 22, 25, 28 (CRIS)**			1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19 20 22, 23, 25

*Bill periods are driven by the end user account. A summary bill will be established for each bill pull in that given state. 20 summary bills in Minnesota, 10 summary bills in Iowa, Nebraska, North Dakota and South Dakota.

**WATS service must bill in the first bill period.

Summary Bills consist of two types of accounts.

- Summary account, with a unique billing number, where all billing information is summarized.
- Sub accounts with End-User billing detail, including usage, if appropriate.

The following pages provide bill layout details, and a Summary Bill example.

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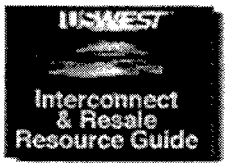

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SUMMARY BILL APPEARANCE

The Summary Bill Includes:

A Header:
Customer Name
Bill Date
Account number
U S WEST URL

Information Line:
Balance Forward-(The current charges from the previous month.)
New Charges
- Total Amount Due (balance forward plus new charges)
- Due date for new charges

Account Summary:
Payments received during current bill cycle.
- Adjustments applied.
- Amount of the previous balance: - Could include additional past due amounts.
  New Charges for each entity and an inquiry number for each entity
- A total of all new charges
  Total amount due that includes, new charges, balance forward, payments and adjustments

List of Accounts:
List that includes the summary and all sub accounts
- New charges for each account
- Circuit ID on circuits
- A summary of taxes and surcharges
- Total of taxes and surcharges
- Total of new charges

Return Document:
Return mailing address for U S WEST (must show through window of the envelope)
- Line to write in amount enclosed
- Customer Name
- Bill Date
- Account Number
- Bill Due Date
- New Charges
- Total Amount Due

The Sub Account includes:
A Header:
Customer Name
Bill Date
Account number
U S WEST URL

Information Line:
Balance Forward- (The current charges from the previous month.) w/Charges
Total Amount Due (balance forward plus new charges)

Account Summary:
New Charges for each entity and an inquiry number for each entity
A total of all new charges
- Total amount due that includes only new charges

The Other Charges and Credits page:
Identify types of local service, basic or optional
- Display monthly rate
- Display all product information that generates charges and/or credits for the billing period
- Display nonrecurring charges
- Calculate fractionals
- Display order number and due date
- Summarize taxes and surcharges on the activity
- Total new charges

The Long Distance page:
Will itemize toll message sorted by date for each carrier
- Provide details on each call
  - date
  - time
  - to place
  - to area number
  - type
  - minutes
  - amount
- Summarize taxes on the toll messages
- Sub total taxes

The Other Charges and Credits page will display all product information that generates charges and/or credits for the billing period.

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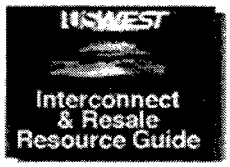

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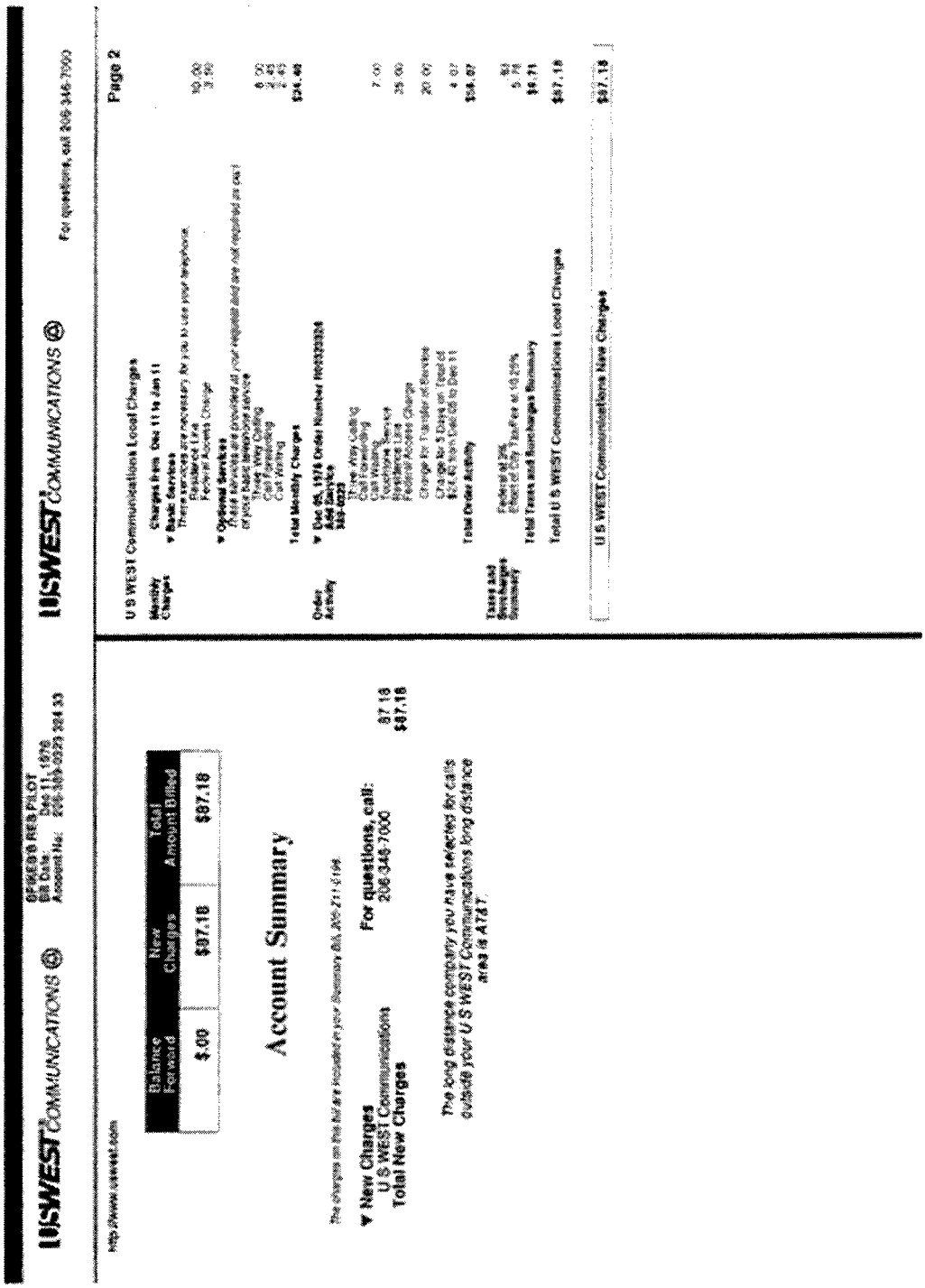
Interconnect and Resale Resource Guide

SUMMARY BILL EXAMPLE #1



http://www.uswest.com

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SPRIGGS REB PILOT
Bill Date: Dec 11, 1998
Account No: 206 345-0223 284 93

Balance Forward	New Charges	Total Amount Billed
$.00	$87.18	$87.18

Account Summary

The charges on this bill are included in your Summary Bill, 206 211-8196

For questions, call: 206 346-7000

▼ New Charges	
U S WEST Communications	87.18
Total New Charges	$87.18

The long distance company you have selected for calls outside your U S WEST Communications long distance area is AT&T.

USWEST COMMUNICATIONS

For questions, call 206 346-7000

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U S WEST Communications Local Charges

Monthly Charges

Charges from Dec 11 to Jan 11

▼ Basic Services
These services are necessary for you to use your telephone.

Residence Line	19.00
Federal Access Charge	3.50

▼ Optional Services
These services are provided at your request and are not required as part of your basic telephone service

Three Way Calling	6.00
Call Forwarding	2.45
Call Waiting	2.45
Total Monthly Charges	$24.40

Order Activity

▼ Dec 05, 1998 Order Number W0032324
Line Services
360 0223

Three Way Calling	7.00
Call Forwarding	
Call Waiting	
Additional Service	35.00
Residence Line	
Federal Access Charge	20.00
Change for Transfer of Service	
Change for 5 Days on Trial	
$24.00 from Dec 05 to Dec 11	4.07
Total Order Activity	$58.07

Taxes and Surcharges Summary

Federal 4.3%	.80
Franchise Fee Tax Fee at 10.25%	5.74
Total Taxes and Surcharges Summary	$6.71
Total U S WEST Communications Local Charges	$87.18

U S WEST Communications New Charges $87.18

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Interconnect

5. Manual Ordering Process/Forms

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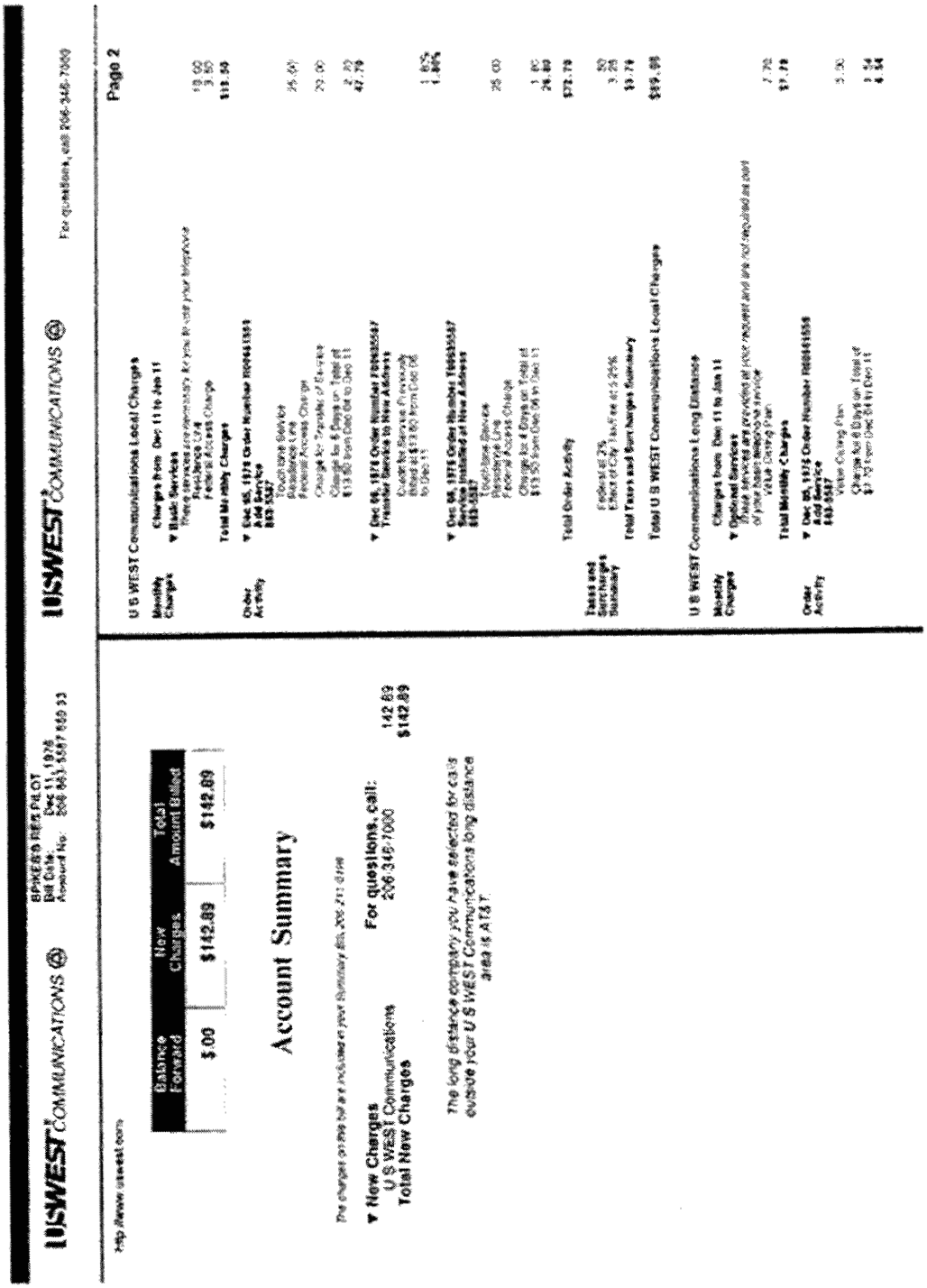
SUMMARY BILL EXAMPLE #2



USWEST COMMUNICATIONS

Balance Forward $.00 | New Charges $142.89 | Total Amount Billed $142.89

Account Summary

New Charges
U S WEST Communications 142.89
Total New Charges $142.89

For questions, call: 206 345 7000

The long distance company you have selected for calls outside your U S WEST Communications long distance area is AT&T.

USWEST COMMUNICATIONS

For questions, call 206-345-7000

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U S WEST Communications Local Charges

Monthly Charges — Charges from Dec 11 to Jan 11
Basic Services
Residence 124 — 18.00
Federal Access Charge — 3.50
Total Monthly Charges — $18.50

Order Activity
Dec 05, 1975 Order Number R06461555
Add Service 885-5587
Touchtone Service — 35.00
Residence Line
Federal Access Charge
Charge for 5 Days on Total of $13.50 from Dec 06 to Dec 11 — 29.00 — 2.70 — 47.70

Dec 06, 1975 Order Number T06835587
Transfer Service to New Address
Credit for Service Previously Billed at $13.50 from Dec 06 to Dec 11 — 1.825 — 1.825

Dec 06, 1975 Order Number T06835587
Service Installed at New Address
885-5587
Touchtone Service — 25.00
Residence Line
Federal Access Charge
Charge for 4 Days on Total of $13.50 from Dec 06 to Dec 11 — 1.80 — 26.80

Total Order Activity — $72.75

Taxes and Surcharges Summary
Federal 2% — 3.50
Effect of City Tax Fee at 5.25% — 3.25
Total Taxes and Surcharges Summary — $3.75

Total U S WEST Communications Local Charges — $95.00

U S WEST Communications Long Distance

Monthly Charges — Charges from Dec 11 to Jan 11
Optional Services
Black Invoiced at $1.00 provided at your request and are not required as part of your basic service. Value Saving Plan — 7.70
Total Monthly Charges — $7.70

Order Activity
Dec 05, 1975 Order Number R06461555
Add Service 885-5587
Value Saving Plan — 3.00
Charge for 8 Days on Total of $7.70 from Dec 04 to Dec 11 — 2.54 — 4.54

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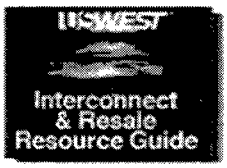

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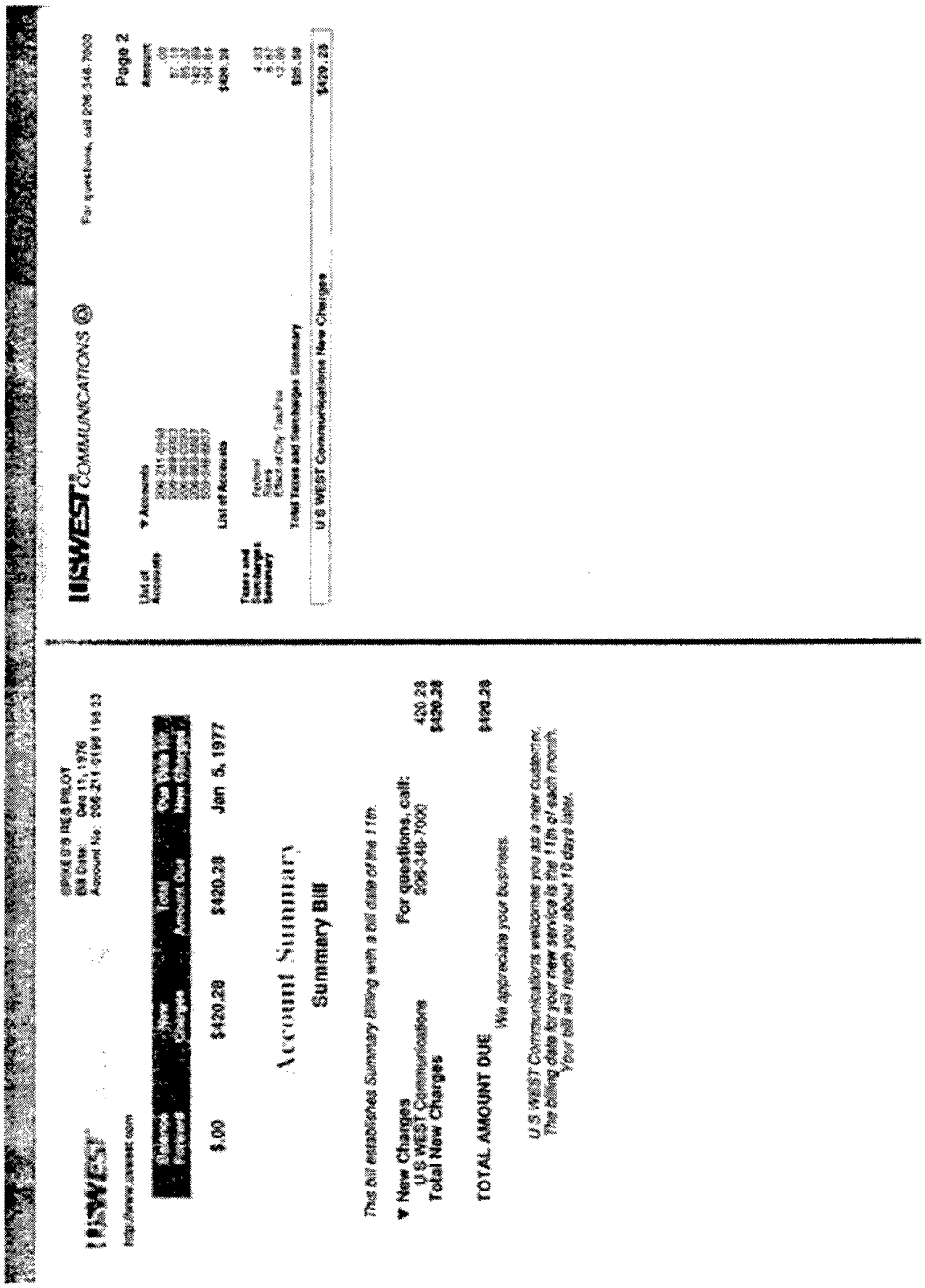
SUMMARY BILL EXAMPLE #3



USWEST COMMUNICATIONS ®

For questions, call 206-349-7000

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List of Accounts

▼ Accounts

	Amount
206-211-0199	[illegible]
206-211-0200	[illegible]
206-211-0201	[illegible]
206-211-0202	[illegible]
206-211-0203	[illegible]
206-211-0204	[illegible]
206-211-0205	[illegible]
206-211-0206	[illegible]
206-211-0207	[illegible]
206-211-0208	[illegible]
List of Accounts	$420.28

Taxes and Surcharges Summary

Federal	[illegible]
State	[illegible]
Effect of City Tax/Fee	[illegible]
Total Taxes and Surcharges Summary	$[illegible]

U S WEST Communications New Charges $420.28

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SPIKE B D RED PILOT
Bill Date: Dec 11, 1976
Account No. 206-211-0199 1993

Unpaid Balance	New Charges	Total Amount Due	Due Date for New Charges
$.00	$420.28	$420.28	Jan 5, 1977

Account Summary

Summary Bill

This bill establishes Summary Billing with a bill date of the 11th.

▼ New Charges	For questions, call:	
U S WEST Communications	206-349-7000	420.28
Total New Charges		$420.28
TOTAL AMOUNT DUE		$420.28

We appreciate your business.

U S WEST Communications welcomes you as a new customer. The billing date for your new service is the 11th of each month. Your bill will reach you about 10 days later.

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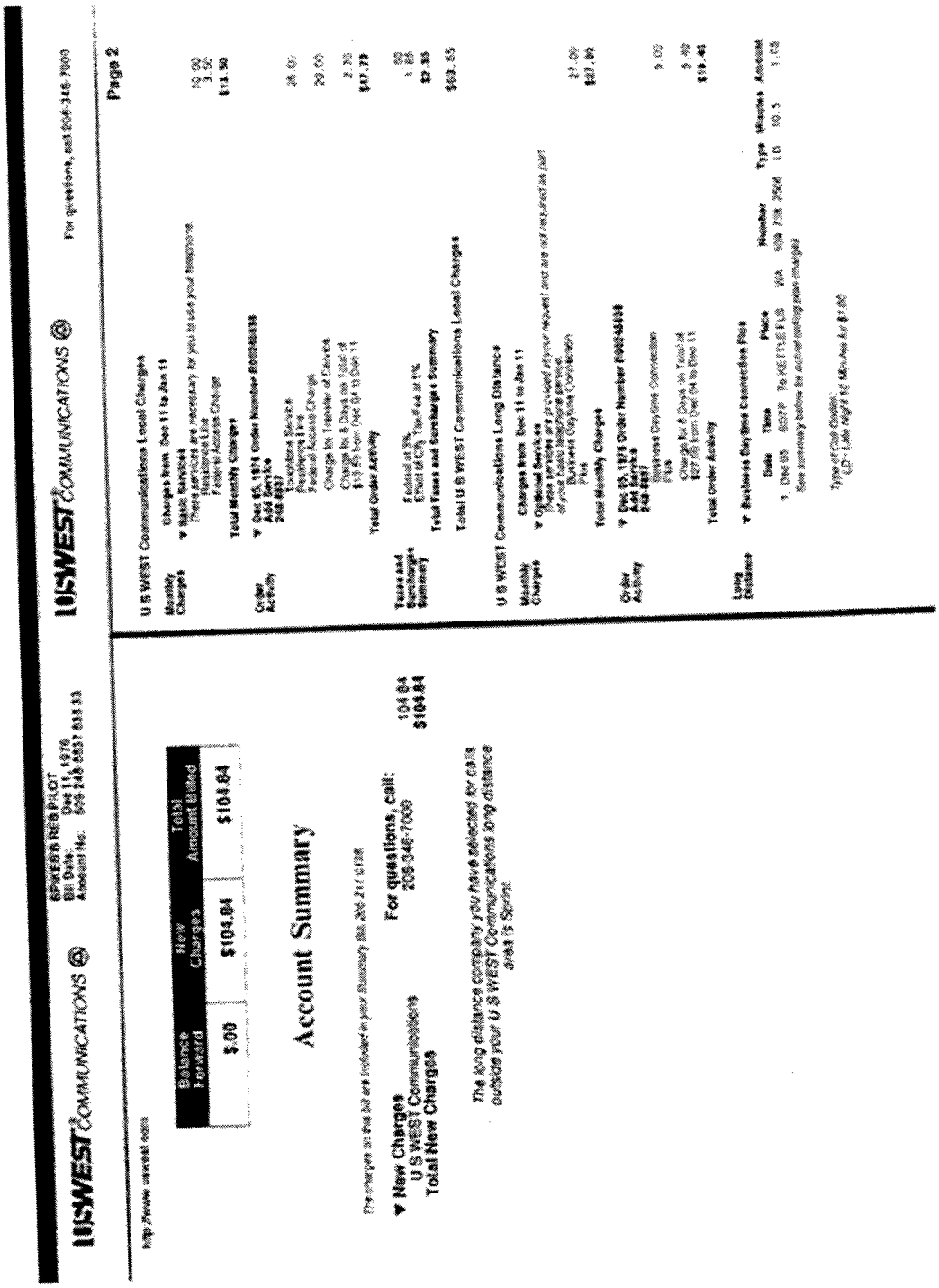
SUMMARY BILL EXAMPLE #4



USWEST COMMUNICATIONS

For questions, call 206-346-7000

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U S WEST Communications Local Charges

Monthly Charges — Charges from Dec 11 to Jan 11

▼ Basic Services
These services are necessary for you to use your telephone.

Residence Line	10.00
Federal Access Charge	3.50
Total Monthly Charges	$13.50

Order Activity

▼ Dec 05, 1978 Order Number 80000000
Add Service
248-8837

Installation Service	25.00
Residence Line	
Federal Access Charge	20.00
Charge for Transfer of Service	
Charge for 8 Days on Total of $13.50 from Dec 04 to Dec 11	2.25
Total Order Activity	$47.75

Taxes and Surcharges Summary

Federal at 3%	1.50
Effect of City Tax Fee at 1%	1.00
Total Taxes and Surcharges Summary	$2.50
Total U S WEST Communications Local Charges	$63.55

U S WEST Communications Long Distance

Monthly Charges — Charges from Dec 11 to Jan 11

▼ Optional Services
These services are provided at your request and are not required as part of your basic telephone service.

Business Daytime Connection Plus	27.00
Total Monthly Charges	$27.00

Order Activity

▼ Dec 05, 1978 Order Number 80000000
Add Service
248-8837

Business Daytime Connection Plus	5.00
Charge for 8 Days on Total of $27.00 from Dec 04 to Dec 11	5.40
Total Order Activity	$10.40

Long Distance

▼ Business Daytime Connection Plus

Date	Time	Place	Number	Type	Minutes	Amount
1 Dec 05	6:07 P	To WEST LS 5	503 708 2500	LD	10.5	1.75

See summary below for actual calling plan charges

Type of LD Code:
LD - Late Night 10 Minutes for $1.00

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SPIKEBR R&B PILOT
Bill Date: Dec 11, 1978
Account No. 503 248 8837 833 33

Balance Forward	New Charges	Total Amount Billed
$.00	$104.84	$104.84

Account Summary

The charges on this bill are included in your Summary Bill 206 211 0138

For questions, call:
206-346-7000

▼ New Charges	
U S WEST Communications	104.84
Total New Charges	$104.84

The long distance company you have selected for calls outside your U S WEST Communications long distance area is Sprint.

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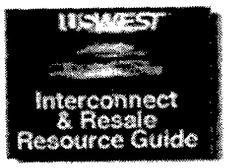

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TARIFF LOCATIONS

The following pages list the locations by state where that state's tariffs are located for viewing. (Tariff price lists only are available through the IMA system.) Tariff are also available now on the internet at the URL: http://www.uswest.com/carrier

ARIZONA

3033 North 3rd Street
Room 1010
Phoenix, AZ

Call 602-630-8224 For Appointment

Arizona Corp. Commission
1200 W. Washington Street
Phoenix, AZ

COLORADO

Colorado Regulatory Affairs
1801 California St
47th Floor
Denver, CO

IDAHO

999 Main Street
11th Floor
Boise, ID

Call 208 385-2734 For Appointment

IOWA

909 High ST
Des Moines, IA
515-286-7336
Call for appointment

MINNESOTA

Minnesota Public Utilities Commission
Department of Public Services

350 Metro Square Building
121 7th Place East
St.Paul, MN

MONTANA

Montana Public Utilities Commission

1701 Prospect Ave
Helena, MT

NEBRASKA

1314 Douglas On The Mall
15th Floor
Omaha, NE

Call 402-422-3137 For Appointment

NEW MEXICO

---

400 Tijeras NW
Suite 510
Albuquerque, NM

Call 505-245-6419 For Appointment

NORTH DAKOTA

---

409 1st Ave No.
Fargo, ND

Call 701-241-3629

OREGON

Regulatory
421 SW Oak
Room 8S7
Portland, OR

Call 503 242-8003 For Appointment

SOUTH DAKOTA

---

125 South Dakota Ave
8th Floor
Sioux Falls, SD

UTAH

---

250 Bell Plaza
Room 1603
Salt Lake City, UT

Call 801-237-5906 For Appointment

WASHINGTON

Tariff Department
1600 7th Avenue
Room 2907
Seattle, WA

Call 206 345-2369 For Appointment

WYOMING

6101 Yellowstone Road
Room 310
Cheyenne, WY

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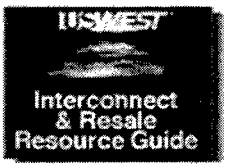

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Repair Centers

General Information

1. U S WEST's customer contact is the Interconnector (i.e., CLEC, Reseller) not the end user.

2. Trouble reports are NOT taken from end users or 2nd and 3rd parties. End users are referred to their local provider for reporting trouble.

3. End users are advised to contact their Local Service provider the following requests:

- Bill Inquiries
- ®Credit Requests

4. Status information is provided to the Interconnector. End users are advised to call their local service provider for status.

Reporting Trouble

To report trouble, call the appropriate Repair Call Handling Center (RCHC) or Call Receipt Service Answering Bureau (CRSAB). Provide the Repair Service Attendant (RSA) with the following information:

- Business Name
- Telephone Number or U S WEST circuit identification in trouble
- End User's name and address
- Trunk Group Number
- 26 Codes for LIS Trunks
- Trouble description
- Repair Contact Name and Telephone number
- Local Contact Name and Telephone number
- Premises access information (if applicable)
- Test results
- Authorization to test

Creating the Trouble Ticket

The RSA creates the trouble ticket. For non-designed services, the RSA provides a service restoral/trouble resolution commitment date and time. The trouble ticket is electronically forwarded to the appropriate U S WEST maintenance center.

Statusing and Escalations

To request status or to escalate on an open trouble ticket, contact the appropriate RCHC or CRSAB. Provide the following information:

- Trouble Ticket Number
- Business Name
- Repair Contact Name and Telephone Number (if a call back is required)

The RSA provided on-line statusing using the trouble ticket log. If additional information is required or an escalation is initiated, the RSA makes a log entry on the trouble ticket indicating the requested information. The maintenance center reviews regularly reviews log entries and completes the requested activity.

Resolving/Restoring/Closing a Trouble Ticket

Upon service restoral and/or trouble resolution, U S WEST maintenance personnel will call the Repair Contact Name and telephone number listed on the trouble ticket.

U S WEST will provide trouble found (if any), trouble disposition, and any pertinent billing information if required.

Misdirected Repair Calls

CLEC/Reseller and U S WEST will employ the following procedures for misdirected repair calls:

1. CLEC/Reseller and U S WEST will provide their respective customers with the correct telephone numbers for access to their repair bureaus. U S WEST customers will be instructed to call U S WEST and CLEC/Reseller customers will be instructed to call their repair numbers.

2. CLEC/Reseller and U S WEST will exchange repair numbers, and to the extent the correct provider can be determined, misdirected repair calls will be referred to the proper provider.

3. U S WEST will not discuss its products or services with the CLEC/Reseller's customers during the course of repair calls or visits.

Interconnect Product Repair Contact Matrix

Note: All centers open 7 days X 24 hours

Interconnect Product	Repair Center	Telephone Number
Resale - Simple Residential (IFR)	RCHC	1-888-405-0083
Resale - Simple Business (IFB)	RCHC	1-888-405-0083
Resale - Complex POTS	AMSC	1-800-223-7881
Resale (Designed services)	AMSC	1-800-223-7881
Unbundled Loop	AMSC	1-800-223-7881
Unbundled Switch	AMSC	1-800-223-7881
LIS Trunking	AMSC	1-800-223-7881
Unbundled Transport	AMSC	1-800-223-7881
Number Portability	AMSC	1-800-223-7881

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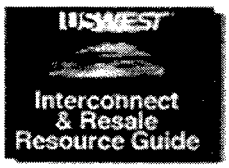

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U S WEST QUESTIONNAIRE OVERVIEW

The New Customer Questionnaire will be completed jointly by a representative of the customer and a U S WEST representative, usually the Account Manager.

The completed questionnaire will be used to:

- determine certification
- determine geographical requirements
- identify Client IDs
- determine USWC system requirements to support client specific activity
- collect credit information
- obtain billing information
- establish input and output requirements
- gather customized routing requirements
- create and distribute client contact lists
- identify client hours and holidays

The New Customer Questionnaire is comprised of the following sections:

General Information

Information on person completing this form

Legal corporate name, address, email, and fax number

Certification information

Client ID numbers

Wholesale discount

Billing and Collections

Credit information

Billing information

Summary billing information

USWC Output Reports

Input to USWC

- Method of input
- USWC Route Traffic
- Non-USWC Route Traffic
- Contact Lists for Orders, Billing and Repair

List of holidays

Other contacts

TO SEE THE MOST CURRENT COPY OF THE QUESTIONNAIRE, CHECK WITH YOUR ACCOUNT MANAGER.

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BILLING PERCENTAGE DEVELOPMENT WORKSHEET (04-98)

The following information is needed, from each CLEC/CMRS, to calculate the Billing Percentages where USWC and the CLEC/CMRS will co-provide access to the IXCs. This information will be provided to the Billing Percent Administration group who will calculate the percentages based on airline miles.

CLLI code of Serving Wire Center (SWC) for CLEC/CMRS's POP (what was filed in NECA Tariff F.C.C. No. 4)

_____

Effective Date of NECA 4 Tariff(SWC section)_____

Official Company Number_____

ACNA_____

NPA and NXX/s filed in NECA 4_____

_____

What is the primary route on which a BIP is needed? (From CLEC/CMRS SWC to USWC End Office)

_____

On above route did CLEC/CMRS install its own facilities from the CLLI of the Serving Wire Center to the first connection with a USWC Office? (For example: 100% owned by CLEC/CMRS) If not, what is the meet point in V & H coordinate format? (If V & H

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unknown, what is the legal description of the meet point?)

_____

What are the additional routes on which a BIP is needed? (CLEC/CMRS SWC to a USWC EO other than primary route.)

_____

_____

BIP Contact - Name

Address _____

City _____ State_____ ZC_____

TN _____

FAX _____

Billing Contact - Name

Address _____

City _____ State_____ ZC_____

TN _____

FAX _____

Name, telephone # and FAX # of person doing input into NECA 4

(CLEC/CMRS must provide signed concurrence sheet to this person.)

_____

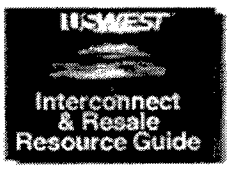
_____

FAX completed form to:

Cathy Augustson

FAX 612-663-7042

TN 612-663-7206



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CALLING CARD AND LINE INFORMATION DATABASE (LIDB)

CALLING CARD

If an end user switches from U S WEST to a CLEC, existing line number based calling cards will be canceled. If a CLEC issues a line number based calling card to the end user, it may be stored in the

U S WEST LIDB only if the CLEC arranges for a LIDB Data Storage contract with U S WEST.

LIDB

Telephone line numbers for CLEC end users provisioned on a resold basis are automatically loaded into LIDB via the service order process for the CLEC summary bill. CLECs providing facility based services to their end users must take steps to store their telephone line number data in a LIDB for fraud prevention purposes.

If telephone line numbers are not stored in a LIDB, the end user may have difficulty placing Calling Card, Collect and Bill-to-Third Number calls. Toll providers may verify the existence of a working line number via a LIDB query and may refuse to process a call if there is no valid response for a query. If LIDB Data Storage is established by the CLEC, the end user will also be able to select screening for Collect or Bill-to-Third Number calls charged against their telephone number.

CLECs should contact their U S WEST account manager for additional information concerning a LIDB Data Storage agreement.

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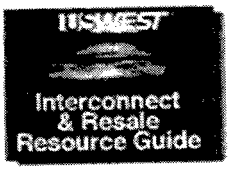

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MEDIA TYPE OUTPUTS/REPORT

The following table is a list of Media Types that are available to receive billing outputs and reports. Additional information about technical requirements to support this media can be provided by your account manager.

REPORT SUMMARY, MEDIA TYPES BY REPORT

Report Name	Source	Transmission Method/Media Type
CRIS Summary Bill	CRIS Billing	**Western Region:** Paper EDI via NDM (direct or dial in) EDI via Value Added Network (VAN) Tape Diskette/Billmate, at an added charge (Currently not available)
		Central Region: Paper EDI via NDM (direct or dial in) EDI via Value Added Network (VAN)
		Eastern Region: Paper EDI via NDM (direct or dial in) EDI via Value Added Network (VAN)
IABS Summary Bill Only available for CLECs who are reselling Frame Relay, ATM, Cell Relay, Transparent LANs, LIS, and Unbundled transport.	IABS	Paper
IABS Sub Account Bill Detail	IABS	Paper detail NDM (direct or dial in) Abbreviated Paper Bill

		Paper image on diskette Paper image on microfiche Bellcore's Billing Output Specifications (BOS) format on mag tape BOS format NDM BOS format on diskette EDI - under development

Report Name	Source	Transmission Method/Media Type
Daily Usage Feed	Billing	NDM (direct or dial in) FTP (direct only) Tape * Paper is not an option (not formatted for paper) * Electronic Fax was not developed for this output.
Loss Report	Service Order Extract	CONNECT:Direct (NDM) FTP Paper Electronic Fax * Tape is not an option; developers assumed that larger carriers would use transmission, smaller CLECs would have very small reports, it would be cost prohibitive to develop on tape.
Completion Report	Service Order Extract	CONNECT:Direct (NDM) FTP Paper Electronic Fax * Tape is not an option; developers assumed that larger carriers would use transmission, smaller CLECs would have very small reports, it would be cost prohibitive to develop on tape.

REPORTS

Order Completion Report - used to advise you that the order for the service you requested is complete. An example of a record layout for the electronic transmission follows:

RSID (Reseller Identification) 4 characters

TN (Telephone Number) 10 characters

Cus (Customer Code) 3 characters

Type (Account Type) 1-2 characters

Order Type 1 character

Order Number 6-20 characters

Listed Name 35 characters

Service Address 35 characters

Location 35 characters

Filler 35 blanks

Completion Date 8 characters (mmddccyy)

An example of the Completion Report that would be faxed follows:

COMPLETION REPORT FOR TEST TRIAL INC
DATE OF REPORT: 03/22/97 <

TELEPHONE NUMBER	CUS	ORDER/TYPE	COMP-DATE	NAME/ADDRESS
989-898-9990	312	B	N1234X096CAN 03/21/1997	TEST TRIAL INC 200 S PETERS AV,SIOUX CITY
989-990-9990	987	R	C124996C 03/21/1997	TEST TRIAL INC 2233 W. HEATH, PARK CITY
999-999-9999	232	B	N23410099A 03/21/1997	TEST TRIAL INC 3800 N METRO ST, DENVER

Loss Report (Local Service Provider) - used to notify you that the end-user has changed Local Service Provider or disconnected main line service. An example of a record layout for the electronic transmission follows:

RSID (Reseller Identification) 4 characters

TN (Telephone Number) 10 characters

Cus (Customer Code) 3 characters

Type (Account Type) 1-2 characters

Order Type 1 character

Order Number 6-20 characters

Listed Name 35 characters

Service Address 35 characters

Location 35 characters

Filler 35 blanks

An example of the Loss Report that would be faxed follows:

COMPLETION REPORT FOR TEST TRIAL INC
DATE OF REPORT: 03/22/97

TELEPHONE NUMBER	CUS ORDER/TYPE		COMP-DATE	NAME/ADDRESS
989-898-9990	312	B	N1234X096CAN 03/21/1997	TEST TRIAL INC 200 S PETERS AV,SIOUX CITY
989-990-9990	987	R	C124996C 03/21/1997	TEST TRIAL INC 2233 W. HEATH, PARK CITY
999-999-9999	232	B	N23410099A 03/21/1997	TEST TRIAL INC 3800 N METRO ST, DENVER

Daily Usage Feed

Daily Usage Feed is a file of unrated usage messages which will be provided to you daily. The file will be in EMR (Exchange Message Record) format and can be sent via NDM (Network Data Mover), tape, or paper. The file will include:

- Residence and Business Measured Service Usage

- 800 ServiceLine and WATS (Wide Area Telephone Service) Usage

- IntraLATA Toll

- Billing Line Verify

- Bill Line Interrupt

- Continuous Redial

- Call Trace

- Directory Assistance

- ADACC (Directory Assistance Complete A Call)

U S WEST will provide a daily mechanized feed in EMR format of all recorded usage/messages involving the resold end user accounts. Usage Feeds contain multi-state data for the Data Processing Center generating the daily usage feed. Individual state indentification information is contained with the message detail. The following IDs the state information contained within the usage feed:

CENTRAL REGION

AZ/NM/CO/WY/MT/UT/SO/ID

EASTERN REGION

NE/ND/SD/MN/IA

WESTERN REGION

WA/OR/NE/ID

If you have a question or problem with your output report, you should contact either your account manager or you should contact the Unified Help Desk directly; do not contact any other organizations within U S WEST Information Technologies (IT).

If you do not know who to call, call 1-888-796-9087 for assistance.

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FORMAL COMPLAINT PROCESS

Written Formal Complaint

This process has been established to formally respond to any complaint that has not been resolved by the responsible U S WEST department.

Please submit in writing specific details of the complaint and send to your respective Account Team Executive:

- Beth Halvorson
  200 S. 5th Street, Room 390
  Minneapolis, MN 55402
  (612)663-0498

- Clarence Osborn
  1801 California Street, Room 2110
  Denver, CO 80202
  (303) 896-2512

- Judy Tinkham
  150 South 5th Street, Room 3300
  Minneapolis, MN 55402
  (612) 663-3013

- In addition, please forward a copy of all complaints to:
  Victoria Aguilar
  1801 California ST, Room 2400
  Denver, CO 80202
  303-965-2222

You will be contacted upon receipt of the complaint, and a formal response with appropriate action will be communicated to you.

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TAX EXEMPTION CRITERIA

TAX EXEMPTION CRITERIA

When USWC services are sold to another provider who will resell the services to an end user, USWC's customer is the reseller. To be considered resale, the service purchased for resell MUST NOT BE substantially changed or modified.

U S WEST is not responsible for determining those customers entitled to exemption and informing them of that fact. Instead, it is the customer's responsibility to claim any exemption to which they are entitled and to provide appropriate documentation.

FEDERAL EXEMPTION REQUIREMENTS

To be exempt from federal taxes, all customers are required to submit documentation. Acceptable documentation is a form RG 31-0093 - CERTIFICATION OF EXEMPTION FROM FEDERAL EXCISE TAX ON COMMUNICATIONS SERVICES. Only one certificate needs to be obtained to tax exempt a customer from all federal tax.

STATE EXEMPTION REQUIREMENTS

State tax rates and applications vary from state to state. U S WEST is responsible for collecting these taxes and passing them along to the state and local government agencies.

The Multijurisdiction Uniform Sales and Use Tax Certificate may be used to exempt the customers from State Sales, County Sales and Local Sales when those taxes are state collected.

QUESTIONNAIRE

The information requested on the questionnaire is intended to expedite the implementation process. When the section is completely filled out, the resell customer has a 30 day period to provide the forms detailed in the Tax Exemption Criteria section.

Particularly important is the answer to question #42:

....."USWC accepts these statements in good faith as cause to exempt the revenues associated with these resell transactions from tax and fee calculations and remittances.

Do you agree to indemnify and reimburse USWC for any assessment, penalty and interest, over these revenues on which additional taxes and fees are due? Yes No (42)

Reimbursement for said costs will be due within 30 days of notification by USWC of such assessments and/or costs. ....."

A "NO" answer would require all tax exempt certificates to be provided prior to implementation.

When Sales Tax License, Registration or Permit numbers are provided on the

questionnaire, no additional form is required. The exceptions are: Colorado, New Mexico, Nebraska and South Dakota.

The following certificates must be provided within 30 days:

Certificate of Exemption from Federal Excise Tax on Communications Services (RG 31-0093)

The Multijurisdiction Uniform Sales and Use Tax Certificate

Colorado Letter of Exemption from the Department of Revenue

New Mexico SERIES 1992 - NONTAXABLE TRANSACTION CERTIFICATE

RENEWALS

Federal Tax exemption certificates are valid for a period of three years. Accordingly, a new certificate must be obtained prior to expiration of the current certificate.

State and local tax exemption certificates remain in effect continuously until the customer notifies USWC otherwise.

Exception: The states of Washington and Iowa require renewal. This request will be made at the time of federal renewal.

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C0-CARRIER INTERCONNECT MANUAL INTERFACES

Overview

This document describes the responsibilities and obligations of the U S WEST InterConnect Service Center (ISC) and the Co-Provider regarding the ordering of U S WEST' InterConnect Services by a Co-Provider.

U S WEST will provide ordering and provisioning services to the Co-Provider for InterConnect service orders, on the days and during the hours defined in the Resource Guide.

Scope of This Document

The purpose of this document is to provide guidelines and instructions for the manual interfaces between U S WEST and the Co-Provider for the ordering of InterConnect Services.

This version addresses POTS resale, PBX non-design resale, BRI ISDN resale, Private Line Resale, INP, LNP, Unbundled Loop, Unbundled Analog Line Side Port, Unbundled Digital Line Side Port, and Directory Listings Simple and Complex. (See attached). As agreement is reached regarding other services and features, this document will be revised to address those services and features.

See Attachment 3 - Mechanized Order and Pre-Order Form.

BACKGROUND

Co-Providers have the choice of ordering InterConnect services from U S WEST either manually via faxing or through IMA (Interconnect Mediated Access) system.

IMA can be accessed via the WEB or through a dedicated EDI (Electronic Data Interface) electronic interface.

The WEB access, also known as the IMA GUI (Graphical User Interface), provides many pre-request transactions as part of it's overall ordering functionality.

The initial EDI transactions (effective 12/97) that can be processed through IMA are initial and supplemental requests for Resale - POTS 1FR/1FB service only.

Pre-request transactions do not presently exist in EDI version of IMA and must be handled manually, if required, as would faxed requests.

Manual Interfaces between the Co-Provider and U S WEST

Pre-Request Interfaces

Pre-request interfaces occur prior to the actual sending of the LSR requests for InterConnect Services to U S WEST ISC either manually or via EDI.

CSR (Customer Service Records) REQUESTS

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4. Product Information - Interconnect

5. Manual Ordering Process/Forms

USW CSRs can be requested by CO-PROVIDERs with POA (Proof of Authorization). CO-PROVIDERs may obtain CSRs by:

- accessing existing IMA (InterConnect Mediated Access)
- processing OBF forms to the appropriate InterConnect Service Center

IMA Generated CSRs

CSRs can be requested on line via the current WEB-based IMA.

Copies of CSRs can be obtained by using an email option. If the CSR is larger than can be retained by email, a service inquiry should be initiated using OBF forms. Large CSRs requested through OBF service inquiries will be mailed to the CO-PROVIDER. An error message will appear on screen when the CSR is too large (usually over 100).

InterConnect Service Center (ISC) Provided CSRs

ISC provided CSR requests:

- require completed LSR and EUI forms from the CO-PROVIDER
- will be processed on a first in - first out basis

The CSR documentation from the ISC:

- will be provided no later than 72 hours (3 business days) from the receipt of the request
- output can be emailed, faxed or mailed (large requests)

InterConnect Service Center (ISC) Provided CSRs

NOTE: The USW preferred manner of sending the CSR output is Email.

Preference of delivery can be defined by completing appropriate parts of the LSR and EUI forms.

There are no quantity levels defining a large CSR request. ISC will define "large" CSR requests on an individual case basis. If CSR requests are defined as large, ISC will contact the CO-PROVIDER and negotiate the mode of delivery to the CO-PROVIDER.

CSR Requests/Fax number 1 800-236-6992 Voice number 1 800-497-7539

LSR FORM ENTRIES

FIELD	REQUIRED or OPTIONAL	ENTRY	COMMENTS
CCNA	Required	CO-PROVIDER	

		RSID/ZCID value assigned by USW	
D/SENT	Required	Date	CCYY-MM-DD
DDD	Required	Date	CCYY-MM-DD
REQTYP	Required	EA	Indicates a CSR request
AGAUTH	Required	Y	Request will be rejected without appropriate entry
DATED	Required	Date	Request will be rejected without appropriate entry
TOS	Required	First Character 1=Business 2=Residence Second Character A=Multiline B=Single line	
INIT	Required	CO-PROVIDER Name or Contact Name	
TEL NO	Required	Contact TN	NPA NXX-XXXX
EMAIL	Conditional	Email address	Enter if Email is the desired mode of delivery
STREET	Conditional	Street number and name	Enter if large CSR and mail is the desired mode of delivery
FLOOR	Conditional	Floor number	Enter, as

			appropriate, if large CSR and mail is the desired mode of delivery
ROOM /MAIL	Conditional	Room number	Enter, as appropriate, if large CSR and mail is the desired mode of delivery
CITY	Conditional	City	Enter if large CSR and mail is the desired mode of delivery
STATE	Conditional	State	Enter if large CSR and mail is the desired mode of delivery
ZIP CODE	Conditional	Zip Code	Enter if large CSR and mail is the desired mode of delivery
REMARKS	Optional	Free form information	Enter if FAX is the desired mode of delivery and provide FAX TN(s)

EUI FORM ENTRIES

FIELD	REQUIRED or OPTIONAL	ENTRY	COMMENTS
PON	Optional	CO-PROVIDER assigned number	If a PON is entered, the number must match the PON number to be assigned on the LSR requesting service. This assists in providing the correct CSR to support order

			activity when duplicates exist.
NAME	Required	Customer name currently associated to the USW account	
STREET	Required	Address currently associated to the USW account	
FLOOR	Conditional	Floor number	Enter to support address, if appropriate
ROOM	Conditional	Room number	Enter to support address, if appropriate
BLDG	Conditional	Building identifier	Enter to support address, if appropriate
AHN	Conditional	Alternate house number	Enter to support address, if appropriate
ROUTE	Conditional	Route number	Enter to support address, if appropriate
BOX	Conditional	Box number	Enter to support address, if appropriate
CITY	Required	City associated to current USW account	
STATE	Required	State associated to current USW account	
AN	Required	Telephone number associated to current USW account	
REMARKS	Optional	Free form information	

Address Validation

The Co-Provider can check the Street Address Guide (SAG) database in the current IMA GUI or via a FTP (File Transfer Protocol) transmitted batch file (provided upon user request) to determine:

- the serving wire center
- feature availability
- PIC (Primary Interexchange Carrier) availability

If the Co-Provider is repeatedly unable to validate the end user's address in the SAG, either not finding any match or only a partial match, one of three means of resolution may be utilized.

Address In Database, but Co-Provider unable to Locate

The Co-Provider may call the USWC ISC and request assistance in validating the address. If the ISC is able to internally validate the address, they will assist the Co-Provider in locating the address in the SAG database.

Address Not in Database -- Co-Provider Retains Request Until Street Address Guide Is Updated

The Co-Provider may call the USWC ISC and request assistance in validating the address. If the USWC ISC determines that the address is valid, but missing from the SAG database, the Co-Provider may retain the request until the ISC notifies the Co-Provider that the address is in the SAG database, or until the Co-Provider itself finds that the address is in the SAG.

Address Not in Database -- Co-Provider Sends Request Prior to Update of Street Address Guide

The Co-Provider may call the USWC ISC and request assistance in validating the address.

Address Not in Database -- Co-Provider Sends Request Prior to Update of Street Address Guide

If the USWC ISC determines that the address is valid, but missing from the Street Address Guide database, the Co-Provider may send their request:

- with a flag in the Remark field that the address is "not validated." for manually faxed or IMA EDI requests

or

- by using the ANV (Address Not Verified) field on the EUI form for IMA EDI requests. This method is preferred for IMA EDI.

When the USWC ISC receives the flagged request, they will ensure that the address is validated internally, and the order will be processed according to standard intervals. The standard interval begins when the address is validated. If the address appears to be misspelled, or contain other minor errors that prevent it's validation, the ISC may call the Co-Provider to confirm the corrected address.

Telephone Number Requests

All pre-service Telephone Number requests can be processed by calling (888) 796-9089.

For all telephone number requests, except Advance Telephone Number Reservation, the U S WEST order number, provided by the ISC via telephone call or fax, must be entered on the LSR to ensure proper processing of those telephone numbers.

The Co-Provider must provide the USW order number(s), the assigned telephone numbers, and the same Purchase Order Number (PON) that was provided during the manual telephone number request.

The order number should be entered in the ORD field of the LSR (also RORD, if applicable), along with a Remark providing the date that the telephone numbers were obtained.

Advance Telephone Number Reservation

The Co-Provider may reserve telephone numbers for its customer's future use, without placing a request for service, in those states where telephone number reservation is tariffed. These reservations are subject to the rates and tariffs for the state in which the telephone number will eventually be installed.

In the event that the Co-Provider wishes to make such a telephone number reservation, the Co-Provider will call the U S WEST ISC. The ISC will make certain that the number is available for reservation, and will establish a billing account to hold the number and assess appropriate reservation rates and charges.

Telephone Number Request — Vanity/Easy Numbers

The Co-Provider may request a specific telephone number for their customer, or may request an "easy" telephone number. These requests and telephone numbers are subject to the rates and tariffs for the state in which the telephone number will be installed.

When a specific telephone number is requested (for instance, one that spells a word or words), the Co-Provider will call the U S WEST ISC with the following information:

- PON
- Desired due date
- Requested telephone number
- The npa and nxx of the serving wire center from which lines will be provided

The U S WEST ISC will verify the availability of the telephone number and call the Co-Provider with the status of the telephone number request.

When a non-specific, "easy" number is requested, the Co-Provider will call the ISC with the following information:

- PON
- Desired due date
- Requested telephone number

- The npa and nxx of the serving wire center from which lines will be provided

Telephone Number Request — Vanity/Easy Numbers

The ISC will obtain a telephone number that it considers "easy" and provide it to the Co-Provider by telephone call [*more than one provided? Denise checking*]. The Co-Provider may accept or reject the specific number offered. If the Co-Provider rejects the telephone number, the ISC will obtain a different telephone number and repeat the process. After the Co-Provider has accepted the telephone number, the ISC will provide any applicable charge USOC(s), which the Co-Provider must then enter on the appropriate OBF form.

Pre-assigning Telephone Numbers

The Co-Provider may decide to have telephone numbers assigned prior to issuing it's request for service. If this is the case, the Co-Provider will contact the ISC by telephone to provide:

- Quantity of Lines
- The npa and nxx of the serving wire center from which lines will be provided
- Purchase Order Number
- Whether or not the lines are to work in a hunt group (if the numbers are to be consecutive)

NOTE: The Co-Provider's end user must NOT be on the line with the U S WEST ISC at the time this information is passed.

If the number of telephone numbers requested is 20 or fewer, and do not work in a hunt group, the U S WEST ISC will obtain the telephone numbers internally and provide them to the Co-Provider during this telephone call.

If the number of telephone numbers requested is more than 20, or if the numbers requested are to work in a hunt group, the Co-Provider must fax the Non-Hunting Telephone Number Request Form (Attachment 1) or the Hunting Telephone Number Request Form (Attachment 2) to the U S WEST ISC. The ISC will provide the telephone numbers, by fax, to the Co-Provider no later than the end of the following business day.

Pre-assigning Telephone Numbers

NOTE: The limit of twenty (20) telephone numbers applies regardless of the number of lines being requested. For example, the Co-Provider may request (by telephone) 20 telephone numbers for 10 lines that will be installed, so long as these 10 lines will not be in hunting.

Telephone Number Return Policy

All pre-assigned telephone numbers must be processed by the Co-Provider within ten business days of receipt or the numbers will be considered to be available for re-assignment.

Telephone Number Guarantee

U S WEST does **not** guarantee any pre-assigned telephone numbers. Telephone numbers cannot be confirmed until the order is in a completed status.

Placeholder Telephone Numbers

The Co-Provider may also place its request without pre-assigned telephone numbers. In this case, the telephone numbers will be provided to the Co-Provider on the Firm Order Confirmation, with a copy of the U S WEST service order.

For example, if two telephone numbers are requested, the placeholders would appear as follows:

- 000-000-0001
- 000-000-0002

Facility Availability

The Co-Provider can check if the outside facilities are available at a certain address either through IMA or by calling the ISC. Currently there is a limitation in IMA of 10 or more lines. If the request consists of more than 10 lines, the Co-Provider must call the ISC the check for facilities.

Also, if the Co-Provider is submitting the LSR manually and does not have access to the IMA system, the Co-Provider needs to call the ISC to have facilities checked manually.

Appointment Scheduling

The Co-Provider may or may not wish to reserve a specific appointment for work to be done at the end user's premises. The following headings address two scenarios: One with a reserved appointment, and one with a "closest available" appointment.

Reserving an Appointment

When the Co-Provider wishes to provide a specific appointment (for work to be done at the end user's location) to its end-user prior to the issuance of the Local Service Request, the Co-Provider must contact the U S WEST ISC to obtain the appointment.

This may be the same or a different telephone call as used to pre-assign telephone numbers. Again, the end user may NOT be on the line with the U S WEST ISC. During the telephone call, the Co-Provider will provide:

- End User Address
- A description of the work to be done
- The number of lines
- Desired due date
- Desired appointment time
- Purchase Order number

The ISC will confirm the availability of the appointment, and provide:

- U S WEST' Order Number(s)
- an appointment Confirmation Number

If the desired appointment is not available, the U S WEST ISC will advise the availability of an appointment that is nearest to the desired appointment.

When the actual request is submitted to U S WEST ISC, it must contain the same Purchase Order, order, and appointment confirmation numbers; or the request will be rejected.

The confirmation number may be entered:

- in the CNUM field on the LSR form for EDI transactions

or

- in the Remarks field of the LSR form for manually faxed requests

Requests without Reserved Appointments

If the Co-Provider sends a request for work at an end user's premises that requires an appointment, but does not reserve an appointment, the ISC will set an appointment, and will provide the appointment information in Remarks on the Firm Order Confirmation.

Due Dates

The Desired Due Date for requests affecting forty (40) or fewer lines may be determined using the standard interval matrices in the Resource Guide; however, the actual due date assigned is not determined until the order is input into U S WEST ordering system, and may be adversely affected by lack of timeliness or inaccuracies. Expedited end user desired due dates can be requested and will be honored based on availability. If field work is required, "AM/PM" appointments are available.

For purposes of this section, "forty (40) or fewer lines" means that number of lines on a single account, for the same end user and at the same location. If these lines are on separate accounts, but for the same end user and same address, the RPON field must be used by the Co-Provider to relate the requests if they are to be worked together.

Every effort will be made to meet a requested due date. Due dates are impacted by work load, features and services requested, equipment availability, premises visit requirements, etc. Commitments should not be made to end users until a Firm Order Confirmation is received.

Due Dates for requests affecting over forty (40) lines will be negotiated individually.

For further details regarding due dates, please refer to the Resource Guide.

Expedited Orders

The authorization of expedited appointments will be at the sole discretion of U S WEST. Not all expedite requests can be granted. Requests will be made with consideration of workload and available resources. Requests for expedited appointments will only be considered after the request for service(s) and/or feature(s) has been received by the USWC ISC.

It is expected that only a very small percentage of a Co-Provider's requests will be requested as expedites.

With Dispatch

For requests requiring dispatch, if the Co-Provider is unable to obtain the end user's desired due date or appointment, the Co-Provider will issue the request with the desired due date, and flag the request as an expedite. The Co-Provider will enter information about the desired appointment in the remarks or appointment fields.

If U S WEST is able to accommodate the desired due date and appointment, the USWC ISC will issue the Firm Order Confirmation with the due date and appointment information (in Remarks) for the request.

If the requested due date or appointment is not available, the ISC will call the Co-Provider to offer the best due date and/or appointment time available. If the Co-Provider accepts this due date/appointment, it will issue a SUP to reflect the new date/appointment.

In either case, U S WEST will call the Co-Provider to advise the status of the expedited request. This will occur within four (4) hours if the request is received prior to 11 a.m. Mountain Time, and by noon of the following business day if the request is received after 11 a.m.

Without Dispatch

For requests that do not require dispatch, only **dire emergencies** will be considered, as the standard due date is either the same or following business day. In these cases, the Co-Provider will issue the request with the desired due date and flag the request as an expedite.

If U S WEST is able to accommodate the expedited request, the USWC ISC will issue the Firm Order Confirmation with the expedited due date.

If U S WEST is unable to accommodate the requested due date, the USWC ISC will issue the Firm Order Confirmation with the best available date. The USWC ISC will also call the Co-Provider to advise that the requested date is not available. This will occur within four (4) hours if the request is received prior to 11 a.m. Mountain Time, and by noon of the following business day if the request is received after 11 a.m.

Manually Submitted LSRs

Refer to the Resource Guide for assistance in determining the appropriate Local Service Request forms, how to complete them, and how to submit them to the U S WEST ISC.

Post Request Notification

Firm Order Confirmation for Manually Issued Service Requests

For Forty or Fewer Lines

U S WEST will provide the Co-Provider with a Firm Order Confirmation (FOC) for each request affecting forty (40) or fewer lines. This will occur within the time period specified in the Co-Provider's Comprehensive Agreement.

For More than Forty Lines

U S WEST will negotiate the Firm Order Confirmation date on requests affecting more than forty (40) lines. The negotiation with the Co-Provider will begin within the time period specified in the Co-Provider's Comprehensive Agreement.

Jeopardy and Error Notification

There are five categories of jeopardies and errors that may be encountered on manually processed requests:

- Non-fatal Errors
- Fatal Rejects
- Complex Listing Errors
- Errors Referred to Account Team
- Jeopardies

Non-fatal Errors

Non-fatal errors are those which can be corrected by the U S WEST ISC, either with or without help from the Co-Provider, and which do not impact the timely processing of the request for service. In the event that a non-fatal error requires the Co-Provider's assistance, U S WEST will make 4 attempts over two days to reach the appropriate party at the Co-Provider. If contact cannot be established, the request will be handled as a fatal reject.

Non-fatal errors generate a call to the Co-Provider to resolve all outstanding issues. Once an understanding has been reached, U S WEST will send the Co-Provider an Error Notification designating a non-fatal error(s) with a remark summarizing the error(s). The request will be held by the ISC until a SUP is issued by the Co-Provider to correct the previous version of the request.

Fatal Rejects

Fatal rejects are discovered before the request is completely processed by the U S WEST ISC. Notification to the Co-Provider of these rejects will be via a Reject Notification that lists the item(s) that caused the Reject condition. These notifications will be faxed or emailed to the Co-Provider for manually faxed or EDI generated requests.

Fatal Rejects

The following fatal rejects may occur:

- End user authorization not filled in -- name, date, and "yes"
- End User Name, telephone number, and/or address are inconsistent
- Account balance is in pay treatment
- Resold account does not belong to U S WEST (Possibly located in independent territory within a U S WESTtate)
- Other Service Orders are pending (such as voice messaging, additional line, moves, etc.)
- Four attempts have been made to reach Co-Provider contact person within a 2 day period, 2 per day, and no response has been received (questions will be included in the Reject Notification).

Rejects Referred to Account Team

In the event that a request is received from a Co-Provider which is not certified or doesn't have contract, or in the event that no tariff supports the service requested, the U S WEST ISC will refer the request to a U S WEST Account Executive for resolution.

Complex Listing Errors

Errors on a request that involves changes to directory listings only are subject to the same fatal errors as other requests. However, when a request for changes to directory listings is combined with other changes (such as migration, or changes to the telephone service), error conditions associated with the listing will not delay the processing of the telephone service changes. In this case, the error notification to the Co-Provider is provided separately and applies only to the listing(s) in question, and will not be considered fatal to all listings.

These errors constitute a unique category, since they do not affect the due date of the request.

The U S WEST ISC will notify the Co-Provider on the Firm Order Confirmation that the complex listing is being handled as a separate request by separate group, and that all further contact will be through them.

Jeopardies

Jeopardies are conditions that are encountered after the service orders have been issued by U S WEST, and which place the due date in danger of being missed. Notification of these jeopardies is given to the Co-Provider via a telephone call and a faxed Firm Order Confirmation. If the ISC requests a SUP, no further work on the order will occur until the SUP is received.

The following jeopardy codes may apply:

- SA = Subscriber Access
- SNR = Subscriber Not Ready
- CO = Company Other
- CF = Company Facilities (delayed service type of Firm Order Confirmation)
- CL = can't complete - work load
- SO = Subscriber Other
- HO = Held Order - remark must show whether partial or complete

Subsequent due dates for orders jeopardied for customer reasons will be set using normal due processes in place today for both dispatched and non-dispatched orders.

Held Order Handling

When the Co-Provider has issued a request with a due date for service at a location where no facilities are available, the ISC will call the Co-Provider and advise of the facility shortage.

If the request is for several lines, and facilities are available for some, but not all lines, the ISC will contact the Co-Provider to issue a SUP to reduce the number of lines on the original request, and to issue a new request for the lines for which no facilities are available. The new request will be issued with a due date of "99999999" (representing a held order).

If there are no facilities for the entire request, U S WEST will call the Co-Provider and send a held order notification, via a FOC, to the Co-Provider

When facilities are available for the request, the U S WEST ISC will call and re-FOC the Co-Provider to advise that the order has been released from a held status.

Held Order Handling

An estimated ready for service date will be provided on this FOC. If the date provided is not acceptable to the end user, the Co-Provider must call the InterConnect Service Center to negotiate a new date. U S WEST will accommodate the new Co-Provider requested due date when possible.

Special Construction

Special Construction is a process required when service order activity exceeds the normal cost effective parameters for provisioning facilities. Special construction charges include, but are not limited to:

- Material
- Supplies
- Engineering
- Labor
- Supervision
- Transportation
- Right-of-way
- Cost incurred due to unusual conditions
- Overhead expenses for construction operations

Resale Construction Charges

U S WEST will apply construction charges associated with the resale of services in the same manner that it applies construction charges to retail customers. This process is not currently defined by Product Management. If an order does require special construction, the Account Manager for that Co-Provider needs to be contacted.

When this process for Special Construction is defined for both Resale and Wholesale Services, this document will be updated.

Requesting Status

For requests that have been placed manually, status may be obtained by calling the U S WEST ISC and providing the PON (Purchase Order Number) and one or more telephone numbers on the request. The ISC will provide the status of the request while the caller is online, or will negotiate the commitment with the caller.

There are six (6) statuses possible for manually placed requests:

- Submitted — Co-Provider has submitted a LSR into IMA.
- In Review — The LSR has been screened and is ready for order issuance.
- Issued — The order has been successfully processed either by flow through or manually in the Service Order Processor and a FOC

has been sent.
- Rejected — the request has failed the initial review
- Errored — an error has been encountered in a U S WEST downstream system, and is pending resolution.
- Jeopardy — A jeopardy occurred on the order when processing, i.e. a held order.
- Cancel — the LSR has been canceled, and no further work will occur on the request.
- Completed — The order or orders have been completed in the Service Order Processor.

Additional Work Requested by Customer While on Premises

If the end user requests that the service technician perform work or install services or features that are not on the service order, the service technician will advise the end user to contact his/her local service provider to request the additional services on a subsequent request.

Fax Numbers for System Interface Outage and Manual Processing

In the case where IMA would be unavailable for an extended period of time, requests should be manually faxed to (888) 796-9087.

Attachments

The attachments contained in this document are:

- NON-HUNTING TELEPHONE NUMBER REQUEST Form
- HUNTING TELEPHONE NUMBER REQUEST Form

The Non-Hunting Telephone Number Request form should be completed and faxed to the InterConnect Service Center for all requests of 9 or more non-consecutive telephone numbers.

This Non-Hunting Telephone Number Request form will accommodate any combination of the items listed below, on a per Co-Provider basis, for any non-consecutive telephone number requests:

- multiple PONs
- multiple end users
- multiple due dates
- multiple central offices
- multiple central office types
- various quantities of telephone numbers requested per PON

The Hunting Telephone Number Request form should be completed and faxed to the InterConnect Service Center for all requests associated to new or existing hunt groups.

This Hunting Telephone Number Request form will accommodate any combination of the items listed below, on a per Co-Provider basis, for any hunting telephone number requests:

- multiple PONs

- multiple end users
- multiple due dates
- multiple central offices
- multiple central office types
- various quantities of telephone numbers requested per PON

Attachment 1 - Non-Hunting Telephone Number Request Form

NON-HUNTING TELEPHONE NUMBER REQUEST Page of

CO-PROVIDER Originator: CO-PROVIDER Telephone Number:

CO-PROVIDER FAX:

USW Originator: U S WEST Telephone Number:

State:

PON	Due Date	USW Order Number	Central Office (C.O.)	C.O. Type	Line Number	Telephone Number

NON-HUNTING TELEPHONE NUMBER REQUEST Page of

CO-PROVIDER Originator: (1)CO-PROVIDER Telephone Number: (2)

CO-PROVIDER FAX: (3)

USW Originator: (4) U S WEST Telephone Number: (5)

USW FAX: (6)State: (7)

PON	Due Date	USW Order Number	Central Office (C.O.)	C.O. Type	Line Number	Telephone Number
(8)	(9)	(10)	(11)	(12)	(13)	(14)

Non-Hunting Telephone Number Request Form Field Entries

The Non-Hunting Telephone Number Request Form can be completed by:

- the CO-PROVIDER and faxed to the InterConnect Service Center
- the InterConnect Service Center based on a call from the CO-PROVIDER or "place holders" on the LSR

This form:

- should only be faxed for requests of over 20 telephone numbers. Use as many pages as are necessary.
- can also be used internally for requests of 20 telephone numbers or less as a tracking tool.

Field #	FIELD NAME	RESPONSIBLE FOR INPUT	FIELD ENTRIES
1	CO-PROVIDER Originator	CO-PROVIDER or InterConnect	Enter the name of the person requesting the numbers for the CO-PROVIDER.
2	CO-PROVIDER Telephone Number	CO-PROVIDER or InterConnect	Enter the telephone number of the person requesting the numbers for the CO-PROVIDER.
3	CO-PROVIDER FAX	CO-PROVIDER or InterConnect	Enter the FAX telephone number of the person requesting the numbers for the CO-PROVIDER.
4	USW Originator	InterConnect	Enter the name of the USW representative requesting the numbers.
5	USW Telephone Number	InterConnect	Enter the telephone number of the USW representative requesting the numbers.
6	USW FAX	InterConnect	Enter the FAX telephone number of the person requesting the numbers for USW.
7	State	CO-PROVIDER or InterConnect	Enter the State in which the numbers are being requested.
8	PON	CO-PROVIDER or InterConnect	Enter the Purchase Order Number for the telephone number(s) being

			requested. If multiple telephone numbers are requested for only one PON on this form, enter the PON number once on the first line of the request. It will be assumed that all telephone numbers requested are for that PON. If telephone numbers are being requested for multiple PONs, enter a PON for each telephone number being requested.
9	Due Date	CO-PROVIDER or InterConnect	Enter the due date of the PON associated to each telephone number being requested.
10	USW Order Number	InterConnect	Enter the pre-assigned order number, which will be used in RSOLAR, SOLAR or SOPAD.
11	Central Office	CO-PROVIDER or InterConnect	Enter the CLLI Code or a NPA NXX that the End Users service location is served from.
12	CO Type	CO-PROVIDER or InterConnect	Enter the Central Office Type that the End Users service location is served from (1AESS,5ESS,DMS-10,DMS-100, Ericsson, etc.).
13	Line Number	CO-PROVIDER or InterConnect	Enter a line number to reference each telephone number requested for a specific PON. Each PON will start with the number one. Example: PON CO123 Line # 1,2,3 PON CO234 Line # 1,2 PON CO345 Line # 1 PON CO456 Line # 1,2,3
14	elephone Number	USW NSAC	

Attachment 2 - Hunting Telephone Number Request Form

	HUNTING TELEPHONE NUMBER REQUEST	Page		of	

CO-PROVIDER Originator: _____ PON: _____

CO-PROVIDER Telephone Number: _____ CO-PROVIDER FAX: _____

U S WEST Originator: _____ Telephone Number: _____

U S WEST FAX: _____

U S WEST Order Number: _____ Due Date: _____

State: _____ Central Office (C.O.): _____ C.O. Type: _____

Hunting Type: (check one) r Series Huntingr Directory Number Hunt (DNH)r Multiline Hunting

Hunting Request: (check one)

r New (Request for a new hunt group(s) r Change (Add to an existing hunt group, rearrange lines of an existing hunt group)

Qty of hunt lines being requested: _____ Existing Hunt group: _____ Lead Number: _____

Line #	Telephone Number	Hunt Group	New HML / DNH	TN Type	Hunting Type

Comments:

Hunting Telephone Number Request Form Field Entries

CO-PROVIDER Originator	Enter the name of the person requesting the numbers for the CO-PROVIDER.
PON	Enter the Purchase Order Number for this request.
CO-PROVIDER Telephone Number	Enter the telephone number of the CO-PROVIDER representative requesting the numbers.
CO-PROVIDER FAX	Enter the FAX of the CO-PROVIDER representative requesting the numbers.
U S WEST Originator	Enter the name of the U S WEST representative requesting the numbers.

Telephone Number	Enter the telephone number for the U S WEST Originator.
U S WEST Order Number	Enter the pre-assigned order number, which will be used in RSOLAR, SOLAR or SOPAD.
Due Date	Enter the due date for the order.
State	Enter the State for which the numbers are being requested.
Central Office (C.O.)	Enter the name of the U S WEST Central Office that the End Users service location is served from. If a CLLI or NPA NXX is entered, the U S WEST representative must translate the data to the appropriate Central Office name.
C.O. Type	Enter the Central Office Type that the End Users service location is served from (1AESS, 5ESS, DMS-10, DMS-100, Ericsson, etc...).
Hunting Type	Check the appropriate box for the type of hunting being requested.
Hunting Request	Check the appropriate box for the type of request.
Qty of hunt lines being requested	Enter the total number of lines being requested.
Existing Hunt group	Enter the "existing" hunt group number **only** if this is a change to an existing hunt group (i.e. HTG A, HTG B, HML 0123, etc...). If this request is for a new hunt group, this field would be blank.
Lead Number	Enter the lead number of the hunt group **only** if this is a change to an existing hunt group. If this request represents a new hunt group, the lead number will be entered by the NSAC.
Line Number	Enter the appropriate line number for the telephone number being requested (i.e 1, 2, 3, 4, etc...). The numbering defines the requested sequence within the hunt group.
Telephone Number	This space should be left blank. NSAC will assign the telephone number (s) and enter in

	this field, before faxing back to the Originator. On a Multiline Hunt group, a blank field indicates the line will be assigned the lead number of the hunt group.
Hunt Group	Enter the appropriate Hunt Group the number/line is to appear in. (i.e. HTG A, A-DNH 0101, HML 0123, etc...) If the HML/DNH number hasn't been assigned, enter NEW HTG or NEW HML or NEW DNH. If there will be multiple HTGs/ HMLs /DNHs, enter NEW HTG #1, NEW HML #1, NEW HML#2, etc...
New HML / DNH	Enter the appropriate "New" HTG or HML or DNH number as shown in the previous column. (i.e. HTG #1, HML #1, DNH #1, etc...) NSAC will assign the new HML/DNH number at the same time they assign the new TNs and enter the new HML/DNH number in this column. The HTG numbers will be assigned by the InterConnect Center.

Hunting Telephone Number Request Form Field Entries (Continued)

TN Type	Used for Multiline Hunt groups only. Valid entries would be:		
	No entry	-	the lead number of the hunt group would be assigned to the line
	Hunting	-	which would apply to a number in a Multiline Hunt group, that when dialed would attempt to reach the terminal number in which it is assigned. If that TER is busy, the call would continue through the remainder of the Multiline Hunt group.
	Non-Hunting	-	which would apply to a number in a Multiline Hunt group, that when dialed would attempt to reach the terminal number in which it is assigned. If that TER is busy, the caller would receive a busy signal.
Hunting	This field is used to identify Hunting Options, which have been		

Type	requested. Valid entries in this field would be:			
		IF the Hunting Type is...	**THEN options available may be...**	
		Series Hunting	• Circular • Bridged Night Numbers© • Preferential List Hunt© • Secretarial© • Overflow©	
		Directory Number Hunt (DMS-10)	• Circular • First • Sequential	
		Multiline Hunting	• Circular • Preferential© • Overflow© • Hunting Telephone Numbers© • Non-Hunting Telephone Numbers© • Series Hunt Group w/in a HML©	
		© Verify availability. Not available in all switch types and/or states.		

Mechanized Order and Pre-Order Processes Currently in Place

	Activity								
Product	**CSR Retrieval**	**TN Reservation**	**Address Validation**	**Appointment Scheduling**	**Facility Availability**	**Service Availability**	**IMA Ordering Ability**	**Dates**	**Flow Through**
POTS Resale	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Dec 97	Yes For activities of Migration As Is, and

									some Migration As Specified for the Central Region
PBX Non-Design Trunks Resale	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Jun 98	Not scheduled
Centrex Resale	Yes	N/A	Yes	Yes	Yes	Yes	EDI—Pending GUI—N/A	Dec 98	Not scheduled
BRI ISDN Resale	Yes	Yes	Yes	Pending changes	Yes	Yes	Yes	Sep 98	Not scheduled
Private Line Resale	Yes	N/A	Yes	N/A	Yes	N/A	Yes	Sep 98	Not scheduled
INP	Yes	N/A	Yes (Central Office address)	N/A	N/A	N/A	Yes	Jun 98	Not scheduled
LNP	Yes (only available prior to porting)	N/A	N/A	N/A	N/A	N/A	Yes	Jun 98	Not scheduled
Unbundled Loop	Yes	N/A	Yes	N/A	Yes	N/A	Yes	Jun 98	Not scheduled
Unbundled Analog Line-Side Port	Yes	Yes	Yes (Central Office address)	N/A	N/A	Yes	Yes	Sep 98	Not scheduled
Unbundled Digital Line-Side Port	Yes	Yes	Yes (Central Office address)	N/A	N/A	N/A	Pending	Dec 98	Not scheduled
Directory Listings Simple & Complex	Yes	N/A	Yes	N/A	N/A	N/A	Yes	Sep 98	Not scheduled

Legend:

YesIndicates current availability in IMA, and both EDI and GUI

PendingIndicates availability in IMA by the end of 1998

N/ANot applicable to a specific product

Not scheduledNot scheduled for 1998 completion

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PROOF OF AUTHORIZATION/LETTER OF AGENCY

Authorization Requirements

CLECs and resellers must obtain permission from end-users to act on their behalf in matters pertaining to the end users' communications services. The scope of this permission covers activities relating to obtaining records and placing orders on behalf of an end-user. This relationship is established by providing Proof of Authorization (POA) to a CLEC or reseller. Although there may be other methods of authorization, the authority can be arranged through a document called a Letter of Agency (LOA). This arrangement is common between local exchange service providers and other third-party providers.

Before CLECs or resellers can authorize activity on an end-user account, they must have a LOA stating the scope of that authority. It is not necessary for the letter of agency to accompany requests for records or services; however, indication of agency authority is a required field entry for U S WEST representatives on requests for customer service records and Local Service Request forms.

This requirement is based on the need to protect both the end-user and the reseller from mishandling of accounts. Your account manager is available to help you understand the importance of authorization requirements for all parties involved.

LOA Content

The content of the Letter of Agency must identify:

i) the scope of the authorization; e.g., local service, telephone number, account number
ii) the name of the end-user authorizing the agreement
iii) the effective date of the agreement

LOA Obtained

The POA/LOA may be obtained in the following ways:

a.) The end user's written Letter of Authorization or LOA (see attached sample letter).
b.) The end user's electronic authorization by use of an 800 number.
c.) The end user's oral authorization verified by an independent third party (with third party verification as POA).
d.) A prepaid returnable postcard supplied by Reseller which has been signed and returned by end user, or a copy of such that has not been returned fourteen (14) days after the postmark date. Reseller will wait fourteen (14) days after mailing the postcard before placing an order to change.

SAMPLE LETTER OF AGENCY

Food for Less
8401 Washington Street
Denver, CO 80202
303 555-1000

DATE:

TelSys Inc.
Bob Walker, Sales Associate
1020 18 Street, Suite 1210
Denver, CO 80202

Dear Bob:

This letter authorizes TelSys, Inc. to act as our communications representative/agent when dealing with U S WEST. We authorize TelSys Inc. to obtain information and/or copies of all our network services and to order and manage all negotiations for the installation of telecommunications services for the above listed address and with respect to the following numbers:
555-1000
555-1001
555-1002

This authorization shall remain in effect until canceled by us in writing. This letter of agency rescinds any other letter of agency previously entered into by Food for Less

Sincerely,

Angus O'Leary, President

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SS7 CERTIFICATION TESTING - CLEC

The CLEC switch must be tested to prove compliance and compatibility with network standards. This is an upfront process. The attached worksheets specify SS7 tests that are required to successfully pass certification. Following installation, additional testing must be completed to validate the accuracy of installation.

Worksheet for Level 2
Worksheet for Level 3
ISUP FDG Calls Worksheets

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Worksheet For Level 2 Compatibility Tests

LATA: _____ Link/Link -Set Tested: _____ Carrier: _____

USW Contact _____ Carrier Contact: _____

(Name) (Telephone) (Name) (Telephone)

Carrier STP: _____ USW STP: _____

(Type) (Generic) (Type) (Generic)

USW Office: DNA for MTP Level 2 Carrier Office: _____

(Type) (Generic) (Type) (Generic)

Date	Init.	TR905	Test Title	Pass/Fail	Comments
		1.2	Timer T2		
		1.3	Timer T3		
		1.4	Timers T1 & T4		
		1.5	Normal Alignment		
		1.19	Timer T4 Emergency		
		1.25	Deactivation During Initial Alignment		
		1.26	Deactivitation During Alignment		
		1.28	SIG Received During Link In-Service		
		1.29	SIGS Received During In-Service State		
		1.32	Deactivitation During Proving Period		
		3.1	Break Transmission Path Link Aligned and Ready		

		3.2	Corrupt FIB's		
		3.5	Broken Transmission Path		
		5.1	Flag Insertion Within Octet Boundaries		
		6.1	Signal Unit Error Rate Monitor		
Date	Init.	TR905	Test Title	Pass/Fail	Comments
		6.2	Signal Unit Error Rate Monitor		
		6.3	Consecutive Corrupt Signal Units		
		7.1	Alignment Error Rate Monitor		
		7.3	Alignment Error Rate Monitor		
		8.1	MSU Generation		
		8.2	Negative Acknowledgement		
		8.3	Retransmission Buffer Full		
		8.4	Erroneous FIB		
		8.7	Erroneous Retransmission - Multiple FISU		
		8.10	Abnormal Backward Sequence Number		
		8.11	Abnormal Backward Sequence Number		
		8.12	Delay of Acknowledgement		

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Worksheet For Level 3 Compatibility Tests

LATA: _____ Link/Link -Set Tested: _____ Carrier: _____

USW Contact _____ Carrier Contact: _____
(Name) (Telephone) (Name) (Telephone)

Carrier STP: _____ USW STP: _____
(Type) (Generic) (Type) (Generic)

USW Office: DNA for MTP Level 2 Carrier Office: _____
(Type) (Generic) (Type) (Generic)

Date	Init.	TR905	Test Title	Pass/Fail	Comments
		1.3	Link Activation - Multiple Links		
		2.1	Discrimination of Invalid Point Code		
		2.4.1	Load Distribution (multi-link link-set)		
		2.5.1	Load Sharing Between Combined Link-sets		
		3.1	Changeover Initiated at One Side of a Link-Set (multi-link link-set)		
		3.16	Changeover to Alternate Link-set		
		4.1	Changeback Within a Link-set (multi-link link-set)		
		4.8	Changeback From Another Link-set		
		7.1.1	Inhibit Available Link		

		7.1.2	Inhibit Unavailable Link		
		7.2.1	Inhibit Denial		
		7.6.1	Management Uninhibit With Changeback		
		7.6.2	Management Uninhibition of a Link - Without Changeback		
		7.10	Link Forced Uninhibit		
		7.17.1	Management Inhibiting Test - Normal Procedure		

The following tests comprise the Signaling Route Management Tests as shown in TR-TSV-000905 Supplement 1. Attachment E of the U S WEST Compatibility Test Plan for SS7 Carrier Interconnection provides a written description of these tests and the expected results. The terms used in the test titles refer to Link-sets and network elements as shown in Figure E-1 of that attachment.

Date	Init.	TR905	Test Title	Pass/Fail	Comments
		9.0.1	SP2 Out-ofService		
		9.0.2	SP1 and SP2 Out-of-Service		
		9.0.2A	Send Traffic From B1 to A1		
		9.0.3	Force Traffic Onto L3 and L4 at SBI From B to A After SP1 and SP2 Out-of-Service		Test not recommended at this time. No test equipment exists, at this time, with the needed capabilities.
		9.0.4	SP2 Restored to In-Service - SP1 Out-of-Service		
		9.0.5	SP1 Restored to In-Service - SP2 In-Service		
		9.0.6	(TFC Procedure)		Test not recommended at this time.

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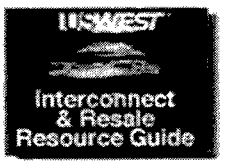

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ISUP FGD Call Through Test #1

Description: Calls originating from line PIC'd to 118 delivered to IC via Direct ISUP FGD Trunks

Test #	Originating Number	Dialed Digits	Expected Results	Date/ Time	Actual Results/Remarks
A		00	IC Operator		
B		1+503-242-1000	Milliwatt Tone (answer)		
C		0+503-242-1000	IC Operator		
D		011+6131196	Australian Weather (answer)		
E		011+4685551212	Foreign Recording		
F		01+6131196	IC Intl Operator		
G		01+4685551212	IC Intl Operator		
H		10118+(local # within test CO)	Answer		
I		10118+(originating #)	Busy		
J		10118+#	IC Cut-Thru Tone*		

*Some IC's do not provide Cut-Thru service

ISUP FGD Call Through Test #2

Description: Calls originating from line PIC'd to 118 delivered to IC via Access Tandem ISUP FGD Trunks

Test #	Originating Number	Dialed Digits	Expected Results	Date/ Time	Actual Results/Remarks
A		00	IC Operator		
B		1+503-242-1000	Milliwatt Tone (answer)		
C		0+503-242-1000	IC Operator		
D		011+6131196	Australian Weather (answer)		
E		011+4685551212	Foreign Recording		
F		011+6131196	IC Intl Operator		
G		01+4685551212	IC Intl Operator		
H		10118+(local # within test CO)	Answer		
I		10118+(originating #)	Busy (release)		
J		10118+#	IC Cut-thru Tone*		

*Some IC's do not provide Cut-Thru service

ISUP FGD Call Through Test #2a

Description: Calls originating from line PIC'd to 118 delivered to IC via Access Tandem ISUP FGD Trunks

Test #	Originating Number	Dialed Digits	Expected Results	Date/ Time	Actual Results/Remarks
A		00	IC Operator		
B		1+503-242-1000	Milliwatt Tone (answer)		
C		0+503-242-1000	IC Operator		
D		011+6131196	Australian Weather (answer)		
E		011+4685551212	Foreign Recording		
F		011+6131196	IC Intl Operator		
G		01+4685551212	IC Intl Operator		
H		10118+(local # within test CO)	Answer		
I		10118+(originating #)	Busy (release)		
J		10118+#	IC Cut-thru Tone*		

*Some IC's do not provide Cut-Thru service

ISUP FGD Call Through Test #3

Description: Calls originating from line not PIC'd to 118 delivered to IC Direct ISUP FGD Trunks

Test #	Originating Number	Dialed Digits	Expected Results	Date/ Time	Actual Results/Remarks
A		10118+00	IC Operator		
B		110118+1+503+242-1000	Milliwatt Tone (answer)		
C		110118+0+503+242-1000	IC Operator		
D		101118+011+6131196	Australian Weather (answer)		
E		110118+011+468+555-1212	Foreign Recording		
F		10118+01+6131196	IC Intl Operator		
G		110118+01+468+555-1212	IC Intl Operator		
H		10118+(local # within test CO)	Answer		

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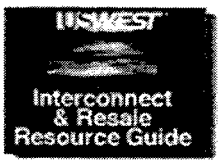

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DIRECTORY LISTING SERVICES

What it is

Competitive Local Exchange Carrier (CLEC) Listing Service consists of U S WEST's placing the names, addresses and telephone numbers of your end users in U S WEST Communications' listing database, based on end-user information provided to U S WEST by you.

U S WEST will use the Listings in directory assistance and will make them available to directory publishers, based on the option you select for use of your Listings.

U S WEST will accept at no charge, one primary listing for each main telephone number belonging to your end user customers. Primary listings are as defined for U S WEST end users in U S WEST's general exchange tariffs.

Optional Features

Premium listings, e.g., additional, foreign, cross-reference, informational, and privacy listings such as non-published or non-listed are also available. CLEC will be charged for these premium listings at U S WEST's general exchange listing tariff rates or at the applicable standard resale rate in each state.

CLEC Listing Service is available to facilities-based local service providers and to resellers of U S WEST's basic or unbundled local service.

CLEC will provide their end user listings to US WEST in a standard format. U S WEST will use the listings in accordance with the option you select. There are two options for use of your listings:

1. Have U S WEST automatically include your
   Listings in directory assistance, make the

   Listings available to directory publishers for

white page directories or make the listings available to other third parties.

or

2. Restrict U S WEST's use of your Listings to directory assistance. With this option, you forge separate agreements with all third parties, directory publishers, and U S WEST entities for all other uses of your listings. U S WEST can release CLEC Listings to others only after each third party furnishes proof of contract with you to U S WEST.

Contracts

U S WEST license agreements (contracts), as well as some tariffs, describe the terms and conditions for CLEC Listings. Interconnect Services will establish your contract, and your Account Manager is your first point of contact.

What you should know about CLEC Listings

In order to submit CLEC Listings, you will need to format your Listings according to specifications that U S WEST will supply. We recommend that you negotiate a CLEC Listings Agreement early in your interconnection process so that you will be ready to transmit Listings as soon as your first customer's service is effective.

Benefits for YOU

With Option 1, you save administrative time. Your end-user listings:

- automatically go into U S WEST's directory assistance (DA)
- are automatically available to all directory publishers, including U S WEST's publisher affiliate, who have license agreements with
- U S WEST for the geographic areas you serve.

With Option 2, you control usage.

- Your listings only go into U S WEST's directory assistance (DA).
- You negotiate separate agreements for additional uses of your listings.

Then

- U S WEST provides those third parties with your Listings, saving you formatting time.

CLEC and Reseller Responsibilities

- Negotiate contracts for provided services and select appropriate listing option 1 or 2.

  Work with Account Manager to obtain listing definitions and instructions on how forms are used.

- Obtain Directory Service Order Guidelines (DSOG) from Bellcore and follow procedures identified when sending listing requests to ICS for service order issuance. Section 5 of this document provides instructions on the preparation of these forms.

  If listing questions arise,contact ICS for assistance.

  Correctly complete listing forms and forward to ICS or Listing Service System (LSS), as appropriate or if using Mediated Access, input listing information on the appropriate listing screens.

- ISPNP and Unbundled Loop services are provided to end user customers by Competitive Local Exchange Carriers.

  Listings on these types of services are established by Operator Information Services via LSS.

  Work with Account Manager to obtain the form U S WEST Communications Directory Assistance/White Page Listings Order Request which is used for listings issued in LSS. Section 5 of this document provides instructions on the preparation of this form.

- Determine with end user customer which number(s) will be listed in Directory Assistance and/or directories.

  Negotiate additional listings and/or directory advertising.

Act on end users behalf when negotiating with U S WEST and U S WEST Dex.

- Contact white and yellow page publishers, including U S WEST Dex, to arrange directory advertising on behalf of the end user customer.

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Wholesale Local Markets New Services (BFR Process) REQUEST APPLICATION

(Bonafide Request Process)

What it is

The Wholesale Local Markets New Services (BFR Process) (BFR Process) Request Application allows U S WEST to receive and analyze requests from wholesale local markets customers for new local interconnection and/or unbundled network elements. U S WEST will review requests based on applicable legal and regulatory guidelines established for interconnection and open network architecture.

The Wholesale Local Markets New Services (BFR Process) (BFR Process) Request Process provides USWC account teams and customers a standardized process for submitting requests for new network elements or interconnection. Your account team is the key contact in the request process, and requests for new services should be submitted through her / him, via the New Services Request Application Form.

See the attached form for the Wholesale Local Markets New Services (BFR Process) (BFR Process) Request Application Form. Questions regarding completion of the form should be addressed to your account team. Applicable legal or regulatory requirements and timeframes for evaluating your request will be identified upon receipt of the completed application form.

WHOLESALE MARKETS INTERCONNECTION BONA FIDE REQUESTS/NEW SERVICES REQUEST APPLICATION FORM

REQUEST APPLICATION

The information requested in this application is essential to evaluate your request for interconnection or access to unbundled network elements. Your request will be reviewed for: technical feasibility (technically and operationally feasible); qualification as a bona fide request (qualified as a network element or interconnection under the Act); or other criteria as may be appropriate. Specific requirements and timeframes for evaluating your request are based on applicable legal or regulatory requirements, and will be identified upon receipt of the completed request application form.

Please complete the application form in full, and submit it to your U S WEST account representative at

the address or fax number listed on the attached letter. All sections must be completed before we can begin processing your request. Please use additional pages as necessary.

1. Requested by:

_____

Company Name

_____

Address

_____

_____

Primary Contact Name, Telephone Number and Fax Number

_____

Date of Request Date Received (completed by USWC)

_____ _____

2 a. Please indicate the type of request (X):

[ ] Competitive Local Exchange Carrier (CLEC) requesting Interconnection or Network Element(s) under the provisions of the Telecommunications Act of 1996.

[ ] Commercial Mobile Radio Service (CMRS) provider requesting Interconnection or Network Elements under FCC 96-325 application of the Telecommunications Act of 1996.

[ ] Enhanced Service Provider (ESP) requesting a basic network capability under Open Network Architecture FCC or state rules. 2 b. If requesting interconnection or unbundled network elements under the provisions of the Telecommunications Act, please attach a statement certifying that each network element or type of interconnection requested by you will be used to provide local telecommunications services. In addition, the following information is required:

Date of Interconnection Agreement approval: _____

3. Please indicate here if you wish to submit this information on a confidential basis. If yes, please

mark the information as "Confidential" or "Proprietary". Information marked as such will be treated according to the terms described in the interconnection agreement.

Yes_____ No_____

4. Please provide a detailed technical description of each requested network element or interconnection. Please attach a drawing or illustration, as appropriate. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

5. Please identify the desired interface specifications for the requested Network Element or Interconnection. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

6. Please identify the type of equipment you plan to interconnect to the U S WEST network.

_____

_____

_____

7. Please identify the specific U S WEST location,(e.g. wire center, CLLI code, NPA, NNX, V&H coordinates) and quantity for each requested network element or interconnection. Quantities should include: number of lines, trunks, units, etc. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

8. Please identify your specific location for each requested network element or interconnection requested; e.g., street address and cross-street information. If necessary, please include a map or diagram.

_____

_____

_____

9. Please provide any additional information that would be useful in evaluating your request.

_____

_____

10. Please list additional contacts, such as technical personnel, who may help us during the evaluation of this request.

Name, Phone and/or Fax Number:

_____

_____

_____

New Services Request Application

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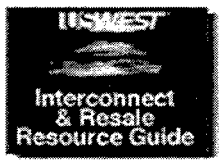

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WHOLESALE LOCAL MARKET NEW SERVICES REQUEST APPLICATION

REQUEST APPLICATION

The information requested in this application is essential to evaluate your request for interconnection or unbundled network elements. Your request will be reviewed for: technical feasibility (technically and operationally feasible) and qualification as a bona fide request (qualified as a network element or interconnection under the Act); or other criteria as may be appropriate. Specific requirements and timeframes for evaluating your request are based on applicable legal or regulatory requirements, and will be identified upon receipt of the completed request application form.

Please complete the application form in full, and submit it to your U S WEST account representative at the address or fax number listed on the attached letter. All sections must be completed before we can begin processing your request. Please use additional pages as necessary.

1. Requested by:

Company Name

_____

Address

_____

_____

Primary Contact Name, Telephone Number and Fax Number

_____

Date of Request Date Received (completed by USWC)

_____ _____

2 a. Please indicate the type of request (X):

[ ] Competitive Local Exchange Carrier (CLEC) requesting Interconnection or Network Element(s) under the provisions of the Telecommunications Act of 1996.

[ ] Commercial Mobile Radio Service (CMRS) provider requesting Interconnection or Network Elements under FCC 96-325 application of the Telecommunications Act of 1996.

[ ] Enhanced Service Provider (ESP) requesting a basic network capability under Open Network Architecture FCC or state rules.

2 b. If requesting interconnection or unbundled network elements under the provisions of the Telecommunications Act, please attach a statement certifying that each network element or type of interconnection requested by you will be used to provide local tele-communications services. In addition, the following information is required:

Date of certification as CLEC: _____

Date of Interconnection Agreement approval: _____

3. Please indicate here if you wish to submit this information on a confidential basis. If yes, please mark the information as (Confidential) or (Proprietary). Information marked as such will be treated according to the terms described in the interconnect agreement

Yes_____ No_____

4. Please provide a detailed technical description of each requested network element or interconnection. Please attach a drawing or illustration, as appropriate. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

5. Please identify the desired interface specifications for the requested network Element or Interconnection. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

6. Please identify the specific location,(e.g. wire center) and quantity for each requested network element or interconnection. Quantities should include: number of lines, trunks, units, etc. (Additional information may be requested, if needed, to complete a feasibility analysis or quote).

_____

_____

_____

7. Please provide any additional information that would be useful in evaluating your request.

_____

_____

---

8. Please list additional contacts, such as technical personnel, who may help us during the evaluation of this request.

Name, Phone and/or Fax Number:

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LONG DISTANCE CARRIER SELECTION

Predesignated Interexchange Carrier Changes

PIC/LPIC changes on individual end user lines submitted on the appropriate service request forms will be processed by Interconnect Service Center (ICS). The service request may be for PIC/LPIC changes only or coincident with other service activity.

Bulk processing of PIC/LPIC changes submitted to U S WEST by Interexchange Carriers (IXC) through the CARE process will be rejected back to the submitting IXC.

Unauthorized PIC Change

Since the only PIC change that will be processed by U S WEST will be initiated by the CLEC on behalf of their end user, U S WEST will not be involved in any PIC dispute initiated by their end user. The CLEC will be responsible for resolving any PIC dispute.

PIC Freeze

When an account is sold to a non-facility based Local Service Provider (LSP) and U S WEST Communication (USWC) is the switch provider, USWC will only change the Inter and/or intra LATA PIC when the LSP who owns the account/line issues a LSR, directing USWC to do so. USWC will NOT accept Inter and/or Intra PIC changes directly from a Long Distance Carrier (LDC) through our Regional Subscription System (RSS). If a LDC submits a PIC change through RSS, USWC will reject the order back to the LDC with a specific Transaction Code-Status Indicator (TCSI) that advises the LDC the line has been sold.

USWC cannot issue a PIC Freeze on a resold account, because we do not own the account. If the LSP wants the PIC to be frozen they will need to set up their own freeze process, and reject any PIC change request they may receive from a LDC. The Ordering and Billing Forum (OBF) - Subscription Committee has created guidelines on how LSPs communicate the existence of a PIC freeze on an account.

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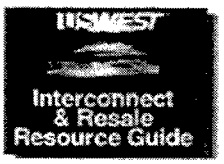

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UNAUTHORIZED SERVICE PROVIDER CHANGE

Proof of Authority (POA)

The CLEC/Reseller shall make Proof of Authority (POA) available to U S WEST upon request. Prior to placing orders that will disconnect a line from another to CLEC/Reseller's account, the CLEC/Reseller is responsible for obtaining all information needed to process the disconnect order and reestablish the service on behalf of the end user. If a CLEC/Reseller is displaced by another, the CLEC/Reseller is responsible for coordination with the other CLEC/Reseller.

Three Business Days

Should an end user dispute or a discrepancy arise regarding the authority of the CLEC/Reseller to act on behalf of the end user, the CLEC/Reseller is responsible for providing written evidence of its authority to U S WEST within three business days.

Conflicts

If there is a conflict between the end user designation and the CLEC/Reseller's written evidence or authority, U S WEST shall honor the designation of the end user and change the end user back to the previous service provider.

If the CLEC/Reseller does not provide the POA within three business days, or if the end user disputes the authority of the POA, the CLEC/Reseller must, by the end of the third business day:

1. Notify U S WEST to change the end user back to the previous CLEC/Reseller

and

2. Provide any end user information and billing records the CLEC/Reseller has obtained relating to the end user to the previous CLEC/Reseller

and

3. Notify the end user and U S WEST that the change has been made

and

4. Remit a slamming charge to U S WEST, as compensation for the change back to the previous CLEC/Reseller.

Switches back to U S WEST

If an end user is switched from a CLEC/Reseller back to U S WEST and there is a dispute or discrepancy with respect to such a change, the CLEC/Reseller may request to see a copy of the POA which U S WEST has obtained for the end user. If U S WEST is unable to produce a POA within three business days, U S WEST shall change the end user back to the CLEC/Reseller without imposition of any Customer Transfer Charge

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PRE-ORDER FORM-CLEC

SIGNALING A CCSAC/SS7 Baseline Service product initial planning session is required between U S WEST and all CLECs prior to formal order completion. Up front negotiation will identify the need for a pre-order form, link data sheet and special requirements for certain sections of the Access Service Request (ASR) and Translation Questionnaire (TQ) final form.

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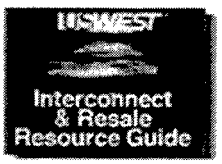

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RESALE USOC PRODUCT LIST

USOC codes for your state will be provided by your Account Manager. For a current listing of USOCs for your particular needs or for more detailed product information please contact your Account Manager.

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- PBX Service
- Private Line Services
- Public Access Line Service - Basic and Smart
- Single Line/Centrex 21 ISDN
- Voice Messaging Service/Business Voice Messaging
- Wire Maintenance and Prewire

4. Product Information - Interconnect

5. Manual Ordering Process/Forms

Interconnect and Resale Resource Guide

BUSINESS EXCHANGE SERVICE

Product Description

Basic product features

Flat Rate Basic Local Exchange Service for business customers provides access to the public switched network for local and long distance dialing. Flat rate service is unmeasured, allowing the subscriber to make an unlimited number of calls within the local calling area at a fixed monthly rate.

Message/Measured Rate Basic Local Exchange Service for business customers provides access to the public switched network for local and long distance calling. Measured Rate Service bills the customer a flat monthly rate for a set number of local calls or messages per line with an additional charge for every local message in excess of the base allowance. Message Rate Service bills the subscriber a flat monthly rate which includes a monetary usage allowance for calls completed to stations in the local calling area. Charges for local calls in excess of the allowance are also applicable and are based upon length of call, originating and terminating point of call, and time of day call made. Message/Measured Rate Service is typically offered as part of an optional calling plan.

Basic product capabilities and restrictions

The service is comprised of the exchange access line, which includes the central office equipment and all the U S WEST plant facilities up to and including the Standard Network Interface.

How this product works

This service provides basic dial tone for business customers.

Central Office Features

Many optional exchange products are available and are described below.

Hunting Service

This functionality completes incoming calls to any of the lines in a group from a line in the group that is called but is in use. This service can be used for sequential hunting (search begins at first line in the group and ends at either the first available line or at the last line in the group) using series completion Hunting (5 lines or less) or multi-line Hunting (6 or more lines), or for circular hunting (search begins at line dialed and ends at line immediately preceding line dialed.

The parameters in the central office associated with the hunt group directs an incoming call to the appropriate next available line. Generally, an incoming call causes the first line in a hunt group to be checked for

availability. If the line is available, the call is completed. If the first line is busy, then the search for an available line continues in the order that the line appears in the hunt group. When an available line is found, the call is completed. If no available lines exist, the incoming caller hears a busy signal.

Custom Calling Services

Call Waiting - Call Waiting allows the subscriber to receive a second call while they are already on the line.

Call Transfer - Call Transfer is a feature which allows a customer to add a third person to an existing incoming call or to transfer an incoming call to a third party and hang up without disconnecting the call.

Call Forwarding Busy Line/Don't Answer - This feature is intra-office only. Incoming calls are automatically transferred to a pre-determined Call Forward Number (CFN) The CFN is established by issuance of a service order.

Call Forwarding Busy Line/Don't Answer Customer Programmable - This feature allows the customer to program the forward to telephone number at any time by dialing an access code and the forward telephone number from their phone. This feature can be programmed at any time, to any number without a service order.

Call Forwarding Busy Line/Don't Answer Expanded - This features is inter-office. It forwards call outside of the customer's Central Office. Incoming calls are automatically transferred to a pre-determined CFN. The CFN is established by issuance of a service order.

Call Forwarding Variable - Incoming calls may be transferred to any local or long distance number that the customer chooses and programs. It is a customer programmable feature that allows a customer to forward all incoming calls to a different telephone number. Calls can be forwarded to any dialable telephone number (local, long distance, 800, etc.).

Call Forwarding Without Call Completion - This is an option of Call Forwarding Variable and allows the customer to forward all calls without waiting for the forward to number to answer or making a second attempt to activate the feature.

Speed Calling - Speed Calling allows a customer to place calls to frequently called numbers, local or long distance, by dialing 1 or 2 digits instead of the complete number. Lists are established or changed by the customer.

Speed calling is available in either 8 number or 30 number capacity.

Three Way Calling - This feature allows a customer to add a third party to an existing call. The customer can either "conference" on the third party or can talk privately to the third party. Customers can set up a call between self and two other parties.

Intracall/Home Intercom - This feature creates an intercom-like system using a single line that has multiple telephone sets. The service works as follows:

Dial telephone number

Hear busy signal
Hang up receiver
All sets on line ring with a short ring

Remote Access Forwarding & Scheduled Forwarding - Advance Intelligent Network (AIN) technology allows a "trigger" to be placed on the customer's telephone number. Remote Access Forwarding allows a customer to route all incoming calls to another destination and may be activated, deactivated, or changed from the customer's premises or from any remote location. Scheduled Forwarding allows a customer to route all incoming calls to another destination by building a forwarding schedule based on time-of-day and day-of-week. The customer controls on and off, forward to number, etc., by calling the correct Update Center number and following instructions provided by a series of voice prompts.

HOT LINE/WARM LINE - This feature allows a customer to place an outgoing call to a preprogrammed number without having to do any dialing. Outgoing calls are automatically routed to the preprogrammed telephone number when the customer takes the phone off-hook.

Abbreviated Access 1 Digit - allows a customer to place a call to a predetermined number by dialing a 1 digit speed calling code. Customers share a speed call (8) list with their Enhanced Service Provider (ESP). Abbreviated Access 2 Digit allows a customer to place a call to a predetermined number by dialing a 1 digit speed calling code. Customers share a speed call (30) list with their Enhanced Service Provider (ESP).

Custom Local Area Signaling Services (CLASS)

CLASS products are based on technology call "Signaling System Seven" (SS7). SS7 technology allows transmission of information about the terminating and originating number between central offices.

CLASS - Anonymous Call Rejection - This feature prevents blocked calls from being received. Blocked calls are those calls on which per call or permanent per line blocking has been activated in order to prevent name and number information from passing to the called party. The blocked call originator will receive the following message, "The party you are calling does not accept blocked calls. To call this person, hang up, dial *82 to unblock your line and dial the number again."

CLASS - Call Rejection - This service allows customers to "block" incoming calls from certain numbers, as well as a call just received even if the customer does not know the number. The customer activates the service by dialing *60 or (1160 for rotary phone users) and follows the recorded instructions. To deactivate, the customer dials *80 or (1180 for rotary phone users) and follows the recorded instructions.

CLASS - Automated Call Trace - This service gives the customer the option of using an automated trace system rather than a manual trace. The mechanical trace is done after a call rather than a manual trace which has to be set up to trace future calls. It traces the last incoming call whether it was answered or not or if another CLASS feature such as Last Call Return was used. It traces the originating telephone number calling, even if the call was forwarded via a call forwarding service.

CLASS - Call Waiting Identification - This feature allows subscribers to

"visually" see who is calling. The customer must have Caller ID and a Call Waiting display unit.

CLASS - Caller Identification Blocking - This service prevents the telephone number from being delivered to the Caller Identification subscriber. It must be activated each time the customer wishes to prevent the number from being displayed to the called party. All customers in offices equipped with CLASS have the ability to block this information at no charge.

CLASS - Caller Identification Number - This feature lets the customer know the telephone number of the calling party before they answer the phone. It requires Customer Provided Equipment (CPE) with a display screen.

CLASS - Caller Identification Name and Number - This feature lets the customer know the first 15 characters of the listed number and the telephone number of the calling party before they answer the phone. It requires Customer Provided Equipment (CPE) with a display screen.

CLASS - Continuous Redial - This feature allows customers who reach a busy signal to "prompt" the Center Office to complete the call for them.

A distinctive ring informs the subscriber when the call can be completed (short, short, long ring) Once initiated, the feature continues to redial until the called party answers or the feature times out (30 minutes). A busy line is tried every 60 seconds until the feature times out. The feature can be deactivated before the time out period.

CLASS - Last Call Return - This service allows the user to dial the number of the last incoming call whether it was answered or not. Upon activation, a recorded announcement will provide the customer with the caller's telephone number (unless it was a blocked number) and will return the call. If the line is busy, Last Call Return will continue to redial for up to 30 minutes.

CLASS - One Call Unblock - This service allows the subscriber to transmit the name and telephone number for one call from a blocked line. Line Blocking returns to the line when the caller hangs up.

CLASS - Priority Call - This feature allows a subscriber to establish a list of special telephone numbers. When an incoming call is from a number on the Priority Call List, a distinctive ring alerts the customer (short, long, short). It functions only when the calling and called numbers are in CLASS equipped offices within the same LATA.

CLASS - Selective Call Forwarding - This service allows the customer to forward only those calls from numbers on their Selective Call Forwarding List. It functions only when the calling and called numbers are in CLASS equipped offices within the same LATA.

BUSINESS COMPLETE-A-CALL - DIRECTORY ASSISTANCE SERVICE

Business Complete-A-Call is a Directory Assistance service which allows a business customer to pay charges incurred on behalf of their customer. Two pricing arrangements are available to the subscriber:

-charge per call or
-charge per month for every 0-100 calls (s) completed. The customer may be offered the most cost effective plan based on their anticipated or current volume.

When a customer calls DA and requests the listing for a business subscribing to Business Complete-A-Call, the customer will hear an announcement indicating they can be connected to the requested number at no charge.

OPTIONAL LOCAL CALLING PLANS

Each state offers optional local calling plans to fit the specific needs of end users within a community. Check the local exchange tariff to determine what plans are locally available.

Tariff references/price list references

Consult your local exchange tariff for availability, USOCs and pricing.

Installation intervals

Normal installation intervals apply.

Service inquiry & manual ordering guidelines

A Local Service Request Form, End User Information Form, and a Resale Service Form must be completed for these services.

See Section 5 for additional instructions on form completion.

Mediated Access ordering information

These products can be ordered through Mediated Access.

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- Single Line/Centrex 21 ISDN
- Voice Messaging Service/Business Voice Messaging
- Wire Maintenance and Prewire

4. Product Information - Interconnect

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RESIDENCE EXCHANGE SERVICE

Product Description

Basic product features

Flat Rate Residence Basic Local Exchange Service for residence customers provides access to the public switched network for local and long distance dialing. Flat rate service is unmeasured, allowing the subscriber to make an unlimited number of calls within the local calling area at a fixed monthly rate.

Message/Measured Rate Basic Local Exchange Service for residence customers provides access to the public switched network for local and long distance calling. Measured Rate Service bills the customer a flat monthly rate for a set number of local calls or messages per line with an additional charge for every local message in excess of the base allowance. Message Rate Service bills the subscriber a flat monthly rate which includes a monetary usage allowance for calls completed to stations in the local calling area. Charges for local calls in excess of the allowance are also applicable and are based upon length of call, originating and terminating point of call, and time of day call made. Message/Measured Rate Service is typically offered as part of an optional calling plan.

Basic product capabilities and restrictions

The service is comprised of the exchange access line, which includes the central office equipment and all the U S WEST plant facilities up to and including the Standard Network Interface.

How this product works

This service provides basic dial tone for residence customers.

Central Office Features

Many optional exchange products are available and are described below.

Hunting Service

This functionality completes incoming calls to any of the lines in a group from a line in the group that is called but is in use. This service can be used for sequential hunting (search begins at first line in the group and ends at either the first available line or at the last line in the group) using series completion Hunting (5 lines or less) or multi-line Hunting (6 or more lines), or for circular hunting (search begins at line dialed and ends at line immediately preceding line dialed.

The parameters in the central office associated with the hunt group directs an incoming call to the appropriate next available line. Generally, an incoming call causes the first line in a hunt group to be checked for availability. If the line is available, the call is completed. If the first line is

busy, then the search for an available line continues in the order that the line appear in the hunt group. When an available line is found, the call is completed. If no available lines exist, the incoming caller hears a busy signal.

Custom Calling Services

Call Waiting - Call Waiting allows the subscriber to receive a second call while they are already on the line.

Call Transfer - Call Transfer is a feature which allows a customer to add a third person to an existing incoming call or to transfer an incoming call to a third party and hang up without disconnecting the call.

Call Forwarding Busy Line/Don't Answer - This feature is intra-office only. Incoming calls are automatically transferred to a pre-determined Call Forward Number (CFN) The CFN is established by issuance of a service order.

Call Forwarding Busy Line/Don't Answer Customer Programmable - This feature allows the customer to program the forward to telephone number at any time by dialing an access code and the forward telephone number from their phone. This feature can be programmed at any time, to any number without a service order.

Call Forwarding Busy Line/Don't Answer Expanded - This features is inter-office. It forwards call outside of the customer's Central Office. Incoming calls are automatically transferred to a pre-determined CFN. The CFN is established by issuance of a service order.

Call Forwarding Variable - Incoming calls may be transferred to any local or long distance number that the customer chooses and programs. It is a customer programmable feature that allows a customer to forward all incoming calls to a different telephone number. Calls can be forwarded to any dialable telephone number (local, long distance, 800, etc.).

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Hear busy signal

Hang up receiver
All sets on line ring with a short ring

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HOT LINE/WARM LINE - This feature allows a customer to place an outgoing call to a preprogrammed number without having to do any dialing. Outgoing calls are automatically routed to the preprogrammed telephone number when the customer takes the phone off-hook.

Abbreviated Access 1 Digit allows a customer to place a call to a predetermined number by dialing a 1 digit speed calling code. Customers share a speed call (8) list with their Enhanced Service Provider (ESP). Abbreviated Access 2 Digit allows a customer to place a call to a predetermined number by dialing a 1 digit speed calling code. Customers share a speed call (30) list with their Enhanced Service Provider (ESP).

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CLASS - Call Rejection - This service allows customers to "block" incoming calls from certain numbers, as well as a call just received even if the customer does not know the number. The customer activates the service by dialing *60 or (1160 for rotary phone users) and follows the recorded instructions. To deactivate, the customer dials *80 or (1180 for rotary phone users) and follows the recorded instructions.

CLASS - Automated Call Trace - This service gives the customer the option of using an automated trace system rather than a manual trace. The mechanical trace is done after a call rather than a manual trace which has to be set up to trace future calls. It traces the last incoming call whether it was answered or not or if another CLASS feature such as Last Call Return was used. It traces the originating telephone number calling, even if the call was forwarded via a call forwarding service.

CLASS - Call Waiting Identification - This feature allows subscribers to "visually" see who is calling. The customer must have Caller ID and a Call

Waiting display unit.

CLASS - Caller Identification Blocking - This service prevents the telephone number from being delivered to the Caller Identification subscriber. It must be activated each time the customer wishes to prevent the number from being displayed to the called party. All customers in offices equipped with CLASS have the ability to block this information at no charge.

CLASS - Caller Identification Number - This feature lets the customer know the telephone number of the calling party before they answer to phone. It requires Customer Provided Equipment (CPE) with a display screen.

CLASS - Caller Identification Name and Number - This feature lets the customer know the first 15 characters of the listed number and the telephone number of the calling party before they answer the phone. It requires Customer Provided Equipment (CPE) with a display screen.

CLASS - Continuous Redial - This feature allows customers who reach a busy signal to "prompt" the Center Office to complete the call for them. A distinctive ring informs the subscriber when the call can be completed (short, short, long ring) Once initiated, the feature continues to redial until the called party answers or the feature times out (30 minutes). A busy line is tried every 60 seconds until the feature times out. The feature can be deactivated before the time out period.

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CLASS - One Call Unblock - This service allows the subscriber to transmit the name and telephone number for one call from a blocked line. Line Blocking returns to the line when the caller hangs up.

CLASS - Priority Call - This feature allows a subscriber to establish a list of special telephone numbers. When an incoming call is from a number on the Priority Call List, a distinctive ring alerts the customer (short, long, short). It functions only when the calling and called numbers are in CLASS equipped offices within the same LATA.

CLASS - Selective Call Forwarding - This service allows the customer to forward only those calls from numbers on their Selective Call Forwarding List. It functions only when the calling and called numbers are in CLASS equipped offices within the same LATA.

OPTIONAL LOCAL CALLING PLANS AND OPTIONAL TOLL PLANS

Each state offers optional local calling plans and optional toll plans to fit the specific needs of end users within a community. Check the local exchange tariff to determine what plans are locally available.

Tariff references/price list references

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Installation intervals

Normal installation intervals apply.

Service inquiry & manual ordering guidelines

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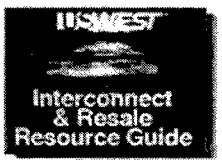

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CENTREX PLUS, CENTREX, CENTRON, ESSEX

Product Description

Basic product features

Centrex Plus Service is a Central Office based business service with capabilities and features provisioned by the use of a common block. A group of station lines is translated for an individual customer group and provides common access to a predetermined group of system features. All station lines in the system have intra-system calling capability.

Customers may choose access to the general message network via:each Centrex Plus station line. This is referred to as "non-blocked" access. Controlled access for which the customer subscribes to a number of Network Access Registers (NARS) is called "blocked" access.

Main station line features may be provided for attendant access lines where facilities permit.

Standard and Optional Features are available on Centrex Plus depending on the Central Office.

Basic product capabilities and restrictions

Centrex Plus availability depends on the facilities and generic feature programs in the Central Office switches.

All Centrex Plus station lines are associated with the main switching equipment. A Centrex Plus system may be either blocked or non-blocked; it cannot be mixed. There is no minimum line charge for Centrex Plus in most states.

Customers must subscribe to at least 20 station lines at one location in Montana.

Switching systems connected to a Centrex Plus system by Private Lines or group use arrangements are separate systems and are billed accordingly.

Split service common equipment is required when a customer wants to have a different set of system common features and separate access to the network. Split service segregates the station lines into separate groups. In a 1A and DMS office, this is done with a separate common block. In a 5E, this is accomplished by multiple terminal groups.

Miscellaneous lines and trunks, e.g., Private Lines, WATS, that customers want to function with the Centrex Plus switching capabilities require a termination arrangement. Centrex Plus miscellaneous termination arrangement charges apply. This is in addition to the charges applicable to

those lines and trunks.

For conversions from Centrex/Centron service to Centrex Plus service, no nonrecurring charges apply for in-service station lines, terminating arrangements and optional system features provided that:

-the service continues to be served by the same switching equipment

-there is no customer requested interruption of service

-there are no moves, changes or additions of the in-service station lines, arrangements and features

Temporary suspension of service, either partial or full is not permitted. Seasonal disconnects are allowed; all rates and charges still apply.

Customers must furnish all terminal equipment compatible for use with Centrex Plus. This includes touch-tone sets and a form of switch-hook flash.

Customers who do not want to change their listed directory number, to be part of a total system, may keep their existing number(s). The customer's existing numbers, however, must reside in the same central office (switch) and control group.

A customer may choose to combine station lines that terminate in different locations into a single system. All station lines in the system must be served by the same central office. Lines for locations that terminate or originate in a different central office are provisioned and billed according to the appropriate Local Exchange Tariff or Private Line Transport Tariff.

After the Service Date, if a customer removes, in whole or in part, the main station lines to a level that is less than 80% of the initial number of main station lines, a termination charge applies.

On the first anniversary of the customer's contract, the termination liability threshold will be re-calculated based on the number of station lines in service.

Centrex Plus service may be substituted by another U S WEST service that functionally provides equal or greater feature functionality without a termination charge provided:

-the service term for the new service is at least equivalent to the current remaining term

-the new service is legally, technically and commercially available

-the customer pays all charges assessed for converting to the new service including, but not limited to:

-all non-recoverable costs for equipment and facilities

-all nonrecurring charges incurred to provision the Centrex Plus service that have not been recovered

A customer may transfer service from one location(s) to another location(s)

within USWC's fourteen state service area if:

-facilities are available
-the customer pays all uncollected costs associated with the original premises location.

If the customer installs fewer station lines at the new location(s) or if service is not connected within thirty days of the disconnect date at the old location, termination charges applies. The transmission quality for calls using Call Forwarding or Conferencing may vary depending on the distance and routing involved.

Tariff references/price list references

For appropriate rates and charges, see the Local Exchange Tariff.

Service inquiry & manual ordering guidelines

All manual requests for service will include:
- a LSR form (Local Service Request)
- End User Information Form

These forms are defined in Section 5 of this guide.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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CENTRAL OFFICE AUTOMATIC CALL DISTRIBUTION (ACD)

Product Description

CO - ACD provides an equal distribution of a large volume of calls to predesignated groups of answering positions, known as agent positions. This service is provided by U S WEST from central office based equipment. CO - ACD is available in Basic or Deluxe service. A customer may have more than one CO - ACD, but within a customer group, all positions must be either Basic or Deluxe service. (See CO - ACD Basic Product Features.)

Basic product features

- Abandon Call Clearing
- Agent Queue
- Automatic Overflow
- Automatic Priority Promotion
- Call Delay Announcements
- Call Processing Control
- CO - ACD Directory Numbers
- Incoming Call Queue
- Night Service
- Ring Threshold
- Threshold Routing

Agent features

- DID/DOD
- Call Hold
- Call Transfer/Three Way Calling
- Login/Logout
- Make Set Bust
- Not Ready
- Toll Restriction

Supervisor features

- Agent Status Display
- Answer Agent
- Call Agent Key
- Display Queue Status
- Enhanced Agent Observe
- Forced Agent Availability
- Multi-stage Queue Status Display
- Status of Secondary Directory Numbers
- Toll Restriction

Deluxe standard features

Deluxe CO - ACD standard features include all basic standard features plus a Management Information System (MIS) interface and the features listed below.

System features

- Call Forcing
- Call Source Identification
- Controlled Overflow
- Line of Business
- Management Reports for Call Hold/Transfer
- Music on Delay in Queue
- Night Recorded Announcement and Forward
- Overflow Enhancement
- Overflow of Enqueued Calls

Agent features

- Call Supervisor
- Emergency
- Login Password Enhancement
- Queue Status Display Refresh
- Walkaway/Closed Key Operation

Supervisor features

- Agent Key
- Extended Agent Observe
- Observe Agent/Three Way Calling

Rate Conditions

The following conditions apply to CO - ACD rates and charges:

- The rates and charges for CO - ACD are in addition to other rates and charges for services with which it is associated.
- Month to month minimum service period is one month. Month to month customers must subscribe to 5 - 20 CO - ACD positions.
- Rate stabilized service requires 5 or more agent positions for a minimum period of 12 months.
- Rate stabilized Agent and Supervisor positions are priced by quantity, location, distance from the central office and length of contract term.
- Network Access Register (NAR) rates do not apply to Agent or Supervisor position Primary Directory Numbers (PDNs); the costing is included in the position pricing. NARs do apply to Secondary Directory Numbers (SDNs).
- End User Common Line (CALC) charge applies per Agent/Supervisor position.

Basic product capabilities and restrictions

CO - ACD service is available in a DMS100 central office or a 5ESS central office with a Meridian ACD Server.

The following regulations are required with CO - ACD service.

1. CO - ACD service is available only where adequate and suitable facilities exist.
2. Customers must furnish compatible premises equipment.
3. Temporary suspension, either full or partial, of CO - ACD service is not permitted.
4. Agent or supervisor positions provided outside of the serving central office area of the CO - ACD system are subject to FX (Foreign Exchange) or FCO (Foreign Central Office) charges.
5. Type CO - ACD Agent or Supervisor positions which terminate in an Electronic Business Set are subject to distance and technical limitations based upon the distance from the customer's premises to the central office. These limitations will be determined on a customer-by-customer basis.

Feature interaction

CO - ACD is a stand alone service. It may also be added to other Centrex-type services.

Tariff references/price list references

See current state tariffs.

Service inquiry & manual ordering guidelines

A Local Service Request (LSR) form, an End User Information (EU) form and a Resale Service (RS) form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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DIRECT INWARD DIALING (DID)

Product Description

Basic product features

Direct Inward Dialing (DID) is a special trunking arrangement which permits incoming calls from the exchange network to reach a specific PBX station directly without attendant assistance.

DID service is only offered with switching vehicles served by trunk service (trunk side of central office). Answer supervision is required from the customer's PBX.

DID is available on Analog One-Way Incoming, Analog Two-Way, and Digital Switched Service (DSS) trunks. All DID service is subject to the availability of equipment and operating conditions.

Basic product capabilities and restrictions

Seven-digit local exchange numbers are assigned to each DID station (by PBX programming) from a block of numbers reserved for the customer.

When the number is dialed, the serving central office directs the call to a dedicated pool of one-way incoming analog DID trunks assigned to that number block.

The central office then outpulses the last three or four digits (depending on the customer's PBX requirements) to the PBX.

The PBX routes the call directly to the called station without going to the attendant. The PBX station number and the digits outpulsed by the central office are usually the same, but can be different.

Arrangements for routing of calls in this manner may vary depending on the customer's PBX and/or the type of serving office.

The number of digits being outpulsed depends on the customer's PBX requirements. A maximum of 7 digits may be outpulsed (if central office has the capability).

Standard features of DID are:

-Incoming calls routed directly to the called station
-Pooled trunk access is utilized

How this product works

Direct Inward Dialing is designed to meet the following customer needs:

Reduce dependency on an attendant to complete incoming calls.

Create a personal office atmosphere by providing a unique telephone number to an employee or department.

Enhance business image by giving departments and individuals the status of a personal line.

Off-loading the attendant by routing calls directly to their destination, bypassing the attendant.

Increased efficiency and productivity of the business. **Feature interaction**

LIMITATIONS

When all DID trunks are busy, the calling party will receive a fast busy tone.

When the station line is disconnected, the 7-digit telephone number, USOC NDN or NFN, cannot be intercepted in the central office.

REGULATIONS

DID may be provided, in addition to regular, FCO or FX, where Central Office facilities are available and the PBX system or customer-provided switching equipment capabilities permit.

The provisioning of this feature requires that the customer subscribe to a sufficient number of trunk facilities to adequately handle the volume of incoming calls.

DID service is available to new customers from non- Stored Program Control when the office is equipped for DID service and where sufficient DID capacity is available.

Sequential numbers may be assigned when blocks of numbers are available and at the discretion of U S WEST.

A DID Sequential Number Block is a group of twenty telephone numbers in numeric order. The last digit of the first number within the block is a zero and the last number within the number block must include an odd number in the sixth digit and a nine in the last digit (NXX-XX00-19, 20-39, 40-59, 60-79, 80-99).

Customers requesting that numbers in a sequential number block be removed from the block will be charged a Block Compromise Charge.

IMPORTANT - DID service is offered with switching vehicles served by trunk service. The switching vehicle must provide is Answer Supervision.

DID AVAILABILITY

DID is normally provided from Stored Program Control Central Offices (ESS Offices).

DID service is available to new and existing customers from Non-Stored Program Control Offices when the office is equipped for DID service and the office has sufficient DID capability available.

DIRECTORY LISTINGS

One primary directory listing in the main directory of the serving central office (CO) is provided for each PBX system.

An additional listing of each DID number may be provided at regular rates and charges.

Tariff references/price list references

Check your local tariff for pricing details.

Installation intervals

Standard Installation Intervals apply.

Service inquiry & manual ordering guidelines

A Local Service Request Form and an End User Information Form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

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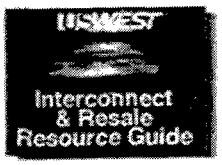

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FRAME RELAY SERVICE (FRS)

FRS is only availabe for resale where required under current contracts.

Product Description

Frame Relay Service (FRS) is the fast-packet data transport technology that offers the equivalent of a high-performance private network at economical public network prices.

Basic product features

With Frame Relay Service, the customer can:

- interconnect Local Area Networks (LANs), allowing users at remote sites to appear as if they were on the network.
- consolidate LANs to create seamless metropolitan area and wide area networks.
- integrate separate networks for connecting LAN and SNA (Systems Network Architecture) applications into a single, virtual network.
- connect with others on the network to communicate easily with customers, suppliers, consultants and others in the community of interest.

Basic product capabilities and restrictions

FRS is ideal for transporting data that flows in short bursts over wide area networks at high speeds. Applications include:

- LAN traffic
- High-speed mainframe connections
- Large file transfer
- Text imaging and forms processing
- E-mail messaging
- Point-of-sale (POS) authorization
- Packetized video
- Switched access for remote and mobile users
- Client-server applications, including distributed database access

Frame Relay Service is not directly available from all U S WEST serving wire centers, except in Minnesota, Oregon, and South Dakota. Service areas are expanding rapidly, covering a 30 mile radius from a switch location.

How this product works

Frame Relay Service operates with permanent virtual circuits (PVCs). PVCs are software-defined logical connections that emulate the functions of private lines, but on a more economical public network. Instead of individual private lines from many locations to all others, FRS does it all with virtual connections and a single access link.

The PVCs are provisioned at customer selected port speeds, with customer

selected Committed Information Rates (CIRs), depending on the customer's data networking requirements.

Feature enhancements

The following services are available to enhance Frame Relay Service.

- DS3 Uni (User-To-Network Interface) Port Connection to FRS
- Dial Access to FRS
- Disaster Recovery Service (available fourth quarter of 1997)
- Priority Service (available fourth quarter of 1997)
- Two-wire Fractional Frame Relay Access Link (available fourth quarter of 1997)
- Frame Relay Reports

Tariff references/price list references

See current state, FCC 5, and NECA 4 tariffs.

Service inquiry & manual ordering guidelines

A Local Service Request (LSR) form, an End User Information (EU) form and a Resale Frame Relay (RFR) form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

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PBX SERVICE

Product Description

Basic product features

Hotel/Motel PBX service is unique due to the fact that trunks which serve hotel/motel are accessed not only by hotel/motel administration, but also by the transient public. Because of this, Hotel/Motel PBX Service requires trunk services and applications that differ from other business types.

The service is normally divided to provide service for the hotel administration and the guests. The hotel administration may have flat, measured or message-rated trunks.

Hotel/Motel services require special handling of guest calls. Specialized services provide these accounts detailed billing on local and long distance calls placed by their guests. To accomplish this service the PBX system is equipped with message trunks and/or central office message registers and toll terminal trunks.

The guest normally dials "9" to place a local call which routes the call to a two-way or out-only trunk.

For long distance calls, guests normally dial "8": The call routes to a special "toll" trunk which provides a quoting system for the long distance call. It enables the hotel/motel to bill long distance charges to the guests prior to check out.

Basic product capabilities and restrictions

TYPES OF TOLL TRUNKS
The type of toll trunk provided depends on the customer's ability to record 1+, 011+ call details via a Call Rating System (CRS).

GUEST REGISTERS
Guest registers (sometimes referred to as message counters) are associated with the Guest (9th level) trunks and record the local calls made by guests. This recorded information is used by the hotel/motel for adding "local call charges" to the guest's bill at the time of check out. There are two types of guest registers:

1. CPE Guest Registers located at the hotel/motel.
2. CO Guest Registers located at the Central Office. These are becoming rare since most hotel/motel PBX systems have their own guest registers. CO Guest Registers require a private line circuit extending from the central office to the customer premises. Each message rated guest trunk would require a private line circuit. Apply appropriate Private Line tariffed nonrecurring charges and monthly charges.

CALL RATING SYSTEM

Hotel/Motel customers may choose to use some form of Call Rating System (CRS) on their premise to record call details and room/station numbers.

Special central office treatment (translations) is necessary to route 1+ (one plus) calls directly to the Network while continuing to allow the 0+ (zero plus) calls to route through TSPS/TOPS (Traffic Services Position System/Traffic Operator Positions System).

CPE CALL RATING SYSTEMS
Customer provided Call Rating Systems are pieces of equipment located at some "guest dial" (8th level) hotel/motels. The equipment times and rates 1+ long distance calls. Time & Charge Quotation Services are therefore not required for 1+ type calls. Time and charges for operator assisted long distance calls will continue to be provided at the end of each call by the appropriate quote service.

Toll trunks with specific "call rating system" Line Class Codes are used to allow 1+ Direct Distance Dialing (DDD) and Operator handled calls.

Some customers using Call Rating Systems may choose not to allow guests the option of placing Operator handled calls. Because of this, they may request that their Guest (9th level) trunks carry a combination of both local and toll calls. Toll only trunks are not required in such cases.

TOLL DIVERSION
When Guest (9th level) trunks are provided from stored program control type offices in conjunction with Toll (8th level) trunks, the Guest trunks are usually set up to prevent guests from making 9th level long distance calls. If the hotel/motel's equipment cannot provide this function, it can be done via Toll Deny/Divert.

Toll Divert causes 1+ or 0+ calls made from Guest trunks to be "diverted" back to the hotel/motel PBX attendant. The attendant then advises the guest that in order to place a long distance call they must dial 8 first to access a toll trunk.

Toll Deny causes any 1+ or 0+ calls made from Guest trunks to reach a reorder tone supplied by our central office.

The customer should choose either Toll Deny or Toll Divert for their Guest trunks.

QUOTING SYSTEMS
Hotel type customers that allow guests to bill calls to their rooms or extensions, need a system that will provide costs of the calls immediately. There are several methods in which this can be accomplished.

TLCS (Time Line Charge System): A U S WEST system that quotes charges on IntraLATA calls.

Some customers have their own Call Rating System (CRS). CRS is a CPE system that rates directly dialed calls automatically without the assistance of the operator service providers switch. CRS's can be purchased from a variety of vendors. When clients of these customers dial IntraLATA 0-/0+ calls, TLCS will quote the charges.

Tariff references/price list references

Refer to Exchange and Network Services Tariff, Section 5.3.

Service inquiry & manual ordering guidelines

A Local Service Request (LSR) form and an End User Information (EU) form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

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PRIVATE LINE SERVICES

Product Description

Basic product features

U S WEST Communications Private Line Transport Service includes a full range of products, service options, transmission speeds and capacities to choose from, including 100 percent fiber routing, the most advanced transmission quality available. Our products provide high-quality transmission, reliability and security essential to your communications requirements.

Private Line Transport Service provides a dedicated voice, video and/or data communications path:

- between a Carrier and an end user,
- between end users, or
- between Carriers.

Dedicated service is available 24-hours-a-day, seven-days-a-week on either analog or digital facilities.

Private Line Transport Service has three basic configurations.

- Two-Point Service connects two customer-designated premises, through a U S WEST Serving Wire Center.

- Multipoint Service connects three or more customer-designated premises through a U S WEST hub. It is available only for certain types of services. There is no limit on the number of mid-links (channels between hubs) available; however, the quality of service can deteriorate when three or more mid-links are provided in tandem. Multipoint Service is provided in two ways- bridging and hubbing:

> Bridging allows multiple loops to be connected together.
>
> *Note: The bridging rate elements are determined by the number of bridge ports used.*
>
> Hubbing may be required for certain applications and is only available in designated U S WEST hubs that provide multiplexing and bridging functions.

- Hub Connecting Service connects customer-designated premises to a U S WEST hub. The service may be utilized in conjunction with Switched Access Service to provide a dedicated connection to certain services such as WATS or Public Packet Switched Network Service. **U S WEST NETWORK 21**

U S WEST NETWORK 21 is a network architecture improvement that protects high capacity Private Line Transport Service, Switched Access,

and Wireless Services in selected high-density cities in the U S WEST territory on survivable network architecture. In the event of catastrophic failure, the signal is automatically rerouted with minimal, if any, interruption in service.

The first phase, interoffice transport modernization, connects selected wire centers or interoffice transport in targeted metropolitan areas. The second phase, local loop modernization, expands the NETWORK 21 architecture to the local loop, connecting the network to customer building sites.

U S WEST NETWORK 21 uses the most advanced technologies available today, including:

-Self-healing ring architecture

-An enhanced fiber optic "ring" architecture ensures survivability in the event of a cable cut or degradation in the working fiber by rerouting the signal over the protect path.

-Synchronous Optical NETwork (SONET) technology

> SONET technology, which carries a high volume of digitized information over the optical fiber at extremely high speeds, has become the international standard and U S WEST leads the industry in its deployment.

-Automatic protection switching

> This technology detects service degradation or failure on the working path and reroutes transmission on the protect path within 50 milliseconds about the blink of an eye - using a combination of functions performed by Intelligent Network Elements (INE), SONET-based Add-Drop multiplexers (ADM), and dual fiber optic facilities.

-Add-Drop Multiplexing

> Add-Drop multiplexing enables customers to aggregate lower speed services onto a single, high-speed circuit and furnishes easy on/easy off access to the self-healing ring.

U S WEST NETWORK 21 provides a SONET-based interoffice network that connects key Wire Centers and extends the platform to the local loop in targeted metropolitan areas. Eleven cities are planned for deployment over the next two years.

BENEFITS

- Network survivability
- Protection provided free of charge
- Platform for future growth
- Provides efficient, reliable and cost-effective access to the telecommunications infrastructure of the 21st century
- Broad geographic coverage - For example: In Denver, U S WEST NETWORK 21 coverage will stretch 60 miles from north to south and 20 miles from east to west for providing 1,200 square miles of survivable network architecture. Coverage will total 800 square miles

in Phoenix and 500 square miles in Seattle
- Expands and upgrades easily to
- Includes 24-hour alarming and performance monitoring by U S WEST
- Protects network traffic via survivable interoffice transport between Serving Wire Centers

VOICE GRADE SERVICE

Voice Grade Service is a dedicated analog circuit (two-wire or four-wire) that can be used for either voice or data transmission. It utilizes a frequency range of 300 to 3,300 hertz and can send analog data at speeds of up to 9.6 Kbps. Voice Grade Service can be used alone or in conjunction with other voice and data transport services. These services can be provided on analog or digital facilities.

BENEFITS

- Available throughout the U S WEST region
- More economical than most other data services
- Assured circuit performance
- Circuit stability and full-time availability
- Compatibility with Digital Carrier Technology as well as Carrier Systems with Analog Technology
- Rate Stability Plan (for 4-wire channel terminations)
- Security that can be controlled along entire transmission path
- Flat-rate service (not usage-sensitive)
- Dedicated line 24-hours-per-day, seven-days-per-week
- Responsive customer service for provisioning and preventive maintenance

APPLICATIONS
-PBX tie lines
-Facsimile transmission
-Backup service for digital data transmission facilities
-Time-share computer systems
-Off-premises station lines
-Foreign Cental Office (FCO)
-Foreign Exchange Service (FX)

WATS Access Line (WAL)

WATS Access Line (WAL) service provides a connection between customer-designated premises and a WATS Serving Office. It is used to originate volume-discounted calls or to terminate 800 calls in conjunction with Switched Access Service. Both Switched Access and Private Line Transport Service are used to provision WATS Access Line Service. Feature Group Switched Access Service provides the switched connection from the Carrier to the WATS Serving Office (WSO). Private Line Transport Service is used to provide the dedicated line from the WSO to the end-user premises. This line is referred to as the WATS Access Line (WAL).

BENEFITS

- Screening and banding provided by U S WEST

- Dedicated line to place outgoing calls or to receive 800 calls

APPLICATIONS

-Used in conjunction with Switched Access Service to originate and/or terminate WATS and 800 service calls

Program Audio Service

Program Audio Service is a one-way transmission path used for sending complex signal voltage at frequency ranges of 200 to 3,500 hertz; 100 to 5,000 hertz; 50 to 8,000 hertz; or 50 to 15,000 hertz. The actual bandwidth is a function of the channel interface you select.

BENEFITS

- Reliability
- Available for full-time (monthly) or part-time (daily) radio broadcasting
- Broadcast quality sound

APPLICATIONS
-Studio to transmitter lines
-Remote broadcasts
-Wired music signals

Commercial Video Data Services Service

This full-motion, high quality video offering is visually comparable to Broadcast Video Service but has less stringent technical parameters. Commercial Video Service (CVS) provides one-way, point-to-point or multipoint transmission capability for a standard 525-line/60-field National Television Systems Center (NTSC) RS-250C color baseband video signal and optional baseband audio signals. A video plus 1.5 or 45 mbps option is available. The service is designed to accommodate up to 16 analog video channels with the associated audio signals over the same facility. Audio interface options include zero, one, two, and four separate (non-diplexed) 15 kHz audio signal(s). The bandwidth of the video signal(s) is 30 Hz to 4.2 MHz.

BENEFITS

- Integrates video, data and voice in a single application
- Ability to transmit or receive up to 16 channels at two or more locations
- Reliability
- Service options include fixed period pricing plans of one, three, five, seven, and ten years
- Highly trained technicians to work with your technicians
- High quality video with less stringent technical parameters
- Transmits broadcast quality video signal
- Linking more than two locations together with up to 16 video channels per location

APPLICATIONS
-Business video teleconferencing/training between company-designated

locations
-Distance learning
-Health care/Medical training and diagnostics
-Remote video court arraignments
-Remote video legal depositions
-Surveilance

U S WEST Digital Data Service (DDS)

U S WEST Digital Data Service (DDS), also known as DIGICOM I and DIGICOM II (hubbed) in some intrastate jurisdictions, is a dedicated point-to-point or multipoint private line transmission service providing users with a 24-hour, high-performance digital communications network. This service provides simultaneous two-way (full duplex four-wire) transmission of synchronous serial data at virtually error-free rates of 2.4, 4.8, 9.6, 19.2, 56 or 64 Kbps.

BENEFITS

- Quality and reliability - 99.875 percent error-free seconds and 10-7 Bit Error Rate (BER)
- No line conditioning needed
- No analog or digital conversion needed
- Subrate multiplexer and bridging helps you achieve economies of scale
- Rate stability plan
- Digital end-to-end - no modem required
- Near-perfect accuracy
- Maximized efficiency
- Centralized trouble detection with built-in diagnostics
- Routine maintenance checks and exact pinpointing of network problems with Secondary Channels
- 64 Kbps Digital Data Service allows a direct interface with the European community

APPLICATIONS
-LAN-to-LAN Connectivity
-Telecommuting from home to workplace
-Mainframe access from remote location terminals
-Inventory system networking
-Telemarketing
-Catalog sales operations
-Automated teller machine linkages
-Shipment tracking
-Information services such as financial news, stock market quotes

OPTIONAL FEATURES

Secondary Channel
A Secondary Channel option allows your telecommunications personnel to perform network management, maintenance and diagnostic functions without interrupting network transmissions.

The Secondary Channel provides an independent lower data rate channel over the same circuit. This channel, derived by using the control bit in some of the transmission frames, gives digital users real time, non-disruptive network management, maintenance, and

diagnostic capabilities. The derived channel may also be used as a lower speed general purpose channel.

Secondary Channel is available with 2.4, 4.8, 9.6, 19.2 or 56 Kbps data rates. The speed of the channel varies according to the data rate of the primary channel. For example, a 2.4 Kbps primary channel may support a .4 Kbps Secondary Channel; and a 56 Kbps primary channel may support up to an 8.0 Kbps Secondary Channel.

Central Office Bridging
Central Office Bridging aggregates channels into a single interoffice transport at cost savings to the customer. Central Office Bridging connects three or more customer-designated premises. It is not available with 64 Kbps or Subrated DSO. Circuits that are bridged must be of the same data rate.

Central Office Multiplexing
DSO to DS1 - Converts 23 or 24 DSO channels to a 1.544 Mbps DS1 channel

Subrate - Converts a DSO(B) channel to twenty 2.4 Kbps, ten 4.8 Kbps, or five 9.6 Kbps subrate channels

Central Office Multiplexer to Multiplexer Connecting Arrangements
Central Office subrate to subrate and DSO to DSO Connecting Arrangements allow a desired direct link between two multiplexers.

> Subrate to Subrate - This arrangement allows a customer to interconnect an individual channel of one DSO to Subrate Multiplexer to an individual channel of another DSO to Subrate Multiplexer at rates up to 64 Kbps.
>
> DSO to DSO - This arrangement allows a customer to interconnect an individual channel of one DS1 to DSO multiplexer at rates up to 64 Kbps.

COMMAND A LINK
You may use COMMAND A LINK service to rearrange your Digital Data Service network. DSO or DS1 circuits connected together may be rearranged as desired for connections to backup communications or for efficient management during peak traffic hours.

Direct Digital Access Line (DDAL)
Direct Digital Access Line is an option to 56 Kbps DDS that provides the added capability of carrying signaling for a Public Switched Digital Service (PSDS) or the customer's private switched digital network.

Simultaneous Voice and Data Service

U S WEST Communications subscribers with ordinary telephone service may now transport data over the same wires that deliver voice services, without altering the voice functions. Simultaneous Voice and Data Service (SVDS) is a basic serving arrangement providing integrated voice and dedicated digital capabilities over the copper wire network. SVDS utilizes time-compression multiplexing equipment to digitally transmit both voice

and data signals over two copper wires, thereby providing customers simultaneous access to existing voice services and a digital data network.

Provisioning of digital data will be on a point-to-point or multipoint arrangement for private lines or packet switching. or circuit-switched applications. SVDS provides end-to-end digital performance supporting synchronous and asynchronous digital speeds up to 19.2 kbps.

BENEFITS

- Economical
- Superior to analog and delivers the same digital quality as Digital Data Service with a BER of 10-7
- Power failure will not stop voice operations
- Eliminates need for multiple business lines
- Ease of provisioning
- Works with existing inside wiring
- Supports speeds up to 19.2 Kbps
- Synchronous and asynchronous data speeds
- Flexibility with connecting arrangements, multiplexing and bridging
- Available virtually everywhere
- Works with 20 Local Exchange Services, including 1FBs and 1FRs Simultaneous Voice and Data Service
- Provides access to a multitude of services
- Practical interim step before going to full Integrated Services Digital Network (ISDN)

APPLICATIONS

-Private Line Networks
- Banking
- Financial information
- Insurance claims processing
- Lottery networks
- Travel reservations
- Ticketing
- Electronic ordering
- Retail
- Telemarketing
- Customer service
- Credit inquiry

-X.25 Packet Networks
- Credit Card Verification
- Automated Teller Machines
- Health Care Claims Processing
- On-Line Order Entry
- Point-of-Sale Debit Transaction

OPTIONAL FEATURES

Central Office Bridging (Multipoint)
Bridging is an optional feature that allows customers to have three or more locations connected to the same circuit using a Central Office bridge. Circuits that are bridged must be of the same data rate.

Central Office Multiplexing (Subrated DSO Service)
Central Office DSO to Subrate Multiplexing, an optional feature available with SVDS, provides customers with the ability to combine multiple lower

data rate circuits into a single higher rate DDS circuit (DSO). Subrate Multiplexing utilizes time division multiplexing. This feature allows a maximum of twenty 2.4 Kbps, ten 4.8 Kbps or five 9.6 Kbps lower speed circuits to be combined into a single higher speed circuit.

Central Office Multiplexer to Multiplexer Connecting Arrangements
Subrate to Subrate - This arrangement allows a customer to interconnect an individual channel of one DSO to Subrate Multiplexer to an individual channel of another DSO to Subrate Multiplexer at rates up to 19.2 Kbps.

DSO to DSO - This arrangement allows a customer to interconnect an individual channel of one DS1 to DSO Multiplexer to an individual channel of another DS1 to DSO multiplexer at rates up to 19.2 Kbps.

HIGH CAPACITY SERVICE

DS1 Service

U S WEST DS1 Service is a private line digital transport service that meets your needs and those of your end users for reliable, secure and cost-effective transport of bulk communications between two locations.

DS1 is a point-to-point service that provides transmission of isochronous serial data at 1.544 Mbps and has the capacity of 24 voice-equivalent channels. A DSX-1 (template) signal assures nearly zero decibel loss in transmissions. DS1 Service Channels are provided between customer-designated premises, between a customer-designated premises and a U S WEST Hub, or between U S WEST Hubs.

U S WEST offers a Density Pricing Zone Plan in Arizona, Colorado, Iowa, Minnesota, Nebraska, New Mexico, Oregon and Washington that modifies the prices for DS1 Private Line Transport Service Channel Termination in Interstate Tariff F.C.C. No. 5, Section 7. This plan sets the price for DS1 Service (Private Line circuit at 1.544 Mbps transmission speed) based on the zone classification of its Serving Wire Center. Wire Centers are designated as either Zone 1, Zone 2, or Zone 3. Only a few Wire Centers are designated Zone 1; most are either Zone 2 or Zone 3.

U S WEST also offers a DS1 Radio Interface designed specifically to meet your need for new or backup DS1 Service to a location where cable is not available or where it would be cost-prohibitive to install. U S WEST DS1 Radio Interface Service connects you to your end users and to your network without the high cost of Special Construction for cable.

DS1 Radio Interface Service provides DS1 Service (1.544 Mbps) over digital microwave facilities in the local loop. Offered in capacities of 4 DS1 channels, DS1 Radio Interface Service allows you to activate each channel separately for a one-time charge.

U S WEST designs, installs, licenses, and maintains one end of the radio system at a U S WEST Wire Center. You provide matching equipment and assume responsibility for licensing at your premises. The network interface is located where the radio signal meets the antenna at your premises.

The service is available in two designs and pricing structures:

Quality Package 1-Hot Standby - Provides full redundancy via Hot Standby radio equipment in the local loop and 1x1 protection against system failures. Estimated Mean Time Between Failures (MTBF): 19.2 years.

Quality Package 2-Standard - Provides standard DS1 Service reliability economically using equipment design without Hot Standby. Estimated Mean Time Between Failures (MTBF): 2.9 years.

BENEFITS

- Reliability - 99.5 percent error-free seconds when provisioned on fiber facilities (measured on a 24-hour basis)
- Transmission availability - 99.925 percent when provisioned on fiber facilities (measured on 12-month basis)
- Bit Error Rate - one bit per billion (10-9) when provisioned on fiber facilities
- Economies of scale
- Traffic aggregation
- Rate stability plan
- Term discounts
- American National Standards Institute (ANSI) Extended Superframe (ESF) format is available for convenient performance monitoring
- Guaranteed service
- Advanced technology
- Security
- Flexibility
- Digital connectivity
- Cost-effectiveness
- Consolidation of services
- Multiple optional features available:
  - Diversity
  - Avoidance
  - COMMAND A LINK
  - Clear Channel Capability (CCC)
  - Central Office Multiplexing
  - Self-Healing Alternate Route Protection (SHARP)
  - SHARP Plus
  - Central Office multiplexer to multiplexer

APPLICATIONS
-Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)
-Data networking
-Bulk data transfer
-Local Area Network interconnection
-Electronic funds transfer
-Centralized data processing
-Integrated voice and data
-Video conferencing

HIGH CAPACITY SERVICE

DS3 Service

U S WEST DS3 Service is a high-capacity channel for the transmission of 44.736 Mbps isochronous serial data having a line code of bipolar three

zero substitution (B3ZS).

U S WEST DS3 System Channel Terminations are available using either an electrical, optical, or a mid-air meet interface.

DS3 can be used for voice, data, video and switched services, eliminating the need to maintain and pay for multiple dedicated lines for different applications.

BENEFITS

- Rate stability - protects you from U S WEST-initiated rate increases for the service term you select
- Multiplexing capabilities
- Reliability - 99.5 percent error-free seconds (measured on a 24-hour basis)
- Transmission availability - average of 99.95 percent annually
- Bit Error Rate - one bit per billion (10-9)
- Consolidation of service

APPLICATIONS
-Data networking, Integrated voice and data
-Bulk data transfer

HIGH CAPACITY SERVICE

Synchronous Service Transport (SST)

Synchronous Service Transport (SST) is a private line, point-to-point, high capacity connection designed to transport very large volumes of information at rates as high as 2.488 Gbps. Provisioned on fiber optic systems based on Synchronous Optical NETwork (SONET) technology, SST can provide connections between user-designated premises or between a user-designated premises and a U S WEST Hub.

Vital circuit protection is an important part of the SST package as well - with alternate fiber routing provided in the local loop (where available) at no additional charge.

BENEFITS

- Reliability - 99.5 percent error-free seconds, measured on a 24-hour basis
- Transmission availability - 99.99 percent, measured on 12-month basis
- Bit Error Rate - one bit per billion (10-9)
- Economies of scale
- Traffic aggregation
- Advanced SONET technology - four Optical Carrier Levels available
  - OC3 155.520 Mbps
  - OC12 622.080 Mbps
  - OC24 1.244 Gbps
  - OC48 2.488 Gbps
- Multiple interface options (Electrical - DS1 and DS3, Optical - OC3)
- Platform for growth
- Security
- Flexibility

APPLICATIONS
-Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)
-Data networking
-Bulk data transfer
-Wide Area Network interconnection
-Business continuation
-Image transfer
-Aggregation
-Video conferencing

OPTIONAL HIGH CAPACITY (DS1 AND DS3)

U S WEST Self-Healing Alternate Route Protection (SHARP)

SHARP is an optional feature of U S WEST's DS1 and DS3 services that answers your need for 100 percent assurance of system reliability in the local loop. SHARP offers timely, cost-effective and high-quality protection.

Designed for point-to-point transport of moderate to heavy volumes, SHARP adds reliability to DS1 and DS3 services by establishing two physically separate routes for the working service path and the protect path.

SHARP is provisioned solely on fiber optics using a 1x1 protection scheme that provides a backup for every system component.

We're so sure that SHARP will deliver near-perfect performance that we guarantee it. If there is a cable cut or if transmission quality degrades to an unacceptable level and SHARP fails to switch to the protect path within one second, U S WEST Communications will credit you for an entire month's billing for the affected service.

BENEFITS

- Standard Network Service reliability of 99.99 percent, exceeding industry norms, and a standard bit error rate of 10-9 or one error in one billion bits
- Guaranteed service
- Discounted, variable-term contract options provide a choice of savings
- Security, Flexibility, and Reliability
- Cost savings, and customer service
- Performance monitoring alarm surveillance by U S WEST

The SHARP option is now available with either circuit (per DS3) or system level protection (per system). Carriers with more than four DS3s terminating at a single location will benefit from the system level pricing structure.

APPLICATIONS
-High-speed host-to-host channel networking
-Load balancing
-Centralized data processing
-Integrated voice and data
-CAD-to-CAD transfer - high-speed file transfer

OPTIONAL HIGH CAPACITY (DS1 AND DS3)

U S WEST Self-Healing Alternate Route Protection Plus (SHARP Plus)

This enhancement to SHARP extends state-of-the-art reliability to the DS1 and DS3 transport channels. When combined with SHARP's coverage of the local loop, SHARP Plus delivers complete protection of your communications link by extending the SHARP protection through U S WEST's interoffice network.

SHARP Plus Interoffice Only is a point-to-point service designed to transport single or multiple DS3s between two U S WEST Wire Centers via diverse routes. The service is provisioned using fiber optic systems based on Synchronous Optical NETwork (SONET) technology. System line rates as high as 1.88 Gbps are available.

BENEFITS

- Reliability - 99.5 percent error-free seconds, measured on a 24-hour basis
- Transmission availability - 99.99 percent, measured on 12-month basis
- Bit Error Rate - one bit per billion (10-9)
- Economies of scale
- Traffic aggregation and a platform for growth
- Security and cost-effectiveness
- Digital connectivity
- Consolidation of services
- Quality and availability

APPLICATIONS
-Wide Area Network interconnection
-Business continuation
-Aggregation

U S WEST Self-Healing Network Service (SHNS)

Self-Healing Network Service is a dedicated network designed with two concentric rings connecting multiple node locations with fiber optic cable pairs. A combination of fiber ring technology and a series of Intelligent Network Elements (INEs) allows SHNS to automatically detect network failures and reconfigure around them. The INEs consist of add/drop multiplexers and appropriate software to provide access from the customer's location (access node) on and off the SHNS ring. At the Network Interface (NI), the customer can order desired Ports. The INE copies all entering data frames and sends one copy on the working path and another on the protection path in the opposite direction. At the receiving or destination node, frames on both paths are monitored and compared, and the frame with none or least flawed bits is selected. This way, if one of the rings goes down, SHNS "heals" itself. Similarly, since the data travels in both directions around the ring, if there is a break in both cables at one part of the ring, the data still reaches its destination.

BENEFITS

- 24-hour performance monitoring and alarm surveillance by U S WEST
- 99.99 percent availability
- Service credit for one month's billing in the event of one second of outage for one occurrence per month
- BER of 10-9
- Continuous customer access to performance monitoring
- Available throughout U S WEST region
- Links multiple customer locations over facilities dedicated solely to a single customer
- Provides network survivability through an integrated combination of Intelligent Network Elements
- Network management via the Software Reconfiguration Capability
- The SHNS network will support DS1, DS3, OC3, OC3-C (concatenated), OC12, and OC12-C (concatenated) ports

APPLICATIONS
-Telecommunications
-Wireless/Cellular
-Telemarketing and Airlines
-Banking/Financial/Insurance
-Health Care
-Utility/Manufacturing
-Data Communications
-Retail and Government

OPTIONAL FEATURES

Software Reconfiguration Capability (SRC) enables customers to redirect their traffic as their business demands change via software commands. Through a computer terminal on your premises, SRC allows you to tailor your system to changing business requirements.

Intelligent Network Element (INE) - Provides for automatic protection switching to the protection path should problems occur.

Private Line Transport Service (PLTS) - Standard private line transport services include U S WEST's Digital Data Service, DS1 Service, DS3 Service, Synchronous Service Transport (SST) and COMMAND A LINK.

COMMAND A LINK

A private line network reconfiguration tool, COMMAND A LINK service enables customers to remotely control their leased communications facilities on a near real time basis. Control is the key to this service. It is the key that saves valuable network time and can help transition a communications network onto the smooth and efficient "Information Highway" of the future.

COMMAND A LINK gives you the control you need to increase your network flexibility, functionality, efficiency and effectiveness. Available 24 hours a day, seven days a week, COMMAND A LINK is there for you, ensuring that your communications needs are met. You can select from multiple interface options (analog-voice grade, DSO, DS1 or DS3) which offer you the ability to customize your communications network needs for voice, data or video applications.

COMMAND A LINK gives you the option of entering your reconfiguration requests yourself or having U S WEST enter them. If you decide to do it yourself, simple access via an 800 (WATS) number links an Intelligent Network Device located with the U S WEST network to a terminal at one of your locations.

BENEFITS

- Network management
- Multiple interface options (analog-voice grade, DSO, DS1, DS3)
- Platform for growth
- Availability and secure access
- Cost effectiveness
- Greater network flexibility
- Reliability/Maintenance
- Traffic aggregation
- Consolidation of services

APPLICATIONS
-Business continuation
-Computer Aided Design/Computer Aided Manufacturing (CAD/CAM)
-Data networking
-Bulk data transfer
-Local Area Network interconnection
-Image transfer
-Centralized data processing
-Integrated voice and data
-Video conferencing
-Aggregation of network services

Basic product capabilities and restrictions

FOUR BASIC RATE CATEGORIES

Private Line Transport Service has four basic rate categories:
- Channel Termination
- Transport Channel
- Central Office Connecting Channel
- Optional Features and Functions

Channel Termination
Channel Termination provides the communication path between your customer-designated premises and its Serving Wire Center, plus the standard channel interface arrangement at the premises.

Rate Structure
-One channel-termination charge per customer-designated premises
-Includes standard channel interface -Recurring and nonrecurring charges apply

Transport Channel
Transport Channel includes the transmission facilities between the Serving Wire Centers associated with two customer-designated premises.

Rate Structure
There are two charges for each band:
Fixed recurring rate
Per-mile recurring rate (charged in airline mileage)
Note: Airline mileage - The National Exchange Carrier Association Inc., Tariff FCC No. 4 lists all U S WEST Serving Wire Centers that offer Private Line Transport Service, along with their V and H coordinates, for computation of airline mileage.

Wire Centers are listed by locality name and include:
-Location code
-Vertical coordinate (V)
-Horizontal coordinate (H)
-Local Access Transport Area number
-Service types available
-Area codes and prefixes available

Determination of Mileage Between Wire Centers
The mileage for access service is the airline distance measured between two Serving Wire Centers. The two Serving Wire Centers may be:

The customer Serving Wire Center and the end-user Serving Wire Center

The customer Serving Wire Center and a hub Serving Wire Center

The customer Serving Wire Center and a bridging Serving Wire Center

The customer or end-user Serving Wire Center and a WATS Serving Office

A hub Serving Wire Center (multiplexing, digital data, bridging, video and program audio) and a customer end-user Serving Wire Center

Two customer Serving Wire Centers

The customer Serving Wire Center and the DA location

Each Serving Wire Center has a unique set of vertical and horizontal (V&H) coordinates. These coordinates are used for calculating the airline mileage between the two Serving Wire Centers.

Mileage Calculations
Mileage is calculated as follows:

Using the locality name, area code (NPA) and the first three digits of the local exchange telephone number (NXX) of each Serving Wire Center, look up the V&H coordinates of the associated Serving Wire Center.

Obtain the difference between the V coordinates. Then obtain the difference between the H coordinates. (The difference is always obtained by subtracting the smaller coordinate from the larger coordinate.)

Square the differences.

Add the squares of the two differences.

Divide the sum of the squares by 10.

Take the square root of the result obtained in the previous step. The resultant number is the airline mileage between the Serving Wire Centers.

Example
The rate distance between Evanston and Carter Creek is calculated as follows:

	V	H
Evanston	7435	6942
Carter Creek	7369	6939
Difference	66	3
Squared	4,356	9
Add	4,356 + 9 = 4,365	
Divide	4,365 by 10 = 436.5 or 437	
Square Root of = 20.90 or 21 airline miles		

Central Office Connecting Channel
Central Office Connecting Channel provides for connections within the same hub Wire Center between the Private Line Transport Channel and other services provided by U S WEST.

One charge applies per connection

Optional Features and Functions
Optional Features and Functions may be added to a Private Line Transport Service to improve its quality or utility to meet specific communications requirements.

Examples of Optional Features and Functions include:
- Signaling capability
- Conditioning
- Hubbing functions

Feature interaction Special Facilities Routing
Private Line Transport Service can be specially routed (at an extra charge) using additional facilities.

- Diversity is a physically separate path that functions as a secondary channel for backup to the primary channel during peak traffic times or in the event of a disaster. It is available on U S WEST Private Line Transport Services. Diversity gives you two separate physical paths, or redundant routes, for one circuit. Both routes are "hot"; both are ready for use at a moment's notice.
- Avoidance is available on all Private Line Transport Service. With avoidance we can provision your primary circuit on a route that deviates from the normally engineered route in order to avoid specific geographic locations.
  Avoidance enables you to route high-priority circuits around a Central Office or corridor that can carry an extremely high level of traffic during peak periods, avoiding potential overload or disaster situations. Private Line Transport Rate Plans Several rate plans are available throughout the Private Line Transport Service family of products. The rate plans were developed to offer you rate stability and to aid you in your planning and forecasting needs. U S WEST understands your need to be competitive and will do everything possible to provide you with stable, cost-effective service.

Termination Liability and Waiver Policy
Furthermore, U S WEST will waive liability for the early termination of a rate plan when you move to another U S WEST rate plan. Liability is waived when the total value of the new rate plan is equal to or exceeds 115 percent of the total remaining value of the old rate plan beyond the minimum service period.*

In the event that you do not qualify for a waiver, U S WEST has reduced the liability to 15 percent of the remaining value of the rate plan beyond the minimum service period.*

** In all cases, 100 percent of the minimum service period liability must be fulfilled.*

High-Voltage Protection
If you terminate your Private Line Transport Service in a high-voltage environment, such as an electronic power station, a special protective apparatus is required. It is your responsibility to advise us of such situations. While this protective apparatus can be provided by either U S WEST, you or your customer, it must be approved by U S WEST.

Special Construction for Private Line Transport Service
Special Construction allows U S WEST to provide extraordinary construction service to our customers when the required facilities are outside the limits of normal, reusable facilities. The type of facility dictates the application of the Special Construction tariff. Your U S WEST Account Manager can explain the details of Special Construction.

Tariff references/price list references

Refer to the following references for each state:
AZ Private Line Transport Services Competitive Services Administrative Guideline
CO Private Line Transport Services Tariff, No.14
No. ID Private Line Transport Services Tariff
So. ID Private Line Transport Services Catalog
IA Private Line Transport Services Catalog and Private Line Transport Services Tariff
MALHEUR Private Line Transport Services Tariff OR. No. 5 and Private Line Transport Services Catalog
MN Private Line Transport Services List/Tariff
MT Private Line Transport Services Catalog and Private Line Transport Services Tariff
NE Private Line Transport Services Catalog
NM Access Service Traiff
No. DAK Private Line Transport Services Price Schedule
OR Private Line Transport Services Price List
So. DAK Private Line Transport Services Catalog
UT Private Line Transport Services Tariff and Private Line Transport Services Competitive Services
WA Private Line Transport Services Tariff, WN U-33
WY Private Line Transport Services Price Schedule

For WATS - See the appropriate Exchange and Network Services Document for all seven states.

Installation intervals

See the Service Intervals Section of this Guide.

Service inquiry & manual ordering guidelines

A Local Service Request Form, an End User Information Form, and a Resale Private Line Form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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- Wire Maintenance and Prewire

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5. Manual Ordering Process/Forms

Interconnect and Resale Resource Guide

PUBLIC ACCESS LINE SERVICE - BASIC AND SMART

BASIC PUBLIC ACCESS LINE SERVICE:

Product Description

Basic Public Access Line (BPAL) is a POTs service offered to Payphone Service Providers (PSPs) for the purpose of connecting their "smart" pay telephones to the U S WEST Public Switched Network (PSN). BPAL is offered in several pricing configurations which include Measured, Measured with Call Allowance, Message, Message with Call Allowance and Flat. In some states, it is offered as both two way and one way service. In other states, it is only available as two way. Not all pricing configurations are available in all states.

Basic product features

BPAL is a POT's service that can be combined with CustomNET/Fraud Protection, BNS and AS-LS.

Basic product capabilities and restrictions

BPAL is the only service tariffed for connection of "smart" pay telephones to the U S WEST PSN except in the states of Minnesota and Iowa. In Minnesota, a 1FB is allowed for use with "smart" pay telephones; however, in Iowa, any business service can be used.

How this product works

BPAL provides service in the same manner as Flat and Measured business service.

Feature interaction

BPAL can be ordered with screening and blocking services and Answer Supervision-Line Side. It is available in all central offices.

Tariff references/price list references

BPAL can be found in section 5.5.7 of the ENS tariff or price list.

Service inquiry & manual ordering guidelines

A Local Service Request (LSR) form and an End User Information (EU) form must be used for manual ordering.

See this section for the PAL Ordering Form, or call the Interconnect Services Center PAL group at 1-800-879-3220.

Mediated Access ordering information

This product can be ordered through Mediated Access. **SMART PUBLIC ACCESS LINE SERVICE:**

Product Description

Smart Public Access Line (SPAL) is a service offered to Payphone Service Providers (PSPs) for the purpose of connecting "dumb" pay telephones to the U S WEST Public Switched Network (PSN). SPAL is offered in several pricing configurations which include Measured, Message, Message with Call Allowance and Flat. Not all pricing configurations are offered in all states. It is offered in all states as both two way and one way service.

Basic product features

SPAL is a unique service that when connected to a "dumb" pay phone provides complete coin service without the need for additional services or equipment. It embodies the following features and functions as an integral part of the access line.
Coin Control - a 130 volt (+/-) signal which powers the escrow device in the pay telephone instrument to collect or return the end users coin depending on whether the called party number answered, did not answer, or an intercept message was reached.
Operator Coin Control - provides the U S WEST operator the ability to monitor the deposit of coins and collect or return coins to the end user.
Automated Coin Toll Service (ACTS) - quotes rates to the end user for coin sent paid intraLATA toll calls. AT&T is presently the only company capable of providing this service for interLATA calls.
Unique Coin Announcements - instructs the end user of the necessity of a coin deposit for sent paid calls.

Basic product capabilities and restrictions

SPAL is the only service tariffed for connection of "dumb" pay telephones to the U S WEST PSN. It is available in all central offices. There is a restriction that only one set can be connected to a SPAL.

How this product works

SPAL service works with central office equipment that is dedicated to coin service. This equipment varies by switch type, but in all switches performs functions noted above.

Feature interaction

SPAL is an integrated, stand alone service and cannot be used with an optional service.

Tariff references/price list references

SPAL can be found in section 5.5.7 of the ENS tariff or price list.

Service inquiry & manual ordering guidelines

A Local Service Request (LSR) form and an End User Information (EU) form must be used for manual ordering.

See this section for the PAL Ordering Form, or call the Interconnect

Services Center PAL group at 1-800-879-3220.

Mediated Access ordering information

This product can be ordered through Mediated Access.

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PUBLIC ACCESS LINE REQUEST

U S WEST Communications
Carrier Service Delivery Center
200 S 5th ST, Suite 495
Minneapolis, MN 55402

Telephone: 612 288-3707
800 879-2627
800 628-COIN

Fax: 612 663-0502
800 809-3220

For Office Use Only

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Today's Date:	Desired Due Date:	Assigned Due Date:	Request Confirmation: [ ] Fax Back [ ] Call Back
Business Name:	Service Address:	City:	State:
Type of Business:	Site Access Hours:	Site Access Person:	Site Tel. No.:
Vendor Name:	Order Placed By:	Contact Tel. No.:	Fax Tel. No.:

Billing Information:
Bill To: [ ] Vendor [ ] Site [ ] Other - Please Specify Below

Name:	Address:	City:	State:	Zip:
Summary Bill Number:	Special Billing Instructions:	Tax Exempt: [ ] Federal [ ] State		

SERVICE ORDER REQUIREMENTS:

Directory Information:
[ ] Non-Published
[ ] Non-Listed
[ ] Listed As Follows:
[ ] Basic PAL [ ] Smart PAL

Class of Service:
[ ] Flat Rate
[ ] Measured Rate
[ ] Message
[ ] W/ Call Allowance
[ ] Guest Line
[ ] Coinless
[ ] Two Way
[ ] Out Only

Long Distance Carrier:

Local Long Distance Carrier: (AZ, MN, NM, WY)

Screening Options:
[ ] International Blocking
[ ] Split Blocking
[ ] Operator Screening-Incoming
[ ] Operator Screening-Outgoing

Repair Plan:
[ ] Yes
[ ] No

Technician Information:
[ ] Wire to MPOP
[ ] Wire to Set (Time & Materials Charges Apply)
[ ] Call Before Dispatch [ ] Call After Completion

Name of Contact: Tel. No.:

LOA:	PUC Certification:	Line Information:	Additional Information:
[ ] Attached [ ] On File [ ] Blanket	[ ] Arizona [ ] Idaho (Required per Location. Send Form W/ Order) [ ] Minnesota [ ] New Mexico	[ ] New [ ] Disconnect [ ] Change Out [ ] Move [ ] Other	

LINE 1: Old Telephone #:_____ Order #:_____

New Telephone #_____ Order #:_____

Physical Location of Set for 911 Records:_____

LINE 2: Old Telephone #: Order #:

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- Wire Maintenance and Prewire

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PUBLIC ACCESS LINE REQUEST

U S WEST Communications
Carrier Service Delivery Center
200 S 5th ST, Suite 495
Minneapolis, MN 55402

Telephone: 612 288-3707
800 879-2627
800 628-COIN

Fax: 612 663-0502
800 809-3220

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Today's Date:	Desired Due Date:	Assigned Due Date:	Request Confirmat [ ] Fax Back [ ]

Business Name:	Service Address:	City:	State:

Type of Business:	Site Access Hours:	Site Access Person:	Site Tel. N
Vendor Name:	Order Placed By:	Contact Tel. No.:	Fax Tel. N

Billing Information:
Bill To: [ ] Vendor [ ] Site [ ] Other - Please Specify Below

Name:	Address:	City:	State:	Zip:

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[ ] N

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New Telephone #_____ Order #:_____

Physical Location of Set for 911 Records:_____

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New Telephone #: _____ Order #:_____

Physical Location of Set for 911 Records:_____

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SINGLE LINE/CENTREX 21 ISDN

Product Description

Basic product features

Single Line Service is a digital service that provides an integrated voice/data capability over the 2-wire customer facility. Utilizing NI-2 technology and the public switched network, Single Line Service distributes voice and/or data, at speeds up to 64 kbps per B channel and up to 16 kbps per D channel, by a standard method of end user access called a Basic Rate Interface.

The BRS is composed of two B (Bearer) channels and one D (Delta) channel.

NI-2 conforms to Inter-nationally developed, published, and recognized standards generated by the International Telegraph and Telephone Consultative Committee (CCITT).

Single Line Service uses NI-2 technology providing for digital network architecture which provides both a voice connection and high or low speed data connection simultaneously over existing telephone lines (twisted pair). These telephone lines are called Digital Subscriber Lines (DSL).

NOTE: U S WEST supports the NI-2 standard for hardware, but the features offered are NI-1

The DSL between the customer's premises and the central office is the Basic Rate Service (BRS). The BRS may 1B+S or 2B+S, or 1B+D or 2B+D.

The DSL has a transmission rate of 144 kbps (kilobits per second) divided into three channels. There are two "B" channels capable of 64 kbps each and one "D" channel capable of 16 kbps. The "D" channels throughput speed will vary significantly, dependent upon the Customer Provided Equipment. The "D" channel packet data is bursty (store and forward) in nature, so the availability of the network at a given time will also affect the throughput speed. Packet transmission is explained later in this section.

Each B channel is capable of:

Circuit switched voice

Circuit switched data

The D channel is capable of:

Signaling (Q.931 protocol)

Packet Data (X.25 protocol)

Single line Service offers two types of applications.

They are:

voice only (2B+S) (no data allowed)
Note: Available in CO & SD Only

voice /data (2B+D) (includes circuit switched voice, data and packet switched data)

BRS CONFIGURATION

NI-2 supports Standard Network Interfaces. NI-2 does not refer to the Point-to-Point or Multipoint Interface.

All Standard Interfaces support from one up to eight terminals per BRS. A single device may be capable of both circuit switched data and voice, as well as D Channel packet switched data.

Only one terminal may use a B channel at a time. The D channel may be used by eight packet switched data terminals simultaneously.

Basic product capabilities and restrictions

Although it is technically feasible to provide interstate and intrastate 800/WATS traffic over Single Line Service, there are major regulatory and legal hurdles that need resolution. At this time we are not able to provide interstate or intrastate 800/WATS access over Single Line Service.

2B1Q (two binary one quaternary) signaling operates to a loss capability of 40 dB at 40 kilohertz, as measured by a nominal 130 ohm termination at the customer network interface. Using 26 gauge wire, for example, BRS will work to about 18,000 feet (about 3.4 miles) using normal cable and pair. Loops more than 18,000 feet in length will be considered "available", but not loop qualified, a non-loop qualified charge will be applied.

NOTE: Each customer location must be checked. For example, bridge taps on the facility may shorten the distance. Also, in order for the pair to be qualified, the dB loss must qualify, and the cable must be non-loaded.

The customer or the customer's authorized agent will be responsible for the procurement of associated Customer Premises Equipment (CPE) and will ensure compatibility with the Single Line NI-2 Services.

- Packet Switched Data is not available with Centrex 21 ISDN.
- A minimum of 3 lines is required and a maximum of 50 lines per location is required for Centrex 21 service. This could include Centrex 21 Analog as well as Centrex 21 ISDN lines on the same account.

The customer is responsible for placement, installation, operation, maintenance, repair and replacement of all inside wire (including riser cable) not owned by the Company, and CPE that the customer uses in connection with this service. Premises wiring and CPE must be compatible with the Company's provisioning of service.

Should any change in inside wiring (including riser cable) not owned by the

Company, or CPE, require the Company to redesign the service, the customer shall reimburse the Company for all costs incurred by the Company in making such a change.

Should the service fail due to inside wiring (including riser cable) owned by the customer, or CPE, the responsibility for failure shall be solely that of the customer and the Company shall have no liability of any kind.

Packet Switched Information

The following information applies for the Single Line Service offering.

Packet Switched Service provides the customer the ability to transmit data in "packets" on the D-channel. A packet consists of information which is grouped together (packets) and interweave on the transmission path with other packets. The information is reconstructed at the receiving end.

The #5ESS uses the international standard X.25 protocol for packet switched data communications. There are 8 bits of information in a octet and 128 or 256 octets in a packet.

In order for a packet switching user to transmit data outside of their switch, a X.75 Prime (X.75') link must be available between this switch and the Public Packet Switching Network (Digipac).

Users wishing to send packet switching traffic InterLATA must do so via a Packet Switching Interexchange Carrier (IEC). The customer is responsible for interfacing with the IEC.

The IEC would then be able to "carry" the Single Line Service user's data transmission to another user located outside the LATA.

A Destination Network Identification Code (DNIC) must be shown on the user's order if the customer wishes to transmit interLATA. The DNIC is a four-digit numeric value assigned to a Packet Switching Interexchange Carrier. Each Carrier is assigned a unique code.

Feature Interaction Single Line Service does not provide service furnished by a remote switch located on the customer's premises.

CORTELCO and FUJITSU sets along with other CPE may require separate telephone numbers to be assigned for Voice, Data and Packet.

The following services are not available and/or compatible with Single Line Service.

- Customer-initiated temporary suspension of service
- Public Access Line
- Custom Ringing
- Direct Inward Dialing
- 800 WATS
- FEX into Independent Company territory

- Dual Telephone Service (cannot have ISDN working simultaneously in two different locations on a Transfer of Service order).

Diversity & Avoidance

The following is a list of features not Supported when an Analog Number is shared on an NI-2 ISDN set.

Call Waiting

AUTOMATIC Call-Back Calling

CFPF - Call Forwarding over Private Facilities

Home Intercom

Series Completion Hunting

SINGLE LINE TARIFF REFERENCE

State of Arizona, U S WEST Communications, Exchange and Network Services Catalog.

State of Colorado, U S WEST Communications, Exchange and Network Services. U S WEST Communications Services Catalog of Colorado.

State of Idaho, Exchange and Network Services Catalog, Section 14

State of Minnesota, Exchange and Network Services Price List, Section 14, U S WEST Communications

State of Minnesota, Exchange and Network Services Price List, Section 14, U S WEST Communications

State of North Dakota, Exchange and Network Service Price Schedule, Section 14

State of Nebraska, Exchange and Network Services Catalog, Section 14 (P/C Phone Section 114).

State of Oregon, Exchange and Network Services, Section 80, U S WEST Communications

State of South Dakota, U S WEST Communications, Exchange and Network Services Catalog

State of Utah, Exchange and Network Services Tariff, Section 14

State of Washington, U S WEST Communications, WN U-31 Exchange and Network Services

State of Wyoming, U S WEST Communications, Exchange and Network Services Price Schedule, Section 14.

CENTREX 21 TARIFF REFERENCE

State of Arizona, Competitive Exchange and Network Services Tariff Section 9

State of Colorado, Exchange and Network Services Tariff COLO P.U.C. No. 15, Section 9

State of So. Idaho, Competitive Exchange and Network Services Tariff Section 9

State of Minnesota, Exchange and Network Services Price List Section 9

State of Montana, Exchange and Network Services Tariff Section 9

State of Nebraska, Exchange and Network Services Catalog Section 9

State of North Dakota, Exchange and Network Services Price Schedule Section 9

State of Utah, Exchange and Network Services Tariff, Section 9

State of Wyoming, Exchange and Network Services Price Schedule Section 9

Installation Intervals See Service Intervals Section of this guide.

Service inquiry & manual ordering guidelines

ISDN INFORMATION ON THE INTERNET

Customers can get the latest Single Line Service ISDN information on the Internet's World Wide Web. The home page for U S WEST can be accessed via URL: "http://www.uswest.com". Choose the

U S WEST Communications link.

A Local Service Request (LSR) form, an End User Information (EU) form and a Resale Frame Relay (RFR) form must be used for manual ordering.

See Section 5 for information on these forms.

Mediated Access ordering information

These products can be ordered through Mediated Access.

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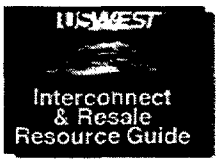

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VOICE MESSAGING SERVICE (VMS) AND BUSINESS VOICE MESSAGING SERVICE (BVMS)

NOTE: THIS PRODUCT IS ONLY AVAILABLE FOR RESALE IN SELECT STATES DUE TO COMMISSION ORDER. CHECK WITH YOUR STATE REGULATORY AGENCY OR ACCOUNT MANAGER.

VMS Product Description

Voice Messaging Service (VMS) is an Enhanced Service offered by U S WEST. It answers incoming calls, placed to the subscriber, when the called number is busy or does not answer.

Subscribers can record a personal greeting or can use a pre-recorded greeting. Callers can leave a message up to 3 minutes in length.

The standard VMS package includes:
-Mailbox
-Call Forwarding Busy Line/Don't Answer
-Message Waiting Indication (stutter dial tone)

Message Retrieval-Messages can be accessed by:
-Dialing the retrieval number and following instructions
-Using Easy Retrieval by calling home number and pressing "7" to interrupt greetings.

Message Retention:
- When messages reach their limit (e.g. 35 messages-100 days), they will not be automatically deleted. If the user has exceeded the message number, the caller will hear a message indicating the mailbox is full and will not receive further messages. When the user has messages which have reached or exceeded their retention period, new messages can be left, but the user cannot hear them until old calls are handled.

BVMS Product Description

BVMS is an enhanced service that allows U S WEST to supply a "mailbox" where a greeting can be given out and messages taken when:
- the customer is not available, or
- the customer chooses not to answer the telephone.
EXCEPTION: Listen Only Mailbox is an exception to this description. The Listen Only Mailbox allows subscribers to pre-record an announcement for incoming callers to hear and does not allow for a message to be taken.

Incoming calls can be answered with:
-a standard greeting announcement, or
-a personal greeting that may be created by the subscriber.

Messages are stored in a Voice Response Unit (VRU) for retrieval at any time. VRUs are configured to handle a designated number of mailboxes; some of them handle up to 17,000.

BVMS can be provisioned via one of two methods:
-Message Delivery Service (MDS) or
-Direct Inward Dial

Customer application and Central Office availability will determine the method used to establish the voice messaging arrangement.

MESSAGE DELIVERY SERVICE
MDS is a service offering available through Open Network Architecture (ONA), that provides an interface to U S WEST's messaging equipment. When MDS is provisioned via MDS and the customer subscribes to a call forwarding feature, calls to the customer's line are transferred over a multi-line hunt group to the VRU.

Because of a dedicated line between the Central Office and U S WEST messaging equipment, the VRU will then recognize the following information:
- the called directory number
- the calling directory number (if in the same Central Office as the called number)
- the reason the call was forwarded, e.g., busy or don't answer.

Most customers subscribing to this type of messaging service may use their own telephone number as their mailbox number.

DIRECT INWARD DIAL (DID)
BVMS provisioned via DID trunks, are also known as "Stand Alone." DID provisioning assigns a unique DID number to each mailbox that is established. The number is different from the customer's business telephone number.

Basic Service Elements include:
- Call Forwarding features such as Call Forward/Busy Don't Answer and
- Message Waiting Indication Audible

The following mailboxes are available with BVMS:
-Voice Mail
-Listen Only

Voice Mail boxes can be ordered with Call Routing. Call Routing is a "front end" call routing services which allows callers to make quick connections to a particular mailbox by pressing a single digit.

Basic product capabilities and restrictions

Touch-tone service is not required on the line, but a push-button set is. If there is no touch-tone, push-button set must have pulse/tone switch. VMS and BVMS is available in select 1AESS, 5ESS, and DMS-100 Central Offices that have been provisioned with Message Delivery Service (MDS).

Feature interaction

Call Forwarding Variable - Will override the CFBL/DA on VMS. Calls will not forward to the mailbox if the line is forwarded to another number.

Call Waiting - Calls not answered will go to VMS in Enhanced Call Waiting (ECW) Central Offices, however, it will not forward to VMS in Central Offices without ECW.

Three Way Calling - When Three Way Calling is in use, the call will forward to VMS.

Tariff references/price list references

There are a variety of options available on VMS and BVMS. Consult your local tariff for additional information.

Service inquiry & manual

A Local Service Request Form, End User Information Form, and a Resale Service Form must be completed to resell these services.

Mediated Access ordering information

This product can be ordered through Mediated Access.

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WIRE MAINTENANCE AND PREWIRE

NOTE: THIS PRODUCT IS ONLY AVAILABLE FOR RESALE IN SELECT STATES DUE TO COMMISSION ORDER. CHECK WITH YOUR STATE REGULATORY AGENCY OR ACCOUNT MANAGER.

Product Description

Basic product features

U S WEST offers a variety of Wire Maintenance Plans and provides prewiring services during initial construction for residential customers. Each plan or service is detailed below.

Basic Wire Maintenance
The Basic Wire Maintenance plan, provides repair or replacement to deregulated inside wire and jacks. The work is performed by U S WEST technicians and a written 30 day warranty is supplied with all Time and Material work. All lines at a customer premises must be covered. It does not offer customer protection from Maintenance of Service/Trouble Isolation charges.

Line-Backer Plan
The Line-Backer Plan provides unlimited trouble isolation and repair of a customer's Inside Wire and Jacks as long as the Wire and Jacks are placed in compliance with F.C.C. Rules and Regulations (Part 68), and local Building and Fire Codes. Inside wire in multi-tenant dwellings is normally not covered--the customer should check with their property manager. If the property manager does not cover the customer's wiring, Line-Backer will cover wiring inside the apartment only. Problems outside the apartment are not covered, and U S WEST could repair outside of the apartment for time and materials.

Line-Backer Plus Plan
The Line-Backer Plus Plan provides all of the services of Line-Backer plus the use of a loaner telephone set.

Prewiring Services
Prewire work is completed after the electrical "roughin" is completed, but before the drywall is placed. If only one visit is required a flat rate jack charge is billed. If more than one visit is required, the customer is billed on a time and materials basis.

Basic product capabilities and restrictions

Basic Wire Maintenance(WMR) Availability:
AZ- available
CO, NM, WY - Protected Status
Existing WMR may keep WMR on existing lines at existing locations. Cannot be offered on transfer or service or new service orders. Line-Backer could be offered instead.
IA, ID, MN, MT, NE, ND, SD, UT, WA - Not available

Basic Wire Maintenance(WMR) Considerations:
-All lines at a customer premises must be covered.
-It cannot be mixed with other Maintenance Plans.
-Does not offer customer protection from Maintenance of Service/Trouble Isolation charges.
-Does not cover non-standard wiring.

Line-Backer Availability:
Line Backer - all states
Line Backer Plus - not available in UT

LINE-Backer Considerations:
-All lines at a customer premises must be covered. Except in CO, NM, WY where a customer may keep WMR on existing lines and add Line-Backer only to additional lines.
-Existing trouble must be repaired prior to adding Line-Backer.
-Non-continuous DPAs must be covered by an additional maintenance plan.
-Coverage becomes effective on the due date, if dial tone is working to at least one jack.
- It is available for sale to mobile customers.
-Line-Backer Plus phones are one-party sets and are provided for up to 60 days.

Prewire Availability:
IA, MN, NE, ND, SD

Tariff references/price list references

Check the local tariff for current pricing and additional information.

Service inquiry & manual ordering guidelines

An Local Service Request Form, a End User Information form, and Resale Form must be provided.

See Section 5 for additional information on these forms.

Mediated Access ordering

This product can be ordered through Mediated Access.

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- AIN Interconnection
- CCSAC/SS7 Baseline Service
- CMDS Hosting and In-region Hosting
- Customized Routing
- Electronic Directory Assistance (EDA)
- Interim Number Portibility
- LIDB Data Storage
- LIDB Query Storage
- Line Validation Access (LVAS)
- Local Interconnection Service
- Local Number Portibility
- Physical Collocation
- Unbundled Dedicated Interoffice Transport
- Unbundled Loop
- Unbundled Switching
- Virtual Collocation
- Voice Directory Assistance for Facility Based CLEC
- Watchdog Access
- Wholesale Directory Listings
- Wholesale Operator Services
- 8XX Data Base Query Service
- 9-1-1 Interconnection

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ACCESS TO POLES, INNERDUCTS AND RIGHT OF WAY

Product Description

Basic product features

Under the requirements of the Telecommunications Act of 1996, U S WEST will grant to competing telecommunications service providers the right to attach facilities to poles owned or controlled by U S WEST or to place facilities within U S WEST owned or controlled conduits, ducts and rights-of-way. U S WEST must provide the requesting party with terms and conditions equal to those provided by U S WEST to itself or to any other provider. Authority and license to attach will be granted on an individual request basis subject to the terms of U S WEST's Pole and Anchor Attachment and/or Innerduct Occupancy Agreement.

Basic product capabilities and restrictions

Access to U S WEST poles, ducts and rights-of-way will be granted on a first come, first served basis.

For Rights-of-Way, U S WEST will only transfer whatever rights U S WEST has and does not warrant the ability to use the right-of-way if the properly owner disputes the right of U S WEST to sublease.

Unless otherwise determined either by negotiated Interconnection Agreement or by an individual state order, U S WEST will lease available duct/conduit space in increments of innerduct only.

U S WEST will not reserve innerduct or pole space based on the potential or forecasted needs of itself or other parties.

U S WEST will respond to a written request for access to innerducts/poles within 45 days for standard inquiries. A standard inquiry may include any or all of the following:

- Not more than 30 manhole sections
- Not more than 100 poles
- Not more that 2 miles of linear private rights-of-way.

All inquiries for innerduct/pole attachments that exceed the above standards must be negotiated between US WEST and the Interconnector.

The Interconnector is responsible to notify the U S WEST Service Assurance Center whenever working on any U S WEST owned infrastructure.

Where U S WEST has rights-of-way to buildings or building complexes, U S WEST will offer to an authorized provider through a license the right to

use any available space that is owned or controlled by U S WEST in a building or building complex to install CLEC equipment and facilities as well as ingress and egress to such space.

U S WEST will take all reasonable steps to accommodate requests of a cable system operator or telecommunications carrier.

Modifications to an existing Interconnector's attachments may be required in order to make accommodations for new requests. If modifications are required, U S WEST will provide written notification to those parties having prior attachments on that facility.

This notice will provide the overall scope of the planned modification and will be done at least 60 working days prior to commencement of the modification. In an emergency situation this notice will be provided as soon as practicable which in some cases may be after the modification has been made. No written notification will be provided for routine maintenance.

U S WEST will take reasonable steps to accommodate requests to expand facilities for innderduct. If such work is done, all costs associated with any modification to existing facilities will be borne solely by the CLEC.

A CLEC will be permitted to connect their conduit or duct only at the point of a U S WEST manhole. Attachment by entering or breaking into conduit between manholes is not permitted. A CLEC will be provided access to U S WEST manholes through a core drilling of the manhole and the placing of a conduit stub to be used by the CLEC for attachment to their conduit or duct system. This work will be performed by U S WEST or an authorized party and all costs associated with this work will be the responsibility of the Interconnector.

U S WEST will remove any retired cable from existing conduit systems to allow for the efficient use of space in response to a CLECs request for occupancy. This work will be performed by U S WEST or an authorized contractor and all costs associated with this work will be the responsibility of the Interconnector.

U S WEST cannot require a Joint User to utilize U S WEST employees or U S WEST contractors to work on poles, innerduct or rights-of-way which U S WEST owns or controls.

It is U S WEST's requirement that all work performed by the Joint User follow established standards regarding access to and placement of facilities in or on poles, conduit, ducts and right-of-way. Facilities shall be placed, constructed, maintained, repaired and removed in accordance with the following rules and regulations:

- The National Electric Code (NEC)
- The National Electric Safety Code (NESC)
- Follow all Federal, State and Local requirements

How this product works

U S WEST will enter into formal agreements for the lease of pole attachments and innerducts. A general information package is available

which documents the Terms and Conditions governing these lease requirements and includes all forms which are required to process the request. These forms will be administered by the appropriate Market Unit representative.

When an authorized telecommunications service provider first inquires about a pole attachment or innerduct lease they should be provided with a copy of the "U S WEST Pole and Anchor Attachment and/or Innerduct Occupancy Agreement". Upon review of this document by the joint user the "general information" pages should be returned to U S WEST to begin the inquiry process. The information provided on these pages includes a drawing of the proposed route and a general description of the facility to be placed. It also includes the joint user contact information and a check for the Record Verification Fee.

Once this package is received, the request will be forwarded to engineering who will be responsible to research all available records to determine if the requested route exists, distances, structure ownership, the number of manholes/poles as appropriate as well as any other pertinent information. This work should be completed within 10 days for standard requests.

Time frames for larger requests must be negotiated between U S WEST and the Joint User.

In order to determine actual innerduct/pole capacity, a field verification of all manholes/poles along the requested route to be leased is required. Estimate charges associated with providing this field verification will be determined. This information will be provided to the joint user for approval via Attachment 1 of the information package.

Once the joint user agrees to the terms and conditions as stated in Attachment 1 and forwards a signed copy of the document as well as a check for the field verification work, U S WEST must respond within 35 days for standard requests. Requests that exceed normal standards must be negotiated between U S WEST and the joint user.

The field verification required for innerduct lease requests includes the identification and &quotbutterfly" mapping of all conduits and respective innerducts that enter each wall of each manhole and the identification of any make ready work required to make innerduct available.

The field verification required for pole attachments will include the physical inspection of all poles along the requested route for available space to attach, identification of clearance requirements and any required make ready work that would be required in order to add additional attachments.

Upon completion of the field verification process, a response will be provided to the Interconnector concerning innerduct/pole availability and cost quote for any required make ready work. Upon expectancy of the quote, standard Special Construction contracts will be entered into between U S WEST and the joint user.

The time frames associated with completion of the make ready work will be determined by the scope of the work to be performed.

Tariff references/price list references

See the price matrix included in this section.

Service inquiry & manual ordering guideline

All requests for pole attachments or innerduct requests must be negotiated through the appropriate Account Manager. A sample U S WEST Pole and Anchor Attachment and/or Innerduct Occupancy Agreement is included in this section.

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

POLE AND INNERDUCT - RECURRING

	POLE (per attachment)	INNERDUCT (per foot)
Arizona	$2.82	$0.48
Colorado	$2.40	$0.39
Idaho	$2.17	$0.34
Iowa	$2.00	$0.24
Minnesota	$2.00	$0.32
Montana	$1.13	$0.38
Nebraska	$12.49	$0.32
New Mexico	$2.67	$0.47
North Dakota	$6.06	$0.50
Oregon	$5.15	$0.53
South Dakota	$2.22	$0.36
Utah	$2.49	$0.40
Washington	$2.81	$0.47
Wyoming	$1.53	$0.32

POLE AND INNERDUCT - NONRECURRING

	POLE	INNERDUCT
INQUIRY FEE (Records Verification per mile)	$114.00	$171.00
REQUEST FEE (Field Survey)	ICB	ICB
MAKE-READY FEE	ICB	ICB

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POLE ATTACH & INNERDUCT RATES

	Pole Attachments (annual rate per pole, per foot)		Innerduct Leases (annual per foot)		Annual Billing Expense
		Large City Urban	Urban	Rural & Suburban	
Arizona	$2.85	$2.12	$2.09	$2.02	$31.87
Colorado	$2.02	$2.29	$2.26	$2.18	$31.86
Idaho	$2.17	$2.35	$2.31	$2.24	$32.06
Iowa	$2.00	$2.42	$2.38	$2.31	$32.62
Montana	$1.13	$2.18	$2.15	$2.08	$33.90
Minnesota	$2.00	$2.59	$2.54	$2.46	$32.57
Nebraska	$10.25	$2.38	$2.34	$2.27	$32.86
New Mexico	$2.69	$2.07	$2.03	$1.97	$31.54
North Dakota	$2.41	$2.19	$2.15	$2.08	$32.78
Oregon	$4.33	$2.13	$2.10	$2.03	$38.71
South Dakota	$1.98	$2.30	$2.26	$2.19	$31.79
Utah	$1.51	$2.08	$2.04	$1.98	$35.95
Washington	$2.94	$1.87	$1.83	$1.78	$32.30
Wyoming	$1.53	$2.02	$1.99	$1.93	$32.30
	Poles	Innerduct			
Record Verification Fees:	$70.34	$106.00			
(Permile, estimate provided by CLEC)					

Poles and Innerduct Agreement Form (Word 6.0 Document)

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AIN INTERCONNECTION

Product Description

Access to U S WEST Advanced Intelligent Network (AIN) Interconnection services is available for services located at the Service Control Point (SCP) via the Signaling Transfer Point (STP).

Basic product features

Not available

Basic product capabilities and restrictions

Not available

How this product works

Not available

Feature interaction

Not available

Tariff references/price list references

Not available

Service inquiry & manual ordering guideline

Services may be requested via the Wholesale Local Markets New-Services Request Process, see Section 2-4 for information.

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

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CCSAC/SS7 BASELINE SERVICE

Product Description

Basic product features

Common Channel Signaling Access Capability (CCSAC) Baseline Service provides the means for transporting signaling information by way of Switched Access Links. This signaling information includes but is not limited to specific information regarding calls being made on associated Feature Group D trunks, Line Information DataBase (LIDB) data, 800 set up information, Call Set Up information and Transient messages.

The data transported is used for faster call set up, for billing and customer data requirements:

- Faster call set-up and tear down
- Signaling data can be sent in both directions simultaneously
- Holding times reduced
- Unique routing and control information available
- No need to tie up voice path for network management data
- Cross talk caused by signaling eliminated

Basic product capabilities and restrictions

The CCSAC Baseline Service has been built after the Local Transport Restructure model. A total Baseline service would be designed from the customers Point of Presence (POP) or Signaling Point of Interface (SPOI) and would include the following network elements:

Entrance Facility: A facility (DS3 or DS1) with a DS1 level facility dedicated which provides the connection from the customer's SPOI to the SPOI serving wire center. This facility must be exclusively used for the transmission of network control signaling data.

Direct Link Transport: This element provides the transmission facilities (DS3, DS1, DSO) between the SPOI serving wire center and the U S WEST local STP.
U S WEST does not differentiate between A and B Links in CCSAC but supports the need for a transmission path from the serving wire center to the U S WEST local STP. U S WEST also agrees that the facility from the Serving Wire Cetner (SWC) to the STP Port may be purchased from other than U S WEST and interconnected. Some form of Direct Link will be required in both unbundled and interconnect scenarios. In an Interconnect arrangement the Link will reside between the Expanded Interconnection Channel Termination and the STP Port.

STP Port: This is the point of termination to the signal switching capabilities of the local STP. A Port is required per Link, either U S WEST or Other's Link, at the STP.

MUX: Muxing can apply at either the serving wire center or at the STP prior to the Port. Muxing splits a facility from a higher to a lower capacity

(DS3 to DS1 or DS1 to DSO).

Expanded Interconnection Channel Termination Like Facility: In the case of Interconnection where the Entrance and/or Link Facilities are not U S WEST's, the customer must purchase an Interconnection Channel to initiate the connection of the customer's facilities to the U S WEST network.

Point Code Activation: Currently the Service Delivery Center receives an Access Service Request (ASR) from the customer to add, change, or remove Point Codes. Translations are accomplished by the Network Signalling Management Center. Several order routing functions are also accomplished. There is no recovery mechanism in place today for Interconnection.

Feature interaction

Optional Features of CCSAC/SS7 are dependent on CCSAC Baseline Service to transport all data. CCSAC Baseline facilities must be in place to accommodate:

- Call Set Up of related Feature Group D messages
- Transient messages
- LIDB data
- 800 set up information

Tariff references/price list references

Installation intervals

CCSAC Baseline ordering will require Customer/Account Manager negotiation, Pre Order Form, Link Data Sheet, ASR Form, BCD Form, and Translation Questionnaire.

Service inquiry & manual ordering guideline

All manual requests for service will include:

Customer/Account Manager negotiation.

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

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CMDS HOSTING AND IN-REGION HOSTING

Product Description

CMDS and In-Region Hosting provides a process to distribute alternately billed messages recorded in one company (the 'earning company') and billed in another company (the 'billing company'). The distribution of the billable records process is supplemented with a settlement process to:

- allow for the exchange of revenue associated with the messages.
- provide a billing and collection fee to be paid to the 'billing company'.
- include a service charge for U S WEST to administer the settlement process between the Earning and the Billing companies.

Basic product capabilities and restrictions

The distribution process and settlement process are limited to alternately billed messages such as Calling Card, Third Number and Collect.

How this product works

Example: Interconnector XYZ's end user customer places a telephone call from a coin telephone and bills the charges to their home phone. The call originates and terminates outside of Interconnector XYZ's serving area.

- The Company that originates and terminates the call is the "Earning Company" and should receive the revenue for handling the call.
- The Earning Company sends the billable record to U S WEST, who distributes the message to Interconnector XYZ.
- Interconnector XYZ bills the end user and receives a Billing and Collection fee.
- U S WEST provides the:
    1. distribution of the billable record between the Earning and Billing Company.
    2. settlement of the associated revenue between the Earning and Billing Company.
    3. settlement of the Billing and Collection fee between the Earning and Billing Company.

Feature interaction

To be determined.

Tariff references/price list references

Under development.

Service inquiry & manual ordering guideline

CMDS and In-Region Hosting are negotiated via the U S WEST Account Team as separate (or ancillary) contracts and are in addition to the Interconnection Agreement.

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

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CUSTOMIZED ROUTING

Product Description

Basic product features

Custom Routing combines End Office (EO) Switching and Dedicated trunks to allow an EO Switch the ability to route traffic by class of service and restrictions to specific dedicated trunks. Capacity constraints vary from switch to switch and Custom Routing orders will be evaluated on an Individual Case Basis in the pre-order process specific line class codes developed and implemented in EO Switches where the CLEC will purchase Custom Routing.

Custom Routing originates from an EO Switch, and has been developed to route Directory Assistance and Operator Services traffic.

Trunking Requirements:

1. Dedicated Local Directory Assistance (DA) trunks directed to a CLEC Local DA platform.
2. Dedicated DA Local Trunks directed to a CLEC Local Electronic DA platform.
3. Dedicated DA Local Trunks directed to the US WEST DA platform. CLEC Branding is purchased through U S WEST Operator Services.
4. Dedicated Full Feature Operator Local Trunks to allow Local Operator Services call (0+,0-) dialed by a CLEC end user customer to be directed to a CLEC Local Operator Services platform (Standard Operator Services protocols of 0+ or 0- will be supported where technically feasible).
5. Dedicated Full Feature Operator Local Trunks to allow Local Operator Services calls (0+,0-) dialed by a CLEC end user customer to be directed to a U S WEST Local Operator Services platform. CLEC branding is purchased from U S WEST Operator Services.

Basic product capabilities and restrictions

1A, DMS10 and Step Offices have memory and technical limitations as to the number of LCCs that can be implemented. LCC availability approved using ICB in pre-order process by switch.

How this product works

The customized routing service allows CLECs to have their operator, and or directory assistance calls directed to their dedicated Local trunks for handling. This customized routing is completed via trunks specially installed to handle the CLECÍs traffic, at an EO.

CLECs may also choose to use U S WESTÍs Operator Services and Directory Assistance.

Feature interaction

Custom Routing can be purchased with:

- Resale Service
- Unbundled Switching
- Rebundled

CLEC must purchase EO switching to order Custom Routing.

Tariff references/price list references

Tariffs are expected to be filed in Colorado, Iowa, Oregon and Minnesota.

Installation intervals

The Service Inquiry interval will be handled on an individual case basis initially.

The interval for establishing a LCC and programming it in a switch is approximately 45 days, at the present time.

Service inquiry & manual ordering guideline

The Reseller/CLEC questionnaire contains a Service Inquiry form. This form should be completed and provided to your Account Manager. This form provides information regarding which switches will require Customized Routing.

After the Service Inquiry is responded to be U S WEST, a LCC (Line Class Code) Ordering form must be completed. This form identifies the types of classes of service and blocking/restrictions that are required for LCC establishment.

Once the LCC is established, the LCC must be programmed in the individual switch(es).

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

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Electronic Directory Assistance (EDA)

Product Description

Electronic Directory Assistance (EDA) provides instant, paperless access to a database of numbers and addresses for over 16 million telephone subscriber listings for the 14-state region of U S WEST. The database also includes the listings of most independent telephone companies in U S WEST's region. The database is updated daily and is available 24 hours a day, 7 days a week.

BASIC SERVICE FEATURES/FUNCTIONS:

On-Line - allows direct access to our database in Omaha via a computer and modem. Can search by name or telephone number.

Tape-to-Tape - customers can send us a tape or disk with names or telephone numbers which will be matched and returned. Will send back tape or disk overnight for a $7.50 charge.

On-Line Local Access - available only for customers inside the U S WEST territory. This product is the same as On-Line, but a local number is provided to dial, rather than a number in Omaha for which the customer has to pay long distance access charges. Search by name is allowed only.

Electronic File Transfer - customers can download names and telephone numbers to our modem in Omaha and two business days later retrieve the information.

Internet Access - same as On-Line, but you access with the Internet address of uswceda@uswest.com/eda.

Basic product capabilities and restrictions

EDA On-Line - Local access provides name search only. There are no restrictions on the use of EDA.

How this product works

Customers either send an electronic file, dial up the database via a computer and modem or send a disk through the mail to secure name, address and telephone number information.

Tariff references/price list references

ELECTRONIC DIRECTORY ASSISTANCE RATES

- ON-LINE

a)	Service establishment fee	$243.00
b)	User I.D. activation fee	8.50
c)	Monthly minimum - Per customer account (includes 1,157 usage screens)	$169.30

(includes 1,157 usage screens)

d)	Usage display per screen, per month (over and above monthly minimum)	.1463

- ON-LINE LOCAL ACCESS
Same as On-Line

- TAPE TO TAPE

a)	Service establishment fee	$243.00
b)	User I.D. activation fee	8.50
c)	Monthly minimum	$169.30
d)	Per match fee	.05

-FILE TRANSFER

a)	Service establishment fee	$243.00
b)	Per file transfer	$200.00
c)	Per match fee	.05

-INTERNET
Same as On-Line

Service inquiry & manual ordering guideline

Electronic Directory Assistance On-Line and File Transfer are FCC tariffed services. The tape-to-tape application is a contracted service.

Mediated Access ordering information

This product cannot be ordered through Mediated Access at this time.

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LOCAL NUMBER PORTABILITY

Local Number Portability is a service offering that allows consumers the ability to retain their same telephone number when changing from one service provider to another. FCC Docket 95-116 addresses specific requirements for providing number portability both on an interim basis and development of a long term solution. Initial deployment will be offered within U S West Communications as Service Provider Number Portability (SPNP). In 1998, ten of the U S West MSA"s converted to LNP.

The Local Number Portability portion of this guide is currently available as an Adobe Acrobat File or MS Word File. The Adobe Acrobat file requires the Free Adobe Acrobat Reader.

- Download The Adobe Acrobat Version
- Download The MS Word Version

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LIDB DATA STORAGE

Product Description

Line Information DataBase (LIDB) storage provides screening and validation on Alternately Billed Services (ABS). This includes billed-to-third, collect, and calling card calls on dialable line number records for CLECs with a signed LIDB Data Storage Agreement. CLECs will provide line number record information to U S WEST's LIDB for the initial loading (if applicable), and daily updates each business day by a method agreed upon by both companies. The CLEC will arrange and pay for transportation of their updates to the U S WEST LIDB.

Basic product features/functions

The U S WEST LIDB stores multiple types of line record information to be accessed via a query for services including:

- Alternately Billed Services (ABS)
- Originating Line Number Screening (OLNS)
- Calling Name (CNAM)

Basic product capabilities and restrictions

The Billed Number Screening options are:

- Verify - accept both bill-to-third and collect calls
- Bill-to-Third - accept collect calls, deny all bill-to-third calls
- Collect - accept bill-to-third calls, deny all collect calls
- Deny - deny all bill-to-third and collect calls

The Calling Card options include two types of calling cards. Both types of calling cards must have a four digit Personal Identification Number (PIN) associated with the card type. The card types and card functionality are:

- Restricted - can only call the telephone number on the card
- Unrestricted - can call any number

How this product works

Operator Service Systems (OSS) and End Offices (EO) launch a query via the SS7 Network to the LIDB to retrieve information for use in call processing and service delivery.

Feature interaction

A CLEC must have access to the LIDB via the SS7 Network. Queries to the

U S WEST LIDB are routed to the Service Control Point (SCP) through the Regional Signal Transport Point (RSTP).

Service inquiry & manual ordering guideline

Contact the U S WEST Account Manager to order LIDB Data Storage. A separate LIDB storage agreement must be signed by CLEC.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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LIDB QUERY SERVICE

Product Description

The Line Information DataBase (LIDB) is an SS7 system database designed to provide for validation of calling card and other billing information stored in LIDB.

The purpose of offering LIDB access service is to provide validation for operator assisted calls such as:

- Calling Card
- Collect
- Third Number Billing

LIDB service transports queries and responses to and from the regional Signalling Transfer Point (STP) and U S WEST's LIDB.

Basic product capabilities and restrictions

To provide LIDB service, transport must be ordered via signalling links to the Signaling Transfer Point (STP). Regional STPs are located in Tempe, Arizona and Thornton, Colorado.

Tariff references/price list references

Customers requesting LIDB access service must currently order service from U S WEST's FCC No. 5 tariff.

Service inquiry & manual ordering guideline

Refer to the CCSAC/SS7 section in this Resource Guide for LIDB access service ordering requirements.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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LINE VALIDATION ACCESS (LVAS)

Product Description

Line Validation Administration System (LVAS) Access will allow the CLEC to add, update and change LIDB line record information for the CLEC end user customers. This will be accomplished via the development of an Interconnect Mediated Access (IMA) Web page.

An interim procedure is available for the receipt of updates from the CLEC to the U S WEST Service Center. The CLEC may fax additions, updates, changes and deletions to the center for input and LVAS will then process the requests.

Basic product features

Under development

Basic product capabilities and restrictions

Under development

How this product works

Not available

Feature interaction

Procedures will allow for the update of the CLEC LIDB records automatically.

Tariff references/price list references

Not available

Service inquiry & manual ordering guideline

Contact the U S WEST Account Manager to order LIDB Data Storage.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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LOCAL INTERCONNECTION SERVICE (LIS)

Product Description

Basic product features

Local Interconnection Service provides Competitive Local Exchange Carriers (CLECs) the ability to terminate calls within a U S WEST-defined Local Calling Area (LCA), Extended Area Service (EAS) area, or LATA.

LIS is a trunk-side connection largely similar in features and functions to Feature Group D. Most of the ordering requirements, technical standards, signaling options and many optional features are as defined for Feature Group D.

Basic product capabilities and restrictions

LIS is available to U S WEST local and access tandems and end offices.

LIS to End Offices
Terminating traffic destined for the NXXs served by a specific U S WEST end office may be routed directly to that end office over LIS. Calls will be terminated on the NXXs served by that office.

LIS to Local Tandems
Calls delivered to the local tandem will be completed to all end offices which subtend that tandem.

LIS to Access Tandems
A CLEC may connect to U S WEST's access tandems for termination of call to all end offices subtending those tandems within a LATA and outside the EAS area.

In addition, a CLEC may connect to the access tandems to terminate a call to an Interexchange Carrier (IXC) Point of Presence.

It is sometimes necessary for calls destined for an IXC Point of Presence to be carried on a separate trunk group from intraLATA calls.

LIS is available as multifrequency (MF) or Common Channel Signaling/Signaling System 7 (SS7).

Traffic over LIS Trunks is measured in minutes of use (for certain rate elements) and is recorded by U S WEST in Bellcore AMA Format (BAF) for handling in the Company's message processing system. Some rate elements applicable to LIS are flat-rated. In those states where reciprocal compensation has been ordered for local interconnection, all rate elements are as defined for intrastate FG D. Carrier Common Line (CCL) is applicable only to traffic which terminates at an end office which subtends USWC's access tandem and is located outside the EAS area but within the LATA.

How this product works

The Local Transport Restructure (LTR) of Switched Access is the rating and network design basis for LIS.

Tariff references/price list references

State tariffs, where they exist, and interconnection contracts define the optional features and technical standards for LIS.

- See Colorado Access Tariff, Section 16
- See Oregon Interconnection and Unbundled Elements Tariff
- See Washington Services Tariff

Applicable Rates
LIS routed to an end office
Nonrecurring charges - currently not defined.
Recurring Charges * -Local switching, Entrance Facility**, Direct-Trunked Transport**

LIS routed to a local tandem
Nonrecurring charges - currently not defined.
Recurring Charges * - Local Switching, Tandem Switching, Entrance Facility**, Direct-Trunked or Tandem-Switched Transport**

* *Recurring charges are applicable only when reciprocal compensation has been ordered by a public commission*

** *Applies only if CLEC uses USWC transport*

Service inquiry & manual ordering guideline

Negotiations with the account team are required before submission of a Local Service Request.

Mediated Access ordering information

Not available in Mediated Access.

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U S WEST

LOCAL NUMBER PORTABILITY

CO-CARRIER INFORMATION

PACKAGE

3-5-99

Document Purpose

The purpose of this document is to communicate U S WEST's understanding of the long term solution for Local Number Portability as it is defined within the industry and within the Western Region LNP Operations Team. This is not intended to be a comprehensive document, but to provide a general overview of the requirements: the processes, systems and network architecture as well as U S WEST policies. There are references to other source documents and to web sites that provide more detailed information.

The guide is available as an Adobe Acrobat file or MS Word File. The Acrobat file requires the Free Adobe Acrobat Reader. If you don't have the Acrobat Reader on your computer, click this link to download it from Adobe's Web site.

- Local Number Portability Co-Carrier Information - Microsoft Word 5.0 file
- Local Number Portability Co-Carrier Information - Adobe Acrobat file

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PHYSICAL COLLOCATION

COLLOCATION OVERVIEW

The Telecommunications Act of 1996 requires U S WEST to provide Collocation of interconnector-provided and designated basic transmission equipment necessary for interconnection or access to unbundled network elements at U S WEST premises. Interconnection is accomplished through either Physical or Virtual Collocation.

In order to request Physical or Virtual Collocation for the purpose of interconnection with the local carrier's network for the transmission and routing of telephone exchange service and exchange access, the interconnector must have received state certification and have either negotiated or arbitrated an Interconnection Agreement. This Interconnection Agreement must have Commission approval or pending Commission's approval. Requests for Physical and Virtual Collocation will be accepted once these requirements are met and U S WEST is in receipt of a Quotation Preparation Fee and appropriate Collocation Order Form.

Product Description

Basic product features

Physical Expanded Interconnection Collocation (PEIC) is a negotiated service offering which provides for the installation of collocator-owned equipment and facilities within leased floor space of U S WEST's wire centers for the purpose of connecting to U S WEST's network transport services and for the procurement of unbundled network elements. Physical Collocation gives the interconnector the right to use space in a LEC wire center. Floor space will be made available per wire center on a first come, first served basis. The interconnector can request cage enclosures in 100, 200, 300 or 400 square feet increments.

The collocator will be required to extend their fiber facility to the U S WEST designated Point of Interconnection (POI). The interconnector owns and maintains its fiber optic cable placed to the POI. U S WEST owns and maintains the cable into the central office termination fiber splice location at which point it will be spliced to an appropriate inside building cable to meet appropriate fire and safety regulations for inside use. U S WEST will place and splice this fiber facility.

The collocator may place basic transmission equipment in their space. The collocator is solely responsible for the timing, alarming, monitoring, performance, maintenance, provisioning and repair of their equipment. Interconnectors will have physical access to the LEC wire center to install, maintain and repair its equipment.

A Single Point of Termination (SPOT) provided by U S WEST is installed near the collocation arrangement as the official demarcation point between collocated equipment and U S WEST's common cross-connect frames. The collocator will provide the cable from their equipment to the SPOT. U S WEST will notify the collocator of the footage of cable required between

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WEST will notify the collocator of the footage of cable required between their equipment and the SPOT. U S WEST will install the cable to the collocator's termination on the SPOT. U S WEST will terminate the cable on both sides of the SPOT. The collocator is responsible for the inventory of all their terminations and U S WEST is responsible for the inventory on U S WEST's side of the SPOT. The collocator will have no physical access to the SPOT. The collocator will provide "CLCI" (tie down) information on their side of the SPOT when issuing access service orders for EICT's.

Nonrecurring and Recurring Elements

The following nonrecurring (NRC) and recurring (RC) rate elements are basic components to Physical Collocation:

Quotation Preparation Fee (QPF) NRC

Covers the work involved in developing a quotation specific to a collocation request.

Entrance Facility - NRC/RC

Consists of a fiber optic cable on a per two fiber increment basis from the POI to the physical space. It includes riser, fiber placement, entrance closure, conduit/innderduct and core drilling.

Cable Splicing - NRC

Applies if USWC is required to perform a splice for the interconnector-provided fiber optic cable to USWC fiber optic cable after the initial installation splice. Includes a per setup and per fiber spliced charge.

-48 Volt DC Power Cable Installation - NRC/RC

Provides for the transmission of -48 Volt DC power to the collocator's equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack, local power bay to the closest power distribution bay, the power cables (feeders) A and B from the local power distribution bay to the physical space. The charge is applied on a per foot basis.

-48 Volt DC Power - RC

Provides -48 Volt DC power to the collocator's equipment and is charged on a per ampere basis.

Inspector - NRC

Provides for the U S WEST qualified personnel necessary when the collocator requires access to the POI after the initial installation. Per half hour charges would apply for the inspector's time during normal business hours and out of normal business hours. A call-out of an inspector after business hours is subject to a minimum charge of four hours.

Base Rent - RC

Consists of Base Rent Areas 1, 2 and 3 and is charged on a per square foot

basis.

Enclosure Buildout - NRC (ICB)

Consists of either a cage enclosure consisting of a minimum of 100 square feet and a maximum of 400 square feet. It includes the material and labor to construct the enclosure, air conditioning, lighting, convenience outlets and security access.

Central Office (CO) Synchronization - RC

Synchronization provides Composite Clock and/or DS1 Synchronization signals traceable to a Stratum 1 source. CO Synchronization is available where U S WEST wire centers are equipped with Building Integrated Time Supply (BITS). CO Synchronization is an option ordered by the interconnector on the PEIC Order Form. A recurring charge is applied per port.

Basic product capabilities and restrictions

Equipment placed as part of a collocation arrangement must meet applicable industry standards, (i.e., NEBS) and at a minimum meet the standards U S WEST requires of itself. All building design and construction work will at least conform to the Uniform Building Code, NFPA Life/Safety Code, National Electric Code, Uniform Mechanical Code and local codes and ordinances of the jurisdictional authority. Equipment must be installed by a vendor on the current approved U S WEST vendor list. U S WEST requires proof of insurance and other liability coverage prior to equipment installation within the U S WEST wire center.

Unless where otherwise ordered by the State Commissions, U S WEST places the following restrictions regarding Physical Collocation:

- U S WEST does not allow collocators to connect to Dark Fiber.
- U S WEST does not offer copper or coaxial interconnection facilities.
- U S WEST does not allow the placement of enhanced service provider equipment.
- The interconnector must order Expanded Interconnection Channel Terminations (EICTs) to connect to USWCs network after the collocation request is completed.
- Other scenarios will be considered using the Bone Fide Request process for a CLEC.

How this product works

Physical Collocation does not have any standard installation intervals. They are based upon the terms identified in the Interconnection Agreements.

Once a collocator has completed the application process and has submitted fifty percent (50%) of the quoted nonrecurring charges, U S WEST will begin constructing the space. Upon completion of the construction activities and the remaining nonrecurring balance has been paid, U S WEST will turn over access to the space and provide security access to the wire center. The

interconnector will sign off on the completion of this space via a PEIC Completion Form, which will begin monthly billing for base rent. The collocator's vendor may then proceed with the installation of the equipment in the U S WEST wire center. Once the collocator's equipment has been installed and cable provided to the SPOT, U S WEST will complete all remaining work activities as outlined on the order form. A PEIC Completion Form will be provided for the interconnector's approval of the project. This form will begin monthly charges associated with the remaining PEIC charges.

Feature enhancements

Once the collocator's request has been completed, the collocator can then place orders to connect to U S WEST's transport services or unbundled elements through the purchase of Expanded Interconnection Channel Terminations (EICT's). EICT's provide a one-to-one dedicated transmission path between the interconnector's network equipment located in the wire center to U S WEST's two-wire and four-wire Analog PLTS and DDS, DS1, and DS3 Services.

Two-wire and four-wire EICTs are for connection to U S WESTs unbundled loops, Analog PLTS and DDS. DS1 and DS3 EICTs provide a 1.544 Mbps or 44.736 Mbps path between the collocator and U S WESTs tariffed DS1 and DS3 Services.

Collocators are also permitted to directly connect their arrangements to another collocation arrangement within the same wire center.

Expanded Interconnection Channel Regeneration will be required when the distance from the physical space to the U S WEST network is of sufficient length to require regeneration.

Tariff references/price list references

Physical Collocation will be provided by U S WEST as negotiated or arbitrated in the Interconnection Agreement.

Service inquiry & manual ordering guidelines

PEIC Collocation Orders:

To request Physical Collocation the collocator must submit a PEIC Order Form and the appropriate Quotation Preparation Fee (QPF) to request a feasibility study to determine whether space and ducts are available within a specific wire center and to request a quotation specific to the collocator's request. A copy of the PEIC Order Form is included in this Resource Guide. Questions on how to complete this PEIC Order Form may be referred to your Account Team Representative. This would be submitted to the EIC Product Manager, 1801 California Street, Room 2330, Denver, Colorado, 80202.

The EIC Product Manager is responsible for distributing the order form to the Account Team and appropriate departments for review and processing. Initially a feasibility study (15 business days) will be performed to determine whether space and ducts are available. A letter will be provided to the collocator indicating the results of the feasibility study. If space and ducts are not available, the QPF will be returned to the collocator.

If space and ducts are available, a quotation will be developed (25 business days) based upon the collocator's request. The Product Manager will compile the quotation information and provide a quote identifying the nonrecurring and recurring charges and estimated construction intervals to the collocator. Within 30 days of the date of the quotation, the collocator will be required to provide fifty percent (50%) of the nonrecurring charges to U S WEST or the quotation will expire and the space and ducts will be returned to available inventory.

The PEIC Order Form is located in this section.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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EXPANDED INTERCONNECTION/COLLOCATION (EIC)

PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

GENERAL CUSTOMER INFORMATION

DATE SENT TO USWC: _____/_____/_____ VERSION:_____

COMPETITIVE LOCAL EXCHANGE CARRIER (CLEC) INFORMATION

Billing Information: (Identify the person who should receive the quotation and bill)

Company Name:_____

Contact Name: _____

Street:_____

City/Town:_____

State:_____ Zip Code: _____

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Telephone:_____ Facsimile Number: _____

Seven Days, 24-Hour Single Point of Contact for Event Notification/Emergency Notification:
(Identify the Regional Single Point of Contact who should be contacted when USWC performs work that could potentially affect interconnector's service and for 24-hour emergency notification.)

Contact Name:_____

City/Town: _____

State: _____ Zip Code: _____

Toll Free Telephone No.:_____ Facsimile Number: _____

E-Mail Address:_____

CLEC Contact Information: (Identify the CLEC Single Point of Contact who will be managing this project.)

Contact Name:_____

Street:_____

City/Town: _____ State: _____ Zip Code: _____

Telephone No:_____ Facsimile Number:_____

Desired Service Date:_____/_____/_____ Activity: _____ (Indicate a new request, a change request, or a disconnect request)

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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

INTERCONNECTION SITE/FLOOR SPACE REQUIREMENTS

DESIRED INTERCONNECTION SITE

Access Provider: _____U S WEST Communications_____

Central Office Name: (e.g., Denver Main)_____

Central Office Common Language Location Identification (CLLI):_____

Wire Center Street:

_____

City/Town: _____State: _____ Zip Code: _____

FLOOR SPACE REQUIREMENTS

Build-out Enclosure: (Check one)

Cage Enclosure:_____

Hard Wall Enclosure: _____

Amount of Space Required (Heat load not to exceed 35 Watts per square foot):

- 100 sq. ft._____

- 101 to 200 sq. ft._____

- 201 to 300 sq. ft._____

- 301 to 400 sq. ft._____

U S WEST ENTRIES:

Central Office CLLI: _____

CLEC CLLI (11 Characters): _____

Central Office Staffed: _____ Unstaffed: _____

Physical Space CLEC Telephone Number: _____

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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

EQUIPMENT

TECHNICAL EQUIPMENT SPECIFICATIONS:

D.C. Power Requirements:

-48 Battery and Ground, A & B supplies number of (A & B) Feeds: _____

(Note: Enter the total number of A & B feeder pairs. A quantity of 1 equals one A & B feeder pair.)

Number of amps required, per A & B Feed:

(A Feed) 20 AMPS _____ (B Feed) 20 AMPS _____

(A Feed) 40 AMPS _____ (B Feed) 40 AMPS _____

(A Feed) 60 AMPS _____ (B Feed) 60 AMPS _____

What should each A & B Feed be fused at?:_____ AMPS

If current exceeds 60 AMPS, indicate the ultimate Ampere size required: _____

CLEC is required to notify U S WEST of additional power requirements beyond what had previously been ordered via a new PEIC Order Form and Quotation Preparation Fee (QPF).

Heat Dissipation Requirements:

The initial heat dissipation: _____ WATTS

The anticipated heat dissipation after six months: _____ WATTS

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The total ultimate heat dissipation: _____ WATTS

Enter the Total Anticipated Equipment Load of Interconnector Equipment:

The initial equipment load: _____ AMPS

The anticipated equipment load after six months: _____ AMPS

The total ultimate equipment load: _____ AMPS

A.C. Power Requirements:

U S WEST will provide convenience outlets per local building code with non-essential power.

Will CLEC request additional convenience outlets to be placed on essential A.C. power?

Yes_____No_____If yes, indicate: Voltage Phase _____ Ampere Size _____

(Charges will apply)

Grounding Requirements:

Does any CLEC equipment use frame return (complete the power circuit using relay rack iron work?)

Yes_____ No_____

(Note: This is not the preferred method. Most equipment should be powered with paired battery and return leads; however, if CLEC uses frame return, U S WEST needs to know this requirement in order to properly size the grounding cables.)

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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

EQUIPMENT

TECHNICAL EQUIPMENT SPECIFICATIONS : (continued)

Provide a list of all interconnector equipment to be placed in the physical space: (Note: Please specify

type, size and quantity of equipment installed so adequate power and environmental safeguards can be

provided.) **Attach preferred floor plan layout for space (footprint).**

		MANUFACTURER/MODEL NO.		PHYSICAL DIMENSIONS		QTY
1.						
2.						
3.						
4.						
5.						
6.						
7.						

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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

SUBCONTRACTOR INFORMATION

CLEC SUBCONTRACTOR INFORMATION

The information contained on this from must be submitted prior subcontractors being allowed on U S WEST property.

Central Office Engineering Subcontractor:

Street:

City/Town:

State: Zip Code:

Telephone Number:

Outside Plant Engineering Subcontractor:_____

Street:

City/Town:

State: Zip Code:

Telephone Number:

Central Office Installation Subcontractor:_____

Street:

City/Town:

State: Zip Code:

Telephone Number:

Outside Plant Installation Subcontractor:

Street:

City/Town:

State: Zip Code:

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Telephone Number:

All subcontractor personnel must be accompanied for the entire duration while on U S WEST property by an authorized CLEC representative. Subcontractor security issues are the responsibilit the CLEC.

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ORDER FORM B

ENTRANCE FACILITY

OUTSIDE PLANT FIELD SURVEY

Cable Information:

Is Dual Building Entrance Requested: YES _____ NO_____

(Note: Dual Entrances are available only where USWC currently has dual entrances and where there are spare

ducts to accommodate the request.)

-

Cable Requirements:

Number of cables to be placed to the POI:

Size of cables (diameter):

Number of fibers to be spliced

Cable Makeup:

Are there any metallic elements in the proposed cable?

YES NO

Connector Type: (The cable extended from the building splice point to the physical space.)

What type of connectorized ends will be required? (e.g., FC, ST)_

Equipment Manufacturer:

Fiber Manufacturer:

Cable Manufacturer:

Type of Single Mode Fiber used (e.g., Dual Window, Dispersion Shifted):

Loss Decibels per Kilometer:

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- Line Validation Access (LVAS)
- Local Interconnection Service
- Local Number Portibility
- Physical Collocation

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-Order Form 3

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-Order Form 6

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-Order Form 9

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- Unbundled Loop
- Unbundled Switching
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- Voice Directory Assistance for Facility Based CLEC
- Watchdog Access
- Wholesale Directory Listings

PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

SERVICE REQUIREMENTS

TERMINATION FORECAST:

-

Forecasted **incremental** quantities to be terminated at the Single Point of Termination (SPOT). Per this order, USWC will bill and terminate only the first year's forecast on the SPOT. Years two and three will be used for USWC and CLEC planning purposes. This information will be considered proprietary information.

	YEAR 1		YEAR 2		YEAR 3
DS3 -- 44.736 Mbps					
DS1 -- 1.544 Mbps					
DSO -- Digital 2-Wire					
DSO -- Digital 4-Wire					
VG* -- Analog 2-Wire					
VG* -- Analog 4-Wire					

- Wholesale Operator Services
- 8XX Data Base Query Service
- 9-1-1 Interconnection

5. Manual Ordering Process/Forms

*** Connections to unbundled loops.**

Is Synchronization to be provided by USWC? YES ____ NO _____

Will basic telephone service with a connection jack be ordered to physical space? YES ____ NO _____

(A separate service order will be required.)

Other environmental, enclosure or security requirements: YES ____ NO _____

(Note: If yes, please detail those requirements in the REMARKS section of this order form. Additional

charges may apply.)

REMARKS

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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

FORECAST REQUIREMENTS

EICT SERVICE FORECAST:

-

Provide a three year forecast for the services listed below based upon the termination forecast contained on the pr should be stated in the appropriate calendar quarter listed below when service is requested to be turned up.) Durin term of this Agreement, the forecast shall be updated and provided to USWC on a quarterly basis. Thereaft Agreement, the forecast will be updated from time to time, as requested by USWC. This forecast will be us accommodate future Expanded Interconnection Channel Termination (EICT) orders placed after completion of this be considered proprietary information and used for network planning purposes only and does not guar

Facility	Service	Yr 1 1st Qtr	Yr 1 2nd Qtr	Yr 1 3rd Qtr	Yr 1 4th Qtr	Yr 2 1st Qtr	Yr 2 2nd Qtr
DS3	DS3						
DS1	DS1						
DSO	Digital 2-wire						
DSO	Digital 4-wire						
VG*	Analog 2-wire						

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5. Manual Ordering Process/Forms

VG*	Analog 4-wire						
Facility	Service	Yr 3 1st Qtr	Yr 3 2nd Qtr	Yr 3 3rd Qtr	Yr 3 4th Qtr	Yr 4 1st Qtr	Yr 4 2nd Qtr
DS3	DS3						
DS1	DS1						
DSO	Digital 2-wire						
DSO	Digital 4-wire						
VG*	Analog 2-wire						
VG*	Analog 4-wire						

* Connections to unbundled loops.

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- Unbundled Loop
- Unbundled Switching
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PHYSICAL EXPANDED INTERCONNECTION/COLLOCATION (PEIC)

ORDER FORM B

ACCESS INFORMATION

ACCESS TO PHYSICAL SPACE:

Please provide a list of CLEC employees who will require access to the physical space. Include a brief description of job duties for each title. (Note: If you have prior employee background checks, please attach to this order.) Copy form as necessary.

	NAME & ADDRESS	SOCIAL SECURITY NO.	BUSINESS TELEPHONE NO.	TITLE & JOB DUTIES
1.				
2.				
3.				
4.				
5.				
6.				
7.				

At the time 50% downpayment is received from the CLEC, this form must be submitted to the U S WEST project manager. U S WEST reserves the right to deny access to specific applicants.

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5. Manual Ordering Process/Forms

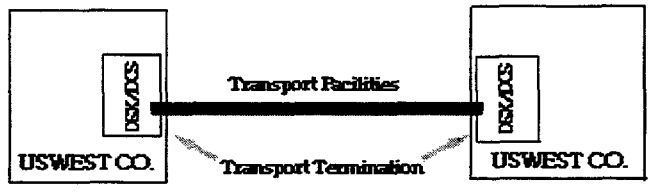
Interconnect and Resale Resource Guide

Revision: 2/10/99

UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT)

Unbundled Dedicated Interoffice Transport (UDIT) provides local transmission paths and multiplexing of signals. UDIT is a flat rated, band-width specific (e.g., DSO, DS1, DS3) interoffice transmission path between U S WEST wire centers in the same LATA and state. UDIT is available where spare U S WEST facilities exist sufficient to carry the desired bandwidth. UDIT in OCn bandwidths can be provided where available on an ICB basis. UDIT is dedicated for the sole use of the Co-Provider. UDIT Multiplexing is a flat-rated element to multiplex a single high speed channel into multiple low speed channels. The UDIT elements are provided in accordance with the specifications, interfaces, and parameters, as described in Technical Publication 77389B. UDIT elements must be ordered through the ASR ordering system and cannot be ordered through IMA. There are no installation options provided with UDIT elements. Technical Publication 77389B should be consulted for design issues. UDIT cannot be used for toll or access bypass.

The UDIT transport element appears as follows:



Another UDIT-family element is UCCRE (Unbundled Customer Controlled Rearrangement Element). UCCRE allows the Co-Provider to control the configurations of leased networks of circuits on a near real-time basis through a Digital Cross-Connect System (DCS) device. UCCRE is available at the DS3 and DS1 levels and only in certain U S WEST offices.

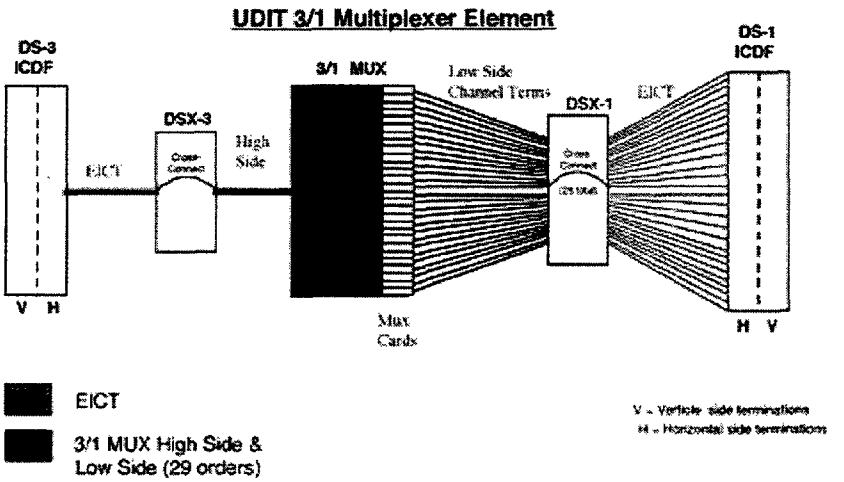
Terms and Conditions

U S WEST provides and maintains UDIT elements in accordance with specifications, interfaces and parameters of the technical publication. U S WEST does not warrant that UDIT is compatible with any specific facilities or equipment or can be used for any particular purpose or service. U S WEST, in order to properly maintain and modernize the network, may make necessary modifications and changes to the network elements in its network on an as needed basis. Such changes may result in minor changes to transmission parameters. Changes that affect network interoperability require advance notice. The Co-Provider is responsible for performing cross connections between UDIT and other UNEs and transmission design work including regeneration requirements for such connections.

UDIT is terminated at the ICDF (Interconnector Distribution Frame), but is designed to the DSX panel. The Co-Provider must have ordered sufficient

collocation terminations from the ICDF frame to complete the circuit. (U S WEST technicians complete the circuits to the ICDF by choosing the next available collocation terminations.) U S WEST will present a templated signal at the DSX. Any regeneration necessary between DSX and ICDF is the responsibility of the CLEC. The CLEC is also responsible for cross-connects on the ICDF to any other UNEs.

To order a 3/1 Multiplexer, the CLEC must order all multiplexing elements and requirements for the initial installation for the 3/1 Multiplexer, including all 28 DS1s and the settings on the multiplexer cards. If options are not selected and identified on the order by the CLEC, the order will be held until options are selected. For the 1/0 Multiplexer, the low side channels may be ordered as needed. Low Side Channelization charges are assigned as DS0 channels are ordered.



Rate Elements

RATE ELEMENTS of DS1 and DS3 UDIT

There are two elements that apply for each high speed interoffice transmission path--a fixed rate (or Termination) and a rate per mile. The rates are portrayed in mileage bands. Transport Facilities mileage measurements are computed using the V&H coordinates methods as set forth in the National Exchange Carrier Association Tariff F.C.C. No 4. When the calculation results in a fraction of a mile, round up to the next whole mile before determining the mileage band and applying the rates.

The following is a list of DS1, DS3 UDIT unbundled rate elements:

- Transport Termination - Dedicated DS1
- Transport Facilities - Dedicated DS1
- Transport Termination - Dedicated DS3
- Transport Facilities - Dedicated DS3
- Expanded Interconnection Channel Termination
- Channel Regeneration
- Non Recurring termination charge

RATE ELEMENTS of DS0 UDIT

There are three elements that apply for each DS0 interoffice transmission

path: a fixed rate (or Termination), a rate per mile, and a DS0 Channelization (per channel). The first two rates are portrayed in mileage bands. Transport Facilities mileage measurements are computed using the V&H coordinates methods as set forth in the National Exchange Carrier Association Tariff FCC No 4. rounded up to the nearest mile. The DS0 Channelization charge is for the channel plugs, or cards, at both ends of the circuit. The cards are for multiplexing and must be set according to the type of DS0 and to match the facility and equipment the Co-providor will be connecting to the UDIT element.

The following is a list of DS0 UDIT unbundled rate elements:

- Transport Termination DS0
- Transport Facilities DS0
- DS0 Channelization
- Non Recurring termination charge

ISDN UDIT requires three adjacent DS0 channels and a single channel card at each end of the circuit. There are no developed rate elements for ISDN. An ISDN order would be treated as ICB.

RATE ELEMENTS of MULTIPLEXING UDIT

3/1 Multiplexing:

The 3/1 multiplexer is fully provisioned with the order. The high side DS3 is designed to the DSX-3 and the 28 low side channels are designed to the DSX-1. Both high and low sides are completed to the respective ICDF frames via ICDF terminations ordered through Collocation. The rate elements are:

- Recurring Multiplexing charge
- Non Recurring multiplexing charge
- EICT charges for tie cables to the ICDF

1/0 Multiplexing:

The 1/0 multiplexer is partially provisioned with the order-- including the high side cabling, the multiplexer and the low side cabling to the DS0 ICDF. Multiplexing cards, or plugs, are placed and set with each order of DSO at which time an additional monthly charge is made for the Low Side Channelization (LSC). The 1/0 multiplexing rate elements are:

- Recurring Multiplexing charge
- Non Recurring Multiplexing charge
- Recurring LSC charge
- Non recurring LSC charge
- EICT charges or tie cables to the ICDF

RATE ELEMENTS of OCN UDIT

OC3 and OC12 UDIT and SONET UDIT elements are under development and intended for availability in early 1999 if demand exists.

RATE ELEMENTS of UCCRE

UCCRE may be used with unbundled network elements (UNEs) or

collocated equipment (IDE). It uses the DCS (Digital Cross-Connect System) to rearrange DS1s or DS0s remotely (depending on the arrangement). The rearrangement can be done either by Dial-up or by Attendant Access. The rate elements are:

- Recurring DS1 Port
- Recurring DS3 Port
- Recurring Dial Up Access
- Recurring Attendant Access
- Non Recurring DS1, DS3 and Virtual Ports

DESCRIPTION OF RATE ELEMENTS:

EICT
The EICT is a recurring charge for the tie cables that enable connectivity between the ICDF Frame and various locations within USW's Central Office for access to USW UNEs.

Regeneration
Required when the distance from either the leased physical space (for Physical Collocation or Cageless Physical Collocation) or the collocated equipment (for Virtual Collocation) to the USW network is of sufficient length to require regeneration.

Transport Termination - Dedicated DSO
A network element consisting of a voice grade or up to 64 Kbps digital data termination on a cross-connect frame in U S WEST's central office providing a connection between the Interoffice Transport Facility and other network elements. It must be ordered with a DSO Transport Facility.

Transport Termination - Dedicated DS1
A network element consisting of a 1.544 Mbps DS1 termination at a DSX or DCS and providing a connection between the Interoffice Transport facility and other network elements. It must be ordered with a DS1 Transport Facility.

Transport Termination - Dedicated DS3
A network element consisting of a 44.736 Mbps termination at a DSX or DCS providing a connection between the Interoffice Transport facility and other network elements. It must be ordered with a DS3 Transport Facility.

Transport Termination - Dedicated OC3
A network element consisting of a 155.52 Mbps termination at FDP providing a connection between the Interoffice Transport facility and other network elements. It must be ordered with a OC3 Transport Facility.

Transport Termination - Dedicated OC12
A network element consisting of a 622.08 Mbps termination at a FDP providing a connection between the Interoffice Transport facility and other network elements. It must be ordered with a OC12 Transport Facility.

Transport Facilities - Dedicated DSO
An interoffice transport network element providing a transmission path of 64 Kbps between U S WEST central offices. This transmission path does not provide metallic circuit capability.

Transport Facilities - Dedicated DS1

An interoffice transport network element providing a transmission path of 1.544 Mbps between U S WEST central offices.

Transport Facilities - Dedicated DS3
An interoffice transport network element providing a transmission path of 44.736 Mbps between U S WEST central offices.

Transport Facilities - Dedicated OC3
An interoffice transport network element providing a transmission path of 155.52 Mbps between U S WEST central offices.

Transport Facilities - Dedicated OC12
An interoffice transport network element providing a transmission path of 622.08 Mbps between U S WEST central offices.

3/1 Recurring Multiplexing
The DS3 CO Multiplexer provides de-multiplexing of one DS3 44.736 Mbps to 28 1.544 Mbps channels.

3/1 Multiplexing Non Recurring
One-Time charges for specific work activity associated with installation of the Multiplexing Service.

1/0 Recurring Multiplexing
The DS1 CO Multiplexer provides de-multiplexing of one DS1 1.544 Mbps to 24 64Kbps data or voice channels.

1/0 Non-Recurring Multiplexing
One-Time charges for specific work activity associated with installation of the Multiplexing Service.

Recurring UCCRE Ports DS1
Charges for ports into the DCS device at the DS1 level

Recurring UCCRE Ports DS3
Charges for ports into the DCS device at the DS3 level

UCCRE Dial Up Access
Monthly charges for direct dial up service into the Network Controller. Includes software and password for remote rearrangement capability.

UCCRE Attendant Access
Monthly Charges for a U S WEST Attendant to complete rearrangements as requested.

Non-Recurring DS3 Port
One-Time charges for specific work activity associated with installation of the DS3 Port

Non-Recurring DS1Port
One-Time charges for specific work activity associated with installation of the DS1 Port

Non Recurring Virtual Port
One-Time charges for specific work activity associated with installation of a Virtual Port. A Virtual Port allows cross-connections between separate Co-Providers[1] networks. (See Tech Pub # 77389 for more detail)

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- Voice Directory Assistance for Facility Based CLEC

1. General

- The purpose of this document is to provide detailed information for the ordering, provisioning, and maintenance of the U S WEST Unbundled Loop element.
- The audience for this information includes Co-Provider and Account Management personnel involved with ordering, provisioning, and repair work activities as it relates to the Unbundled Loop product.
- This document will be updated as required to meet the needs of U S WEST .
- Document issue number, date, and author(s) are found in the footer information of this document.
- While titles used in this method may vary throughout U S WEST, they apply to all employees who have responsibilities with respect to provisioning and maintaining the Unbundled Loop product.

2. Description

- The Unbundled Loop product provides a connection between an end user premises location Network Interfac (NI) and a U S WEST Central Office Main Distributing Frame (MDF) or equivalent. The structure, pricing, a guidelines for the Unbundled Loop product is determined by individual State Public Utility Commissions an Interconnection Contracts. Standard ordering, provisioning, and maintenance processes are defined in this document, but may need to be adapted to support the differences in the Unbundled Loop products defined in individual state tariffs or Co-Provider negotiated contracts.

3. Application

- The Unbundled Loop product is available in all U S WEST states. The Unbundled Loop product includes a connection from the end user premises NI to the U S WEST Central Office Main Distributing Frame (MDF) equivalent. The loop is then cross-connected to a Single Point of Termination (SPOT) designation for exiting the office via the Co-Provider's collocation equipment (either physical, Cageless Physical, SPOT collocation, virtual or shared.). SPOT frames will be provisioned in all states except those where local regulatory decision have disallowed the SPOT frame concept. Included in the basic product descriptions are the following Unbundled Loop offerings:
    - Basic Analog 2 Wire Loop
    - Basic Analog 4 Wire Loop
    - Non-Loaded 2 Wire Loop
    - Non-Loaded 4 Wire Loop
    - Basic Rate (BRI) ISDN Capable Loop
    - DS-1 Capable Loop
- The Co-Provider is U S WEST's customer. The end user is the Co-Provider's customer. The Trunk Integrated Record Keeping System (TIRKS) provisioning flow is used to facilitate the unique structure of the Unbundle Loop.

- Watchdog Access
- Wholesale Directory Listings
- Wholesale Operator Services
- 8XX Data Base Query Service
- 9-1-1 Interconnection

5. Manual Ordering Process/Forms

- When a Co-Provider requests service for an end user, who currently uses U S WEST as their local telephone service provider, a Disconnect order is issued to produce a final bill for that end user.

4. Provisioning/Installation Options

- Four provisioning options are available for Unbundled Loop elements. The cost for these provisioning option will vary depending on the type of loop requested and the negotiated contract rate. For instance, the Basic Installation option for a 2-Wire voice grade loop is less than the same option for the DS-1 capable loop. Cost documentation demonstrates the additional provisioning and testing time required for the DS-1 capable loop hence the additional cost.
  - Basic Installation
  - Basic Installation with Performance Testing
  - Coordinated Installation with Cooperative Testing
  - Coordinated Installation without Cooperative Testing

NOTE: Please refer to Technical Publication 77384 Issue E, for the testing parameters.

- **Existing Contract Language**

- **Basic Installation**
  - The Basic Installation option may be ordered for new or existing service. For an **existing** U S WEST e user changing to a Co-Provider or a Co-Provider end user changing Co-Providers, the Basic Installatio options is a "lift and lay" procedure with no associated circuit testing. The Central Office Technician (COT)"lifts" the loop from its current termination and "lays" it on a new termination connecting to the Co-Provider's collocation equipment. Field dispatch is at the discretion of U S WEST.
  - For **new** service that has not previously existed, the COT and Designed Services I&M Technician (DS I&M Technician) complete circuit wiring per the WORD document and/or the service order. The COT and DS I&M Technician perform **Conformance** testing to ensure the new circuit meets the required parameter limits. The test results are provided to the Designed Services Customer Communication Technician-Implementor (CCT-I), who records them as benchmarks for future testing purposes. These test results are **NOT** provided to the Co-Provider.

- **Basic Installation with Performance Testing Option**
  - The Basic Installation with Performance Testing option may be ordered for new or existing service. Fo an **existing** U S WEST end user changing to a Co-Provider or a Co-Provider end user changing Co-Providers, the Basic Installation option is a "lift and lay" procedure with Performance testing. The Central Office Technician (COT) "lifts" the loop from its current termination and "lays" it on a new termination connecting to the Co-Provider collocation equipment. The COT and DS I&M Technician complete the required Performance Tests. The test results are provided to the CCT-I, who records them benchmarks for future testing. In addition, the CCT-I forwards the test results to the Co-Provider.

- For **new** service that has not previously existed, the COT and DS I&M Technician complete circuit wiring pe the WORD document and/or the service order. The COT and DS I&M Technician perform the required Performance tests to ensure the new circuit meets the required parameter limits. The test results are provided the CCT-I, who records them as benchmarks for future testing purposes. The test results are forwarded to the Co-Provider by the CCT-I.

- **Coordinated Installation with Cooperative Testing Option**
  - The Coordinated Installation with Cooperative Testing option may be ordered for new or existing servi For an **existing** U S WEST end user changing to a Co-Provider or a Co-Provider end user changing Co-Providers, the Coordinated Installation options is a "lift and lay" procedure with Cooperative testin The Co-Provider has the option to designate a specific "Appointment Time" when the service order is placed. If no "Appointment Time" has been specified when the order is initiated, the Co-Provider has u to 48 hours prior to the due date to relay the "Appointment Time" information to the U S WEST Interconnection Services Center (ICS) Service Delivery Coordinator (SDC). On the Due Date (DD), at the Co-Provider designated "Appointment Time", the COT "lifts" the loop from its current termination and "lays" it on its new termination connecting to the Co-Provider collocation equipment. The COT an DS I&M Technician complete the required Performance tests. In addition, the COT and DS I&M Technician perform other testing as requested by the Co-Provider. It is important to note that any Co-Provider requested provisioning test not defined for the Unbundled Loop product in the U S WEST Technical Publication 77384 is billable. The test results are provided to the CCT-I, who records them a benchmarks for future testing, and forwards them to the Co-Provider.

- For **new** service that has not previously existed, the COT and DS I&M Technician complete circuit wiring pe the WORD document and/or the service order at the "Appointment Time" designated by the Co-Provider. Th COT and DS I&M Technician perform the required Performance tests to ensure the new circuit meets the required parameter limits. In addition, the COT and DS I&M Technician will perform other testing as request by the Co-Provider. It is important to note that any Co-Provider requested provisioning test not defined for th Unbundled Loop product in the U S WEST Technical Publication 77384 is billable. The test results are provided to the CCT-I, who records them as benchmarks for future testing and forwards them to the Co-Provider.

- **Coordinated Installation with No Testing Option (Limited to existing service only)**
  - The Coordinated Installation with No Testing Option may be ordered for existing 2-wire loop start or ground start service. For an **existing** U S WEST end user changing to a Co-Provider or a Co-Provider e user changing Co-Providers, the Coordination with No Testing option remains a "lift and lay" procedur but offers the Co-Provider the ability to coordinate the conversion activity. This allows the Co-Provide end user to pre-plan for minimal service interruption. At the Co-Provider designated "Appointment Time", the U S WEST COT contacts the CCT-I, who, in turn contacts the Co-Provider to notify them t the U S WEST work activity is beginning. Once work is completed, the CCT-I calls the Co-Provider to inform them the "lift and lay" procedure is completed. This option does NOT require a field dispatch if no field or premises work is required.

NOTE: Conformance and Performance Tests involve performing the same tests and using the same test limi The difference between the two types of testing is Conformance testing is internal to U S WEST to establish benchmarks and verify circuit performance. These results are NOT provided to the Co-Provider. If the Co-Provider requires test results, they are required to order the Performance testing Option.

- **Phase II Contract Language**
  - **Basic Installation Option for Existing Service**
    - The Basic Installation option may be ordered for existing (reuse) service only. For an **existing** U WEST end user changing to a Co-Provider or a Co-Provider end user changing Co-Provider's, th Basic Installation options is a "lift and lay" procedure with no associated circuit testing. The Central Office Technician (COT) "lifts" the loop from its current termination and "lays" it on a n termination connecting to the Co-Provider. The Co-provider will be contacted when the work activity is completed.

- **Basic Installation with Performance Testing Option for New Service**
  - The Basic Installation with Performance Testing option may be ordered for new service only. For **new** service that has not previously existed, the COT and CST/NT complete circuit wiring per the WORD document and/or the service order. The COT and CST/NT perform the required performance tests to ensure the new circuit meets the required parameter limits. The test results are provided to the Designe Services Implementor/Tester, who records them as benchmarks for future testing purposes. The test results are forwarded to the Co-Provider by the Implementor/Tester.

- **Coordinated Installation with Cooperative Testing Option**
  - The Coordinated Installation with Cooperative Testing option may be ordered for new or existing servi For an **existing** U S WEST end user changing to a Co-Provider or a Co-Provider end user changing CLECs, the Coordinated Installation options is a "lift and lay" procedure with Cooperative testing. The Co-Provider has the option to designate a specific "Appointment Time" when the order is placed. If no "Appointment Time" is specified when the order is initiated, the Co-Provider has up to 48 hours prior t the due date to relay the "Appointment Time" information to the U S WEST Interconnection Services (ICS) Service Delivery Coordinator (SDC). On the Due Date (DD), at the Co-Provider designated "Appointment Time", the COT "lifts" the loop from its current termination and "lays" it on its new termination connecting to the Co-Provider. The COT and CST/NT complete the required Performance Tests. In addition, the COT and CST/NT will perform other testing as requested by the Co-Provider. It important to note that any Co-Provider provisioning test not defined for the Unbundled Loop element(s in the U S WEST Technical Publication 77384 is billable. The test results are provided to the Designed Services Implementor/Tester, who records them as benchmarks for future testing, and forwards them t the Co-Provider.

- For **new** service that has not previously existed, the COT and CST/NT complete circuit wiring per the WOR document and/or the service order at the "Appointment Time" designated by the Co-Provider. The COT and CST/NT perform the required performance tests to ensure the new circuit meets the required parameter limits In addition, the COT and CST/NT will perform other testing as requested by the Co-Provider. It is important note that any Co-Provider provisioning (transmission) test not defined for the Unbundled Loop element(s) in the U S WEST Technical Publications is billable. The test results are provided to the Designed Services Implementor/Tester, who records them as benchmarks for future testing and forwards them to the Co-Provide

- **Coordinated Installation without Testing for Existing Service**
  - The Coordinated w/o Testing may be ordered for 2-Wire Analog loop start or ground start unbundled loops. For an **existing** U S WEST end user changing to a Co-Provider or a Co-Provider end user changing CLECs, this option remains a "lift and lay" procedure but offers the Co-Provider the ability t coordinate the conversion activity whereby allowing their customer to pre-plan for minimal service interruption. At the Co-Provider designated time, the U S WEST Central Office Technician (COT) wil contact the Implementor who, in turn, will contact the Co-Provider to notify them that the work activit beginning. If no "Appointment Time" is specified when the order is initiated, the Co-Provider has up t 48 hours prior to the due date to relay the "Appointment Time" information to the U S WEST Interconnection Services (ICS) Service Delivery Coordinator (SDC). On the Due Date (DD), at the Co-Provider designated "Appointment Time", the COT "lifts" the loop from its current termination and "lays" it on its new termination connecting to the Co-Provider. Once the work has been completed, the Implementor will again call the Co-Provider to inform them that the "lift and lay" procedure has been completed.

5. Product/Service Features

Analog Loops

- **2-Wire Analog Loop**
  - The 2 Wire Analog loop is a U S WEST two wire facility that provides a connection from the U S WE serving Central Office Main Distributing Frame or equivalent to the end user's Network Interface (NI). This channel supports 300 to 3000 Hz analog service. The Co-Provider is required to specify a signalin format.

- The standard actual measured loss (AML) of the 2 wire loop should not exceed -8.5 dB, however, State speci tariffs or individual Co-Provider contracts may require different actual measured loss values. U S WEST Technical Publication 77384, Issue E indicates the majority of 2 wire Analog loops meet this requirement, however, there may be some loops that exceed this requirement. No line treatment or range extension is adde to the Basic 2 wire Analog loop unless required by State specific tariffs or individual Co-Provider contracts.

- **4-Wire Analog Loop**
  - The Basic 4 Wire Analog Loop is a U S WEST four wire facility that provides a connection from the U S WEST serving Central Office Main Distributing Frame or equivalent to the end user's NI. This channel supports 300 to 3000 Hz analog service with a send and receive transmission path.

- The standard actual measured loss (AML) of the Basic 4 Wire Loop should not exceed -8.5 dB on either pair, however, state specific tariffs or individual Co-Provider contracts may require different actual measured loss values. U S WEST Technical Publication 77384, Issue E indicates the majority of Basic 4 Wire Analog Loop meet this requirement, however, there may be some loops that exceed this requirement. No line treatment or range extension is added to the Basic 4 Wire Analog Loop unless required by state specific tariffs or individu Co-Provider contracts.

Non-Loaded Loops

- **2-Wire Non-Loaded Loop**
  - The 2 Wire Non-loaded loop is a U S WEST provided facility from the U S WEST serving Central Office Main Distributing Frame or equivalent to the end user's NI. It is a metallic, wire cable pair with load coils, and, depending on the service the Co-Provider intends to transmit on the Non-Loaded Loop, some limited lengths of bridges tap. (see Table 4-2 for 2 Wire Non-Loaded Loop Formats).

- The non-loaded loop has the following characteristics:
  - Metallic facilities onlyno carrier segments
  - No load coils or build out capacitance
  - Tolerant of some bridged tap
  - Loop may contain a mixture of cable gauges

Technical Description - 2-Wire Non-Loaded Loop

- The 2 Wire Non-Loaded loop may be used to support Co-Provider service offerings such as digital data, Basi Rate (BRI) ISDN, and a variety of 2-wire Digital Subscriber Line (DSL) technologies. Each digital service a the specific transport equipment applied by the Co-Provider has its own tolerance to loop loss and bridged ta The Co-Provider must determine, by ordering and reviewing a Design Layout Record (DLR), whether the available loop satisfies their service requirements.

- **4-Wire Non-Loaded Loop**
  - The 4 Wire Non-loaded Loop is a U S WEST provided facility from the U S WEST serving central off distributing frame to the network interface at the End user's designated premises. It is a metallic, wire cable pair with no loading coils.

- The 4 Wire Non-loaded loop has the following characteristics:
  - Metallic facilities onlyno carrier segments
  - No loading coils or build out capacitance
  - Tolerant of some bridged tap
  - Loop may contain a mixture of cable gauges

Technical Description - 4-Wire Non-Loaded Loop

- The 4 Wire Non-loaded loop may be used to support Co-Provider service offerings such as digital data, Prim Rate (PRI) ISDN, and Digital Subscriber Line technologies (HDSL). Each digital service and the specific transport equipment applied by the Co-Provider has its own tolerance to loop loss and bridged tap. The Co-Provider shall determine, by submitting a LSR, requesting a Design Layout Record (DLR) and reviewing the information contained on the DLR, whether the available loop satisfies their service requirements.

NOTE: Transmission characteristics of the two pairs making up the 4 wire facility may not be identical.

Digital Capable Loop

- **Basis Rate ISDN (BRI) Capable Loop**
  - The Basic Rate (BRI) ISDN Capable Loop is a U S WEST facility with a two-wire interface that provi a connection from the U S WEST serving Central Office Main Distributing Frame (MDF) or equivalen to a end user NI. This loop will meet the design requirements for Basic Rate (BRI) ISDN standards of 144kbps customer useable data capacity channelized as 2B + D.

- The BRI ISDN Capable Loop is typically provided in the following configurations:
  - Non-loaded metallic loop technically qualified for BRI ISDN transmission without the need for additional equipment.
  - A combination of a long non-loaded metallic loop, a mid-span repeater and Central Office power unit.
  - A combination of Universal Digital Loop Carrier (UDLC) channels and a qualified non-loaded metalli loop.

- There are some end user locations served by loop facilities and transmission equipment that are not compatib with the BRI ISDN technical requirements. Requests for a BRI ISDN capable loop for these locations must b submitted on an "Individual Case Basis" (ICB).

- **Typical Applications for Basic Rate ISDN Capable Loop**

- The BRI ISDN Capable Loop is ordered in the following scenarios:
  - The loop is an element of a BRI ISDN service or another service utilizing "U" interfaces, 2B1Q line signals and 2B+D channelization.
  - The loop is qualified or designed, tested, and maintained by U S WEST to meet the specific technical requirements for BRI ISDN as described in Technical Publication #77384 Issue E.
  - The End user location is too far from the U S WEST Central Office for non-loaded cable to technically qualify for BRI ISDN transmission.

- **ISDN (BRI) Extension Technology**
  - In those cases where the Co-Provider orders the 2-Wire Non-Loaded Loop or the BRI Capable Loop, t Co-Provider will need to request a Design Layout Record (DLR). The information on the DLR will all the Co-Provider's engineers to determine if the Non-Loaded is within the allowable technical limits set forth by the specific xDSL service - in this case Basic Rate ISDN.

- In those instances where a Non-Loaded loop is either beyond the allowable loop lengths or the loop is provisioned through a carrier system, the Co-Provider will have to order the BRI Capable Loop. When orderi the BRI Capable loop, the Co-Provider could incur charges for cable unloading and/or bridged tap removal. recurring charge for Basic Rate ISDN Extension Technology will also be applicable. The BRI Extension Technology is unique to the ISDN product offering and prices are State and contract specific. BRI Extension Technology takes into account the additional repeater placement including central office powering and Mid-Span repeaters, if required, and BRITE/ISDN cards in order to provision the Basic Rate ISDN Capable Loop.

- **DS-1 Capable Loop**
  - The DS-1 capable loop was developed for those instances where a 4-wire non-loaded loop is not available or where the loop is unable to meet the technical parameters to serve an end user customer wi the HDSL technology. The Co-Provider design engineer is responsible for making this determination a is aided by reviewing a Design Layout Record (DLR) which is provided by U S WEST and requested the Co-Provider at the time of LSR submittal for the Non-Loaded Loop.

- The DS-1 Capable Loop is a transmission path between a DSX-1 panel or equivalent in a U S WEST serving Central Office and the Network Interface at the end user location. The DS-1 Capable Loop transports bi-directional DS-1 signals with a nominal transmission rate of 1.544Mbps and will meet the design requirements specified in Technical Publication 77384, Issue E.

- It will be at U S WEST's discretion to determine the manner that the service is provided. This could include; is not limited to the following:

- Metallic based span with HDSL or T-1 equipment
- Channel of a fiber based system

- Combination of both fiber and metallic

- Each request for a DS-1 Capable loop will go through a pre-qualification process. In those instances where a DS-1 Capable loop is not readily available the Co- Provider will incur additional expenses associated with an or all of the following work activities:

- Engineering and/or construction of loop facilities
- Cable unloading and/or bridged tap removal

- Any combination of the above stated activities could be required before the loop is capable of meeting the technical parameters required for a 1.544Mbps transmission rate. The costs are State and contract specific an noted in the Co- Provider's interconnection agreement.

- U S WEST reserves the right to limit the provisioning of DS-1 Capable loops in some areas served by loop facilities and/or transmission equipment that are not compatible with DS-1 service. U S WEST reserves the right to make some cables unavailable to Co- Providers based on Spectrum Management considerations. Requests for DS-1 capable loops at these locations must be submitted on an "Individual Case Basis" (ICB).

6. Unbundled Loops Utilizing Integrated Digital Loop Carrier (IDLC)

- **Loops over IDLC**
  - Analog Unbundled Loop provides a voice grade facility. The actual loop facilities that provide this service may utilize various technologies or combinations of technologies. This could include metallic facilities or a variety of Digital Loop Carrier (DLC) technologies.

- If U S WEST uses Integrated Digital Loop Carrier (IDLCs) systems to provide a finished service to a U S WEST end user today and a Co-Provider requests that local loop, to the extent possible U S WEST will make alternate arrangements to permit the Co-Provider to order a contiguous unbundled local loop. This coul include finding either a metallic or UDLC facility alternative.

- Demultiplexing of concentrated loops are specific to loops currently provisioned over IDLC. When a loop is provisioned utilizing IDLC, a Litespan 2000 must be placed in order to unbundle the loop from the switch fabric.

- Prior to provisioning the loop through the Litespan 2000 the company will attempt to utilize either UDLC or metallic facilities to provide an unbundled loop. However, if IDLC is the only media available, the Litespan 2000 alternative will be utilized. Some States may have differing language in contracts around cost recovery the additional equipment that will need to be placed in this scenario.

- If no alternative facilities are identified, the order will be placed in held status until the equipment is placed allowing the Unbundled Loop to be unbundled from the IDLC.

- Standard intervals will not apply to the first loop unbundled from the IDLC due to equipment placement and availability from the vendor. Once provisioned, each additional loop will fall under the standard interval as stated in the Interval Guide.

7. Loop Conditioning

- Language exists in many of the interconnect contracts, in effect to date, concerning cable unloading/bridged-t removal. In these existing agreements this work may also be referenced as "loop conditioning or conditioning The following clarifies U S WEST 's position and further defines each of these terms.
  - **Loop conditioning** - If referenced in an Interconnection Contract, it will take into account Cable Unloading and/or Bridged Tap removal that needs to occur in order to qualify a loop as a Non-Loaded facility with some limited amount of bridged-tap.
  - **Cable unloading** - The process of removing load coil(s) from a metallic cable facility in order to provi the requesting Co-Provider with either a 2-Wire or 4-Wire Non-Loaded Loop. The Co-Provider's Interconnect Agreements should have the rate stated for this work activity in Schedule A of their contr
  - **Bridged-tap removal** - The physical act of "cutting off" part of the metallic facility along the cable ro to remove cable not in the direct electrical path. The original loop could have made multiple appearanc along the cable route and the service subscribed to by the end user may have limited tolerances to total bridged-tap on a circuit. Such services could include the xDSL line of services. In today's contracts one rate applies for both cable unloading and bridged-tap removal.
  - **Placement of Repeaters** - **Conditioning does not include repeater placement** of any form. If the Co-Provider's requests a 4-Wire Non-Loaded or a DS-1 Capable Loop, placement of repeaters may be required. U S WEST would make this determination. The cost for this additional work is captured as either ISDN Extension Technology or as a cost component of the DS-1 Capable Loop. The following l of Repeaters may not be all inclusive:
    - Office Repeaters
    - Line Repeater
    - Mid-Span Repeaters
    - ISDN BRITES Card

8. Installation Policies

- U S WEST defines an Unbundled Loop as a transmission path between the U S WEST serving Central Offic Main Distributing Frame (or equivalent) up to, and including, the end user NI. U S WEST technicians will NOT provide service (repair or installation) beyond the NI on Unbundled Loop elements unless otherwise mandated by state specific tariffs and/or Co-Provider contracts.

- U S WEST will only do work beyond the NI in those states where mandated (OR, MN and IA). If a Co-Provider requires work beyond the NI or MPOP in those states, a remark must be placed on the Local Service Request (LSR) requesting such work to be completed on the Co-Provider's behalf. This work will be completed on a Time and Material basis. The work request will require a Co-Provider representative on prem to sign the invoice once the work is complete or written permission for the Co-Provider's end user to sign the

invoice on the Co-Provider's behalf. The Time and Materials invoice will summarize the work and/or materia to complete the job and the total dollars for those items.

- The Network Channel (NC) and Network Channel Interface (NCI) identify the channel performance of the unbundled loop.
- U S WEST will provide Unbundled Loops in accordance with the specifications, interfaces, and parameters described in U S WEST Technical Reference Publications 77384, Issue E. U S WEST 's sole obligation is to provide and maintain Unbundled Loops in accordance with such specifications, interfaces, and parameters.
- U S WEST does not warrant that Unbundled Loops are compatible with any specific facilities or equipment o that the loops can be used for any particular purpose or service. Transmission characteristics may vary depending on the distance between a Co-Provider's end user premises and the U S WEST serving Central Office. In addition, transmission characteristics may vary because of inherent physical network characteristic
- U S WEST may make necessary modifications and changes to network elements in its network on an as need basis in order to maintain and modernize the network. Such changes may result in alterations to transmission parameters of the Unbundled Loop.
- U S WEST will use an Overall Control Office (OCO) provided by the Design Service Centers for end-to-end coordination of Unbundled Loop service orders.
- Facilities and lines furnished by U S WEST on the Co-Provider's end user premises up to, and including, the or equivalent device are the property of U S WEST . U S WEST must have access to all such facilities for network management purposes. U S WEST 's technicians may enter the Co-Provider's end user premises at a reasonable hour to test and inspect such facilities and lines. U S WEST technicians will also enter the end use premises upon termination or cancellation of the Unbundled Loop Service to remove such facilities and lines.

NOTE: U S WEST will obtain authorization from the Co-Provider prior to entering the end user premises.

- U S WEST will identify Unbundled Loops with a Common Language Circuit Identification (CLCI) code seri number type format using the following Service Code and Modifiers:
  - LX Service Code (Analog and Non-Loaded Loops)
  - UB Service Code (ISDN Capable Loop)
  - HC Service Code (DS-1 Capable Loop)
  - U (6th CLCI Character2nd Modifier position-Unbundled Element)

EXAMPLE:

/ LXFU / 944444 / MS

- U S WEST will reuse the existing facilities to provision the Unbundled Loop product whenever possible. U S WEST will use the following provisioning assignment sequence for Unbundled Loops operating on Integrate Digital Loop Carrier (IDLC):
  - 1st ChoiceRoll to available Universal Digital Loop carrier (UDLC) facility
  - 2nd ChoiceRoll to an available copper facility
  - 3rd ChoiceDelayed until such time when Time Slot Interchange (TSI) equipment (e.g., SLC 2000, Litespan 2000, etc.) is installed.

- The Co-Provider is responsible for obtaining and providing facilities and equipment that are compatible with the Unbundled Loop product and for the service they are providing to the end user.

- U S WEST shall provide non-discriminatory access to the development of additional unbundled network elements not covered in these policies in response to specific requests (BFR) and pursuant to the New Interconnection/Unbundled Element Request (NIUER) Process.

- In those instances where Unbundled Loops are not readily available and U S WEST would have to construct facilities to make one available, the Co-Provider will have to pay all applicable construction charges. This request will need to come into the Account Management Team and input into AQCB for a quote. Constructio charges also apply when U S WEST determines that the placement of facilities will be temporary, or facilitie are ordered in advance of actual Co-Provider demand for service.

9. Network Interface Device (NID)

- The NID provides an interface between the U S WEST facility and the end users Inside Wire (IW). The NID divided into two compartments; one containing the over voltage unit (protector), buried service wire and dro terminals; the other containing the customers Inside Wire, the IW terminals and a modular plug which conne the IW to the dial tone source. U S WEST does not place any electronics or loop back equipment in the NID today.

- If ordering unbundled loops on a reuse basis, the existing drop and U S WEST 's NID will remain in place an continue to carry the signal to the end user's equipment. If the Co-Provider intends on placing its own drop th are required to install their own NIDs. The Co-Provider can then connect their NID to the U S WEST NID by placing a cross-connect between the two whereby constituting a NID to NID connection. If the Co-Provider requires that a non-modular unit be replaced with a modular NID, U S WEST will do so but charges will be accessed for the NID and the time associated with the request. The Non-recurring charge for a NID placed du to a Co-Provider request is State and Contract specific.

- The following are issues pertinent to both single and multi tenant NIDS:
  - In a majority of the existing contracts the NID is considered to be part of the unbundled loop however,

some contracts may contain language that gives the Co-Provider the ability to order the NID as a stand alone element.
  - Security of the NID - With U S WEST provided services, the end user customer is responsible for the security of their NID. When the Co-Provider provides services, the Co-Provider could secure on their e user's behalf or continue to let the end user secure the NID.
  - U S WEST retains sole ownership of the NID
  - U S WEST is not conducting wholesale NID change-outs
  - U S WEST does not inventory NID locations
  - If U S WEST is dispatched to a location and finds the existing protector in a state of disrepair, the protector will be replaced with a new modular NID.
  - If U S WEST is dispatched to a end user's location on a maintenance issue and finds the modular NID t be defective, U S WEST will replace the defective element or, if beyond repair, the entire device.

- In most States and contracts, the NID is considered part of the unbundled Loop and is priced as a component that element however, there are some contract that have the recurring cost of the NID as a separate element. I either case, the NID recurring charge is meant to recover the cost of the NID. The Non-recurring cost stated i existing contracts is for cost recovery of the truck roll and the time associated with installing the NID.

10. Spectrum Management

- U S WEST reserves the right to make some cables unavailable to Co-Providers based on Spectrum Management considerations. Because of the lack of both standards and equipment registration of xDSL and other future telecommunications technologies, some Co-Provider service offerings may be incompatible with other services on the U S WEST network. U S WEST reserves the right to identify those Co-Provider service interfering with other network services and disconnect them if necessary. In these instances, the Co-Provider will be notified so they can inform their end user.

- U S WEST will provide a variety of service specific NCI codes with the expectation that the Co-Provider wil identify the type of service working on the Unbundled Loop. U S WEST will use this information for invento purposes to prevent future modifications or changes to the Co-Provider's loop.

- When submitting a Loop Service Request (LSR) to request a loop capable of transmitting a digital signal, the Co-Provider may request a Confirming Design Layout Record (CDLR). The CDLR request will suspend the order process while the Co-Provider evaluates the DLR information. The DLR provides information to the Co-Provider on items such as the Loop make-up, bridged tap (if known) and the loop's total length. Co-Provi engineers will need to determine if the available loop falls within the technical

requirements of the service they intend to transport over the loop. The DLR is descriptive, not definitive and is base on U S WEST facility records.

- If U S WEST loop inventory records do not identify any qualified metallic loops, the Co-Provider has the

option of asking U S WEST to unload a loaded loop or may order a service specific (BRI or ISDN Capable Loop) or a finished retail service.
- Once U S WEST receives confirmation back from the Co-Provider, U S WEST will continue with the order activity. Additional work such as loop conditioning and excessive bridged tap removal (for the Co-Provider's specific service) will result in additional construction charges (rates are State and Co-Provider contract specific).

11. Maintenance Procedures

- Account Management Service Center (AMSC) Responsibilities
  - Co-Providers should be referred to the following numbers if they are experiencing maintenance problems:

States	Number
All States	1 800 223 7881

- U S WEST employees will not provide any service (repair or installation) beyond the NI unless otherwise mandated by state tariffs or Co-Provider contracts

- U S WEST will NOT provide proactive maintenance for Unbundled Loops

- The U S WEST Designed Services Customer Communication Technician-Maintenance Tester (CCT-MT) initiates a Maintenance of Service Charge (MSC) to the Co-Provider when trouble is isolated beyond the NI.

- U S WEST will take Unbundled Loop trouble reports from the Co-Provider, not the end user. U S WEST wil NOT take repair reports from 2nd and 3rd parties. U S WEST will notify the Co-Provider reporting a trouble condition when the trouble is repaired.

- The Co-Provider must provide to U S WEST test results when testing its end user's trouble prior to U S WES performing any repair functions. U S WEST and the Co-Provider will cooperate in developing test report standards. If the trouble found is NOT in U S WEST 's network, a Maintenance of Service charge is applied

- All trouble reports are to be reported by the Co-Provider not the Co-Provider's end user and are to be reporte using the U S WEST Unbundled loop circuit identification (i.e. 24LXCU101010MS is an example of a 2 wir pots capable unbundled loop for Colorado). If an end user attempts to report a maintenance trouble, the RSA will advise the End User to call their Co-Provider to report the maintenance trouble.

- The AMSC Repair Service Attendant (RSA) is responsible for interfacing with the Co-Provider to take troub report information and generate a U S WEST trouble ticket. The AMSC RSA will perform the following activities:
  - The RSA will receive the trouble report from the Co-Provider. All misdirected calls (i.e., calls received

from end users and 2nd and 3rd parties) will be routed properly by instructing the end user to notify the local service provider. If available, the RSA will provide the Co-Provider name and telephone number the end user.

- The RSA will create a U S WEST trouble ticket. The RSA will request the following information from the Co-Provider:
  - U S WEST Circuit Id
  - Reported By Name
  - Reported By Telephone Number
  - Local contact name (if different than Reported By Name)
  - Local contact telephone number
  - Access Hours
  - Authorization to Test and Dispatch
  - Trouble reported
  - Test results (if any)

NOTE: The Co-Provider is responsible for isolating the trouble to the correct unbundled element or collocated equipment. The RSA creates the trouble report on the specific element that the Co-Provider is reporting. The Desig Services CCT-MT tests this element and if no trouble is found, the trouble ticket is closed and a maintenance of service charge applies. U S WEST will NOT isolate trouble beyond the element reported. When combining networ elements, U S WEST will not complete end to end testing, only individual elements can be tested.

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12. General Service Order Information

- Listings
  - Directory Listings are not provided on the Unbundled Loop service orders. However, Co-Providers ma request a listing. Listing requests are processed through the Listing Service System (LSS) process. Additional information can be obtained from existing Directory Methods and Procedures. Directory Service Requests (DSR) forms are faxed by the Co-Provider to the following address:
    - Listings 503-242-1653
    - FAX contact 503-242-1653
    - Contact number 503-242-7822
    - Alternate contact number 503-242-7856 & 7873

- Billing
  - The billing for Unbundled Loop is processed through CRIS. Unbundled Loops will have a one month minimum billing period. The Unbundled Loop bill reflects the following information:
    - Monthly charges for the loop type installed
    - Non-recurring charges for the installation option

- Non-recurring charges for cable unloading and/or bridged tap removal (if applicable)
- Monthly charges for EICT (Expanded Interconnection Channel Termination)

NOTE: Non-recurring charges do NOT apply to the Expanded Interconnection Termination (EICT) USOC when t Unbundled Loop is connected to Co-Provider collocated equipment. The non-recurring charge for the EICT is bille on the Collocation order.

- Summary Billing
  - All Unbundled Loops must be billed to a Co-Provider's summary bill. Existing summary bill informati is entered on the service order. The summary bill is established prior to the service order requests being sent. The completed Co-Provider Questionnaire is forwarded to the Interconnection Service Center (IC for establishment of the summary bill.

- Order Forms
  - A Co-Provider request for service order activity uses the following standard forms:
    - Local Service Request (LSR)
    - End User Information (EU)
    - Loop Service Form
    - Loop Service with Number Portability

- Co-Provider Order Forms requesting service order activity are national standards agreed upon at Open Billin Forum (OBF) meetings.. Definitions for each of the form fields is included with these examples. All Co-Provider requests for service will include a LSR and EU form. A Loop Service or Loop Service with Number Portability form is also sent when Unbundled Loop is ordered.

NOTE: The Co-Provider MUST order these forms from BellCORE. U S WEST will NOT (under penalty of copyright laws) reproduce copies for any Co-Provider or other customer.

- Order forms are faxed to the Denver Interconnection Service (ICS) Center.

- On November 15, 1997, U S WEST enhanced Mediated Access to include ordering the Unbundled Loop product. The ICS Centers will receive the order request forms electronically via Mediated Access from those Co-Providers who have agreed to participate in the Mediated Access platform.

13. Co-Provider Service Order Request for Unbundled Loop

- When the Co-Provider requests an Unbundled Loop, the request is received via the LSR, EU, and Loop Servi or Loop Service with Number Portability forms. A Common Language Circuit Identification (CLCI) serial number format is used to identify the Unbundled Loop element. Service orders for the Unbundled Loop prod are flowed through the Designed Services process. Existing national Service Code standards are used.

- The Co-Provider service request identifies the following information:
  - Type of loop (e.g., 2 wire analog, 4 wire analog, Basic Rate ISDN capable, DS-1 Capable Loop, etc.)
  - Connecting Facility Assignment (CFA)Cable pair information
  - Network Channel Code (NC)identifies the Service Code and options (if appropriate)
  - Network Channel Interface Code (NCI)Electrical characteristics at the Co-Provider and End user demarcation points (required for both demarcation points)
  - Signaling required (i.e., Loop Start, Ground Start, No Signaling, Reverse Battery Signaling)
  - Telephone number of the existing service if applicable
  - Installation Options (e.g., Basic, Basic with Performance Testing, etc.)
  - Appointment Time (Coordinated Installation/Coordinated Installation with Cooperative Testing Optio only)
  - Contact information (e.g., CCON, LCON, DSGCON, IMPCON, etc.). A centralized contact is not appropriate for the premises contact, a technician is required.

14. Loop Qualification

- When the Co-Provider requests service for an Unbundled Loop, the ISC personnel will verify facility type an facility availability at the requested address. Facility Check is accessed when establishing a new Unbundled Loop service or converting an existing service. Loop qualification provides the following information:
  - Facility availability
  - Type of facility serving the requested address

- If no facilities are available, the Co-Provider will be notified. The Co-Provider is advised that no facilities are available. U S WEST will, however, continue the order process. If during provisioning activities, the facilitie cannot be assigned, the Co-Provider is notified of the held order status.

- Unbundled Loop service can only be established on copper or Universal Digital Loop Carrier (UDLC). Integrated Digital Loop Carrier (IDLC) cannot be used for an Unbundled Loop service at this time. U S WES has chosen not to unbundle IDLC because of the expense of providing equipment to "groom" the DS0 lines. During the Unbundled Loop facility assignment, an attempt will be made to Line and Station Transfer (LST) the IDLC loop to UDLC or copper. If there are no facilities available to complete the LST, the Co-Provider w be notified that the order has been placed into a held status.

15. USOCs

- The following USOCs are used on the Service Order. This matrix includes the loop USOCs, as well as, the installation USOCs:

USOC:	DEFINITION:
NR9U9	NID - SINGLE TENANT
NR9UM	NID - MULTI TENANT
NR9U8	CONDITIONING (DELOADING)
2LF	2 WIRE ANALOG LOOP (COLORADO TARIFF ONLY)
U21	2 WIRE ANALOG LOOP
U2X	2 WIRE ANALOG LOOP (IOWA TARIFF ONLY)
U4Z	4 WIRE ANALOG LOOP (COLORADO TARIFF ONLY)
U4H	4 WIRE ANALOG LOOP
U1Q	ISDN CAPABLE LOOP
U23	2 WIRE NON-LOADED
U4D	4 WIRE NON-LOADED
1CRUL	BASIC INSTALLATION, 1ST LOOP
1CRUM	BASIC INSTALLATION, ADDITIONAL LOOPS
1CRUB	BASIC INSTALLATION WITH PERFORMANCE TESTING, 1ST LOOP
1CRUC	BASIC INSTALLATION WITH PERFORMANCE TESTING, ADDITIONAL LOOPS
1CRUT	COORDINATED INSTALLATION WITH COOPERATIVE TESTING, 1ST LOOP
1CRUU	COORDINATED INSTALLATION WITH COOPERATIVE TESTING, ADDITIONAL LOOPS
1CRUF	COORDINATED INSTALLATION WITH NO COOPERATIVE TESTING, 1ST LOOP
1CRUG	COORDINATED INSTALLATION WITH NO COOPERATIVE TESTING, ADDITIONAL LOOPS
1CRUY	COORDINATED INSTALLATION WITH COOPERATIVE TESTING, 1ST LOOP, RESIDENCE
1CRUZ	COORDINATED INSTALLATION WITH COOPERATIVE TESTING, ADDITIONAL LOOPS, RESIDENCE
1CRUN	BASIC INSTALLATION, RESIDENCE
U21XA	2 WIRE ANALOG LOOP, LARGE METRO AREA
U21XB	2 WIRE ANALOG LOOP, MEDIUM METRO AREA
U21XC	2 WIRE ANALOG LOOP, OTHER METRO AREA
U4HXA	4 WIRE ANALOG LOOP, LARGE METRO AREA
U4HXB	4 WIRE ANALOG LOOP, MEDIUM METRO AREA
U4HXC	4 WIRE ANALOG LOOP, OTHER METRO AREA

U1E	ISDN EXTENSION TECHNOLOGY
U4D1X	DS-1 CAPABLE LOOP

16. Critical Date Intervals

- Critical Date Intervals for Unbundled Loop requests are documented in the Resale and Interconnection Servi Interval Guide. These intervals are standard unless otherwise stated in the Co-Providers contract. These intervals are established under the assumption that facilities are in place and the information on the LSR is complete and accurate.

- Existing guidelines for establishing a project must be followed, if a Co-Provider is ordering 25 or more Unbundled Loops at a single location at one time. In addition, the same installation option must be requested for all items on the project.

17. Firm Order Completion (FOC)

- A Firm Order Confirmation (FOC) must be provided to the Co-Provider for every service order. The FOC is faxed to the Co-Provider number indicated on the request form. Committed time for FOC return is contract specific.

18. Measurable Installation Commitments

- Listed below are the regional standard installation commitments for the Unbundled Loop product. State and Co-Provider agreements may supersede these regional standards. See state addendum for additional information.
    - Installation Intervals Offered (measured from application date to original due date)
    - Installation Commitments Met
    - Installation Reports within 7 days (percent of reports per total of new, to or change orders)

19. Measurable Maintenance Commitments

- Listed below are the regional standard maintenance commitments for the Unbundled Loop product. State and Co-Provider agreements may supersede these regional standards. See state addendum for additional information.
    - Out of Service Cleared in Less Than 24 Hours (percent of total out of service reports)
    - Report Rate per 100 Access Lines
    - Repair Commitments Met
    - Out of Service and Service Affecting Cleared in Less than 48 Hours
    - Repair Repeat Reports within 30 Days (Percent of Repeats per 100 Access Lines)

20. Outage Event Procedure

- The primary contact number regarding Infrastructure Outages within U S WEST is through the Co-Provider Independent Company's Account Representative or the Des Moines Design Service Center. The Network Management Center (NMC) may also be contacted for information and status regarding an outage event. The main 800 number is the preferred way to reach either NMC center, however, local numbers can be used. Whe the 800 number is accessed there are two options:
  - Option 1Denver Network Reliability Center
  - Option 2Plymouth Network Reliability Center

- The Denver and Plymouth Network Reliability Centers are responsible for the surveillance of the following states. The appropriate center should be accessed depending on the location of the outage.

Network Reliability Center (NRC) Main Telephone Number1-800-879-1200

- If an outage event is reported to the NMC and the NMC can determine the impact to a Co-Provider, the NMC will make an attempt to contact that Co-Provider to advise them of the problem. The NMC will provide any information that is known at the time (e.g., Cause, Estimated Time of Restoral, etc.). The NMC will attempt t provide periodic status calls to the affected Co-Provider if the event duration is excessive. Event resolution information will be provided to the affected Co-Provider(s).

- If a Co-Provider becomes aware of a problem impacting their customers that may be within U S WEST 's network, the Co-Provider may contact the NMC for information. The person contacting the NMC must be ab to provide the following information:
  - Co-Provider Name
  - Full name and telephone number
  - Location of the trouble (area)
  - Trouble description

- The NMC will attempt to provide current information regarding the event to the Co-Provider, or pursue information/status if event has not already been reported.

NOTE: Depending on the type of event, impact to a Co-Provider may not be obvious to the Network Reliability surveillance groups. The NMC will notify the Co-Provider when the NMC is sure the event is impacting the Co-Provider.

- Unbundled Loops and Unbundled Sub Loop Elements pose several challenges. The loss of switch access pla

service constraints on U S WEST 's network:
  - No remote testing causing screening degradation which results in delays in service restoral and non productive dispatches
  - Loss of switch/digital loop carrier remote alarming which results in the loss of early and accurate detection of infrastructure outages
  - Loss of programmable proactive maintenance monitoring which results in infrastructure degradation a more costly restoral
- The interim process for handling these short comings will require manual procedures. Long term solutions (automation of these tasks) will require new technologies and system enhancements.

21. Collocation

- The Co-Provider may elect to exit the U S WEST Central Office through Physical, Cageless Physical, SPOT Collocation, Virtual or Common Collocation. The Co-Provider-owned equipment associated with the collocation arrangement will be terminated on a Single Point of Termination (SPOT) frame or an equivalent designation. Unbundled elements combinations (e.g., Unbundled Loop, Unbundled Switching, collocation et will be cross-connected on the SPOT by the Co-Provider.

- **Single Point of Termination Frame (SPOT Frame)**
  - U S WEST will establish a SPOT frame appearance between the Co-Provider and U S WEST except in those states where local regulatory bodies have disallowed the SPOT concept. The SPOT frame appearance is the demarcation point between the Co-Provider's collocated equipment and the U S WES Main Distribution Frame (MDF). The Co-Provider is responsible for all costs associated with cabling and/or other necessary infrastructure items between their collocated equipment and the SPOT Frame.

- U S WEST is responsible for engineering and installation of the tie pairs from the SPOT Frame to other fram in the Central Office based on the Co-Provider's forecast for facilities. These connections are known as EICT U S WEST terminates that cable between the Collocation and the SPOT Frame on the vertical side of the SP Frame. The cable between the SPOT Frame and other U S WEST Frames terminates on the horizontal side o the SPOT Frame. The SPOT Frame provides a demarcation between the Co-Provider and U S WEST for the following types of terminations:
  - DS0
  - DS1
  - DS3

- The SPOT Frame appearance may be considered an Intermediate Distributing Frame (IDF). It is designated a the interface between the Co-Provider and U S WEST . The SPOT is administered and provisioned in the sa manner as U S WEST provisions IDFs for its own purposes. The SPOT Frame appearance consists of the following components:
  - Appearance
  - DSX type terminations (DS1 and DS3)
  - DS0 terminations

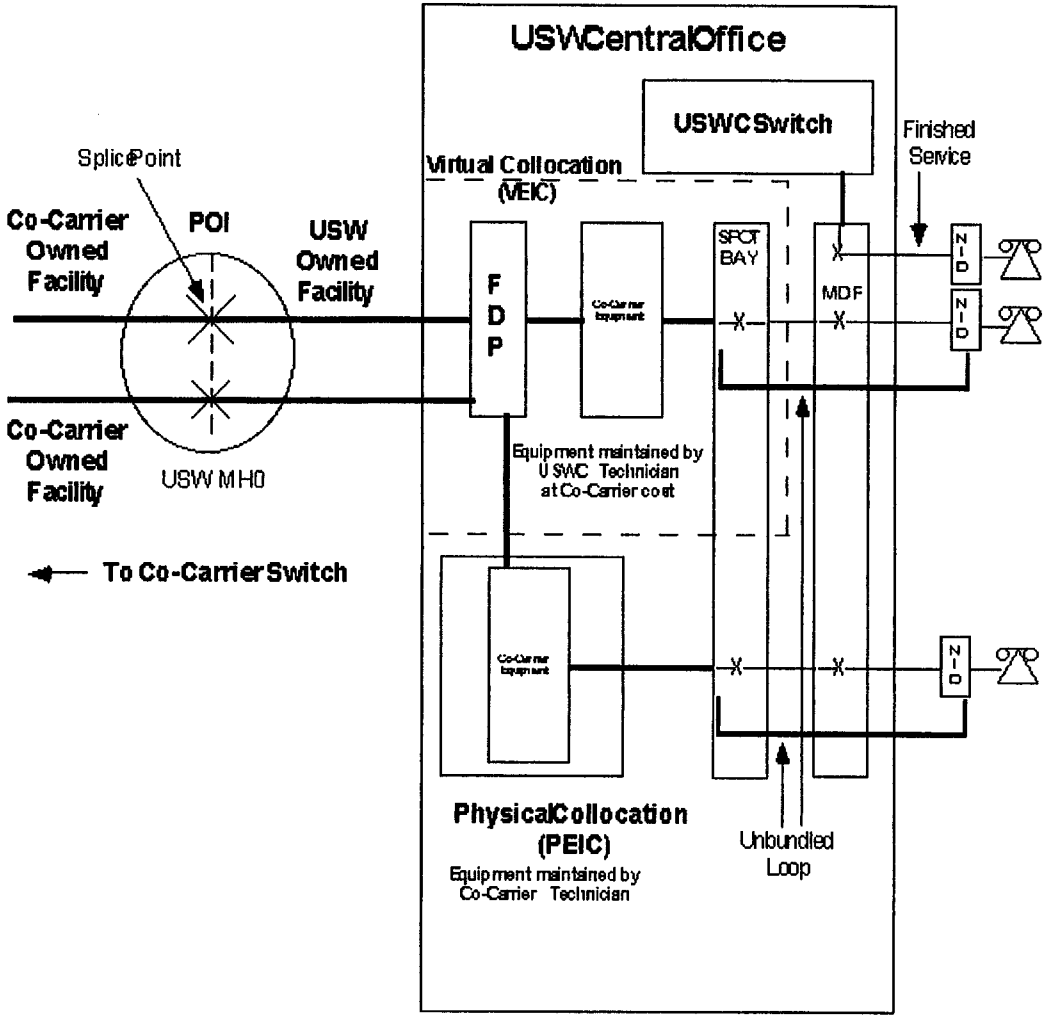
  - Tie pair terminations
  - Tie cables to the DSX/DS0 terminations and the COSMIC or Main Distributing Frame (MDF)

- The Co-Provider maintains an inventory of their appearances on the vertical side of the SPOT Frame. U S WEST maintains and inventory and assignments of the horizontal side of the SPOT Frame. U S WEST provide Point of Interconnection (POI) information to the Co-Provider on the horizontal side of the SPOT Frame. The Co-Provider is responsible for connecting the POI location to their Connecting Facility Assignm (CFA) point on the vertical side of the SPOT Frame U S WEST will not be responsible for resolving issues involved with inaccurate assignments provided by the Co-Provider for the vertical side of the SPOT Frame appearance.

- The SPOT Frame appearance may be shared between multiple Co-Providers. If security becomes an issue for the Co-Provider, the Co-Provider can request a dedicated SPOT Frame which places the SPOT either in or ne the Co-Providers collocation area. In addition, there is a per foot charge that the Co-Provider pays U S WES for placing of cables and the infrastructure that supports the SPOT Frame (cable racking, risers, fore stopping riser holes, and other ancillary items).

- U S WEST will open the circuit on the vertical side of the SPOT and isolate trouble to this point. If trouble is isolated to the Co-Provider's collocated equipment, the Central Office Technician (COT) closes the WFA-DI work request with a trouble disposition of CPE. A Maintenance of Service Charge (MSCEO-135) is generate to bill for the trouble isolation charge. U S WEST will contact the Co-Provider to inform them of the trouble disposition.

Attachment A - Unbundled Loop with Collocation


USWCentralOffice
USWCSwitch
Finished Service
Splice Point
Virtual Collocation (VEIC)
Co-Carrier Owned Facility
POI
USW Owned Facility
F D P
SPOT BAY
MDF
N I D
N I D
Co-Carrier Owned Facility
USW MH0
Equipment maintained by USWC Technician at Co-Carrier cost
To Co-Carrier Switch
N I D
PhysicalCollocation (PEIC)
Equipment maintained by Co-Carrier Technician
Unbundled Loop

Ref. #	Field Name	N= New Installation of loop	C= Change of CFA or NC/NCI	C= Change - CP (OR only)	D= Disconnect	M= Inside Move (CO, IA, MN only)	T= Outside Move	R= Record Activity	V= Conversion as Specified	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
	Local Service Request (LSR)												
[redacted]													
1	CCNA	R	R	R	R	R	R	R	R	The Co-Provider must provide ZCID on order requests. USW edits to validate certification by state.	3	a/n	
2	PON	R	R	R	R	R	R	R	R	This entry is Co-Provider generated and may be reused 2 years after initial request. This PON will be used for all forms associated with this request.	16	a/n	
3	VER	C	C	C	C	C	C	C	C	USW does not edit this entry. If provided, the VER is returned on the FOC. This VER will be used for all forms associated with this request. Initial orders are assumed to be	2	n	

										Version 1. All subsequent supplements should increment (Version to 2,3,etc.) VER is not required for the initial order, but is required for any supplement. The same VER can be used when a Fatal Error is received prior to when the Co-Provider is sent a FOC or a manually generated Error. The VER can also be incremented each time an request/SUP is sent.			
4	LSR NO.	N	N	N	N	N	N	N	N		11	a/n	
5	LOCQTY	N	N	N	N	N	N	N	N		3	n	
6	HTQTY	N	N	N	N	N	N	N	N		2	n	
7	AN	R	R	R	R	R	R	R	R	This entry should represent the existing USW end user account number. If a working telephone number is entered rather than the account number, the USW account number will be provided on the FOC.	12	a/n	303-555-1212 This format assumes two hyphens as part of the entry.
8	ATN	O	O	O	O	O	O	O	O		12	a/n	303-555-1212 This format assumes two hyphens as part of the entry.
9	SC	N	N	N	N	N	N	N	N		4	a/n	

10	PG__OF___	O	O	O	O	O	O	O	O	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total order (LSR, EUI, or LS form). Example: If the order has one page for each form, the LSR form would indicate 1 of 3, the EUI form would indicate 2 of 3, the LS form would indicate 3 of 3.	4	n	
11	D/TSENT	R	R	R	R	R	R	R	R	This entry is populated using the date and time that the order is sent by the Co-Provider. For manual processing, a mm-dd-ccyy format may be used. For mechanical processing, a cyymmddhhMinMin is required.	12	a/n	mm-dd-ccyy or ccyymmddhhMinMin
12	DDD	R	R	R	R	R	R	R	R	Due date based on either standard due date interval or as negotiated between project managers.	8	a/n	ccyymmdd
13	APPTIME	O	O	O	N	O	O	N	O	If a coordinated installation (CHC=Y) is requested, a desired appointment time (APPTIME) may be	9	a/n	hhmm Always shown as military time. Mm is always zero.

										provided. The Co-Provider has up to 48 hours prior to the DD to pass the appointment time to USW. Appointment times outside of normal work hours require advance approval by USW. Additionally the approving Co-Provider's name and telephone number must be indicated in Remarks to accept charges associated to the out of hours installation.			
14	DDDO	N	N	N	N	N	N	N	N		8	a/n	
15	APPTIME	N	N	N	N	N	N	N	N		9	a/n	
16	DFDT	N	N	N	N	N	N	N	N		4	a/n	
17	Project	O	O	O	O	O	O	O	O	USW will automatically project manage requests of more than 25 loops or requests requiring out of hours cuts. A Co-Provider can indicate an entry of "Requested', however USW will not provide project handling unless the previously defined criteria is met.	16	a/n	
18	CHC	O	O	O	N	O	O	N	O	If CHC=Y, then APPTIME is required for the loop. This indicates the installation request	1	a	Y or blank

										requires coordination. If the CHC entry is Y, then the installation type is defined as "coordinated with testing". If the CHC entry is blank, the installation type is defined as "basic". Edits are based on the Co-Provider contracts and the CHC matrix. NOTE: If "basic installation with test" is required, it must be entered as a REMARK.			
19	REQTYP	R	R	R	R	R	R	R	R	The REQTYP for NP with Loop is AB.	2	a	AB = Loop Firm Order
20	ACT	R	R	R	R	R	R	R	R	LSR, EUI and LS forms are necessary on all activities except for "Record" and "Disconnect" (ACT=R or D) activities. If the ACT=R or D, then only LSR and EUI are required and the LS Form is optional.	1	a	V=Migration as specified (Will be used for Migration Partial), ,N=New installation D=Disconnect of entire Account,C=Change,R=Reco T=Outside Move, M=Inside move(CO, IA, MN only)
21	SUP	C	C	C	C	C	C	C	C	An entry is required on all supplements, but not required on the initial request. Remarks are not required, but support the request. If the wrong ACT is used on the supplemental, the supplemental	1	n	1=cancel,2=DD change,3=other

										will be rejected.			
22	EXP	C	C	C	N	C	C	N	C	If EXP=N or blank, the DDD cannot be less than the standard interval. An EXP entry is required when the DDD is less than the USW standard interval. EXP is not allowed when the ACT="D","A", or "R". Expedites require USW approval. If charges are approved by the Co-Provider, their approver's name and TN must be supplied in Remarks before USW will issue the order.	1	n	Y=Expedite Charges Authorized N or Blank=Charges Not Authorized
23	AFO	N	N	N	N	N	N	N	N		5	a	
24	RTR	R	R	R	R	R	R	R	R	When ACT = D or R can only have a value of "C". If a CDLR (Confirming DLR) if required, it must be entered as a remark.	1	a	C=Confirmation D=Confirmation and DLR
25	CC	N	N	N	N	N	N	N	N		4	a/n	
26	AENG	O	O	O	N	O	O	N	O	If Y, the approver's name and telephone number are required in the Remarks Field.	1	a	Y or blank
27	ALBR	O	O	O	N	O	O	N	O	If Y, the approver's name and telephone number are required in the Remarks	1	a	Y or blank

										Field.			
28	SCA	O	N	N	N	N	N	N	O	If populated, additional manual processing is needed.	1	a	Y or blank
29	AGAUTH	R	N	N	N	N	N	N	R	The AGAUTH and DATED entries combine to form the LOA for a specific request. AGAUTH must = Y when ACT = N or V.	1	a	Y = Authorization on file
30	DATED	R	N	N	N	N	N	N	R	This entry is required when AGAUTH is populated.	8	a/n	mm-dd-ccyy
31	AUTHNM	O	N	N	N	N	N	N	O		25	a/n	
32	PORTTYP	N	N	N	N	N	N	N	N		1	a	
33	ACTL	N	N	N	N	N	N	N	N		1	a	
34	AI	N	N	N	N	N	N	N	N		1	a	
35	APOT	N	N	N	N	N	N	N	N		11	a/n	
36	LST	N	N	N	N	N	N	N	N		11	a/n	
37	LSO	N	N	N	N	N	N	N	N		6	n	
38	TOS	R	R	R	R	R	R	R	R	2nd and 3rd characters are not valid for loop requests.	3	a/n	TOS=1 and 3 will be treated a Business TOS=2 will be treated as Residential
39	SPEC	N	N	N	N	N	N	N	N		7	a/n	
40	NC	R	R	R	N	R	R	N	R	Valid NC Codes are located in Technical Publication 77384. Additionally, DDD validation must be made using NC, NCI , SEC NCI Codes, and standard interval.	4	a/n	
41	NCI	R	R	R	N	R	R	N	R	Valid NCI codes are located in Technical	12	a/n	

										Publication 77384. Additionally, DDD validation must be made using NC, NCI codes, and standard interval. This NCI indicates the termination at the wire center.			
42	CHANNEL	N	N	N	N	N	N	N	N		6	a/n	
43	SEC NCI	R	R	R	N	R	R	N	R	Valid SEC NCI codes are located in Technical Publication 77384. Additionally, DDD validation must be made using NC, NCI and SEC NCI codes, and standard interval. This NCI indicates the termination at the end users location.	5-12	a/n	
44	RPON	C	O	O	C	C	O	C	C	When multiple PONs are to be related, the first LSR in the series would have a blank RPON. The subsequent LSRs would all have the PON of the first LSR in this RPON field.	16	a/n	
45	RORD	O	O	O	O	O	O	O	O	USW provided number that will relate USW issued orders together. This entry might be provided on a PON supplement.	9	a/n	
46	LSP AUTH	N	N	N	N	N	N	N	N		4	a/n	

47	LSP AUTH DATE	N	N	N	N	N	N	N	N		10	a/n	
48	LSP AUTH NAME	N	N	N	N	N	N	N	N		15	a/n	
49	LSPAN	N	N	N	N	N	N	N	N		16	a/n	
50	CIC	N	N	N	N	N	N	N	N		4	n	
51	CUST	N	N	N	N	N	N	N	N		25	a/n	
[illegible]	[illegible]												
52	BI1	N	N	N	N	N	N	N	N		1	a	
53	BAN1	R	R	R	R	R	R	R	R	The Co-Provider is required to populate appropriate summary bill number for Loop service. The fields 51,52,55-60 will be populated by USW from information on the Co-Provider profile specific to each BAN. Dashes are required in positions 4, 8 and 13.	16	a/n	
54	BI2	N	N	N	N	N	N	N	N		1	a	
55	BAN2	N	N	N	N	N	N	N	N		16	a/n	
56	ACNA	N	N	N	N	N	N	N	N		3	a	
57	EBD	N	N	N	N	N	N	N	N		10	a/n	
58	CNO	N	N	N	N	N	N	N	N		12	a/n	
59	NRI	N	N	N	N	N	N	N	N		1	a	
60	BILLNM	N	N	N	N	N	N	N	N		25	a/n	
61	SBILLNM	N	N	N	N	N	N	N	N		25	a/n	
62	TE	N	N	N	N	N	N	N	N		1	a	
63	EBP	N	N	N	N	N	N	N	N		6	a/n	
64	STREET	N	N	N	N	N	N	N	N		25	a/n	
65	FLOOR	N	N	N	N	N	N	N	N		3	a/n	
66	ROOM	N	N	N	N	N	N	N	N		6	a/n	

67	CITY	N	N	N	N	N	N	N	N		15	a	
68	STATE	N	N	N	N	N	N	N	N		2	a	
69	ZIP CODE	N	N	N	N	N	N	N	N		5	n	
70	BILLCON	N	N	N	N	N	N	N	N		15	a/n	
71	TEL NO	N	N	N	N	N	N	N	N		17	a/n	
72	VTA	N	N	N	N	N	N	N	N		17	a/n	
[redacted]													
73	INIT	R	R	R	R	R	R	R	R	The Co-Provider will provide the contact information for the request.	15	a/n	Name format
74	TEL NO	R	R	R	R	R	R	R	R	The Co-Provider will provide the contact information for the request. Dashes are required in positions 4 and 8. Dash is required in position 13 when an extension is included.	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry.
75	EMAIL	O	O	O	O	O	O	O	O		60	a/n	
76	FAX NO	R	R	R	R	R	R	R	R	This entry is only required in a manual mode.	12	a/n	303-555-1212 This format assumes two hyphens as part of the entry.
77	STREET	N	N	N	N	N	N	N	N		25	a/n	
78	FLOOR	N	N	N	N	N	N	N	N		3	a/n	
79	ROOM/MAIL	N	N	N	N	N	N	N	N		10	a/n	
80	CITY	N	N	N	N	N	N	N	N		25	a	
81	STATE	N	N	N	N	N	N	N	N		2	a	
82	ZIP CODE	N	N	N	N	N	N	N	N		5	a	
83	IMPCON	R	R	R	N	R	R	N	R	The Co-Provider will provide the implementation	15	a/n	

										contact name information for the request.			
84	TEL NO	C	R	R	N	C	C	N	C	The Co-Provider will provide the implementation contact telephone information for the request. This field can only be populated if IMPCON is populated and field 85 (PAGER) is not populated.	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry. Dash is required in position when an extension is include
85	PAGER	O	O	O	N	O	O	N	O	This field must be populated if field 84 (IMPCON TN) is not populated.	25	a/n	
86	ALT IMPCON	N	N	N	N	N	N	N	N		15	a/n	
87	TEL NO	N	N	N	N	N	N	N	N		17	a/n	
88	PAGER	N	N	N	N	N	N	N	N		25	a/n	
89	DSGCON	C	C	C	N	C	C	N	C	If the RTR=D, then the DRC or DSG FAX are required.	15	a/n	
90	DRC	C	C	C	N	C	C	N	C	If the RTR=D, then the DRC or DSG FAX are required. If the DRC is populated, then the DSG FAX NO is not allowed . This field can only be populated if the DSGCON is populated.	3	a/n	
91	DSG TEL NO	C	C	C	C	C	C	C	C	If the RTR=D, then the DRG TEL NO is required.	17	n	

92	DSG FAX NO	C	C	C	N	C	C	N	C	If the RTR=D, then the DRC or DSG FAX are required. If the DSG FAX is populated, then the DRC is not allowed. This field can only be populated if the DSGCON is populated.	12	a/n	
93	DSG EMAIL	N	N	N	N	N	N	N	N		60	a/n	
94	DSG STREET	N	N	N	N	N	N	N	N		25	a/n	
95	DSG FLOOR	N	N	N	N	N	N	N	N		3	a/n	
96	ROOM / MAIL STOP	N	N	N	N	N	N	N	N		10	a/n	
97	DSG City	N	N	N	N	N	N	N	N		25	a	
98	DSG STATE	N	N	N	N	N	N	N	N		2	a	
99	DSG ZIP CODE	N	N	N	N	N	N	N	N		5	n	
100	REMARKS	C	C	C	O	C	C	O	C	Remarks are recommended on all supplements and are preferred if the SUPP=3 to explain the changes made on the LSR. Remarks are required if basic installation with testing is requested. Name and TN are required in Remarks if an out of hours installation is requested and CHC='Y', ALBR='Y', AENG='Y', or EXP='Y'. In case of a held order, use this	255	a/n	

										field to indicate that this LSR is for a held order.			
[redacted]													
101	LOCNUM	N	N	N	N	N	N	N	N		3	n	
102	HNUM	N	N	N	N	N	N	N	N		5	n	
103	CB	N	N	N	N	N	N	N	N		8	a/n	
104	HA	N	N	N	N	N	N	N	N		1	a	
105	HID	N	N	N	N	N	N	N	N		4	a/n	
106	TIP	N	N	N	N	N	N	N	N		1	a	
107	TLI	N	N	N	N	N	N	N	N		12	a/n	
108	HNTYP	N	N	N	N	N	N	N	N		1	n	
109	HLA	N	N	N	N	N	N	N	N		1	a	
110	HTSEQ	N	N	N	N	N	N	N	N		512	a/n	
111	NOTYP	N	N	N	N	N	N	N	N		1	a	
112	HTN	N	N	N	N	N	N	N	N		17	a/n	

Ref#	FIELD NAME	N= New Line	D= Disconnect	V= Conversion as Specified	C= Change	T= Outside Move	R= Record	M= Inside Move	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
	End User Information (EUI)											
[redacted]												

1	PON	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	
2	VER	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	2	n	
3	AN	R	R	R	R	R	R	R	This entry should be the same as the AN entry on the LSR form. This entry is required in a manual mode but not required when using a mechanized mode of service request.	12	a/n	303-555-1212 This format assumes two hyphens as part of the entry
4	ATN	O	O	O	O	O	O	O		12	a/n	
5	DQTY	N	R	N	N	N	N	N		3	n	
6	PG_OF_	R	R	R	R	R	R	R	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total order (LSR, EUI, & LS forms). Example: If the order has one page for each form, the LSR form would indicate 1 of 3, the EUI form would indicate 2 of 3, the LS form would indicate 3 of 3.	4	n	

7	LOCNUM	N	N	N	N	N	N	N		3	n	
8	NAME	R	R	R	R	R	R	R	This entry will be used to validate the ownership of the current USW account.	25	a/n	Name format
9	SAPR	C	C	C	C	C	C	C	This entry is optional when the SANO field is populated and otherwise is not applicable.	5	a/n	
10	SANO	C	C	C	C	C	C	C	This entry is required for numbered addresses and otherwise is not applicable.	8	a/n	
11	SASF	O	O	O	O	O	O	O	This entry is optional for numbered addresses and otherwise is not applicable.	4	a/n	
12	SASD	O	O	O	O	O	O	O	This entry is optional when the SASN field is populated and otherwise is not applicable.	2	a	
13	SASN	R	R	R	R	R	R	R	This entry will be used to support validating the ownership of the current USW account. If the entry is longer than 25 characters, then recap the total street name in the Remarks field.	25	a/n	
14	SATH	C	C	C	C	C	C	C	This entry is optional when the SASN field is populated and otherwise is not applicable.	10	a/n	

15	SASS	C	C	C	C	C	C	C	This entry is optional when the SASN field is populated and otherwise is not applicable.	4	a/n	
16	SADLO	O	O	O	O	O	O	O		100	a/n	
17	FLOOR	O	O	O	O	O	O	O		4	a/n	
18	ROOM	O	O	O	O	O	O	O	This entry is used for APT, LOT, RM, SLIP, UNIT and SUITE.	9	a/n	
19	BLDG	O	O	O	O	O	O	O	This entry is used for BLDG,WNG and PIER.	9	a/n	
20	CITY	R	R	R	R	R	R	R		25	a	
21	STATE	R	R	R	R	R	R	R		2	a	
22	ZIP CODE	R	R	R	R	R	R	R	USW supports five (5) digit zip codes.	5	n	
23	LCON	C	N	C	C	C	N	C	This field is required when the request requires a dispatch and is necessary for all physical changes.	15	a/n	Name format
24	TEL NO	C	N	C	C	C	N	C	Required if LCON is populated. Dashes are required in positions 4&8. A dash is required in position 13 when an extension is included.	17	a/n	
25	EUMI	N	N	N	N	N	N	N		1	a	
26	ACC	C	N	C	C	C	N	C	Required if LSR has request for a new NID (field #24 of the LS Forms. Instructs installer for above work	255	a/n	
27	**WSOP**	N	N	N	N	N	N	N		1	a	
28	**CPE MFR**	N	N	N	N	N	N	N		20	a/n	
29	**CPE MOD**	N	N	N	N	N	N	N		20	a/n	

30	**IBT-ISDN BRI Type**	N	N	N	N	N	N	N		1	n	
17	IWO	N	N	N	N	N	N	N		1	a	
18	IW BAN	N	N	N	N	N	N	N		12	a/n	
19	IWCON	N	N	N	N	N	N	N		25	a/n	
20	TEL NO	N	N	N	N	N	N	N		17	a/n	
21	EAN	N	N	C	N	N	N	N	This field is conditional (C) when the account number is being changed as a result of the request activity. This number is the old (to be removed) account number. Ex. The entire account is not being ported; a sub-sequent number becomes the main number.	16	a/n	303-555-1212 This format assumes two hyphens as part of the entry Or 303-555-1212-123 This format assumes three hyphens as part of the entry
36	EATN	R	R	R	R	R	R	R	This field entry must be either 12 or 16 characters.	16	a/n	303-555-1212 This format assumes two hyphens as part of the entry Or 303-555-1212-123 This format assumes three hyphens as part of the entry
37	FBI	N	O	O	N	N	N	N	If converting entire account from U S WEST to Co-Provider, and customer requests a different address for the	1	a	

									final USW bill, use these fields.			
38	BILLNM	N	C	C	N	N	N	N	If converting entire account from US WEST to Co-Provider, and customer requests a different address for the final USW bill, use these fields. This field is required if FBI is populated.			
39	SBILLNM	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider, and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	25	a/n	
40	STREET	N	N	N	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	63	a/n	
41	FLOOR	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	15	a/n	
42	ROOM	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider and the	15	a/n	

									customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.			
43	CITY	N	C	C	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	15	a	
44	STATE	N	C	C	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	2	a	
45	ZIP CODE	N	C	C	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	5	n	
46	BILLCON	N	O	O	N	N	N	N	This field may be populated if BILLNM is present.	15	a/n	
47	TEL NO	N	C	C	N	N	N	N	If a BILLCON is provided, this entry must have a telephone number. A dash is required in position 4 &	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry Dash is required in position

									8. If an extension is used, a dash is also required in position 13.			13 when an extension is included.
48	SSN	N	N	N	N	N	N	N		11	a/n	
[redacted]												
49	DNUM	N	N	N	N	N	N	N		4	n	
50	DISC#	N	N	N	N	N	N	N	This field is used to setup transfer of calls for a line under the disconnected account.	12	a/n	
51	TER	N	N	N	N	N	N	N		8	a/n	
52	TC OPT	N	N	N	N	N	N	N		3	a/n	
53	TC TO PRI	N	N	N	N	N	N	N		12	a/n	
54	TC TO SEC	N	N	N	N	N	N	N		12	a/n	
55	TCID	N	N	N	N	N	N	N		2	n	
56	TC NAME	N	N	N	N	N	N	N		35	a/n	
57	TC PER	N	N	N	N	N	N	N		8	a/n	
58	REMARKS	O	O	O	O	O	O	O		255	a/n	

Ref. #	Field Name	N= New Installation of loop	C= Change - CFA	C= Change - CP (OR only)	D= Disconnect	M= Inside Move (CO, IA, MN only)	T= Outside Move	R= Record Activity	V= Conversion as Specified	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
3	Loop Service (LS)												
[redacted]													

1	PON	R	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	
2	VER	R	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	2	a/n	
3	AN	R	R	R	R	R	R	R	R	This entry should be the same as the AN entry on the LSR form. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	Account number or N=new account number 303-555-1212 This format assumes two hyphens as part of the entry.
4	ATN	N	N	N	N	N	N	N	N		12	n	
5	LQTY	R	R	R	N	R	R	R	R	Must match number REFNUM	4	n	example: 0008
6	PG__OF___	R	R	R	R	R	R	R	R	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total			

										order (LSR, EUI, & LS forms). Example: If the order has one page for each form, the LSR form would indicate 1 of 3, the EUI form would indicate 2 of 3, the LS form would indicate 3 of 3.	4	n	
[redacted]													
7	LOCNUM	N	N	N	N	N	N	N	N		3	n	
8	LNUM	R	R	R	N	R	R	R	R	This entry should be sequentially numbered. LNUM must be unique within a single request/PON and sequential starting with 0001. Once a LNUM is generated it cannot change and is retained through the completion of the request.	4	n	
9	LNA	R	R	R	R	R	R	R	R	This entry Identifies the activity involved at the line level. The ACT entry mirrors the LNA entry except when a conversion is requested. When converting at the account level, the LNA can equal D or V.	1	a	N=New Install C=Change account D=Disconnect M=Move physical termination w/in bldg T=Outside Move R=Record activity V=Conversion to New LSP

10	CKR	O	O	O	N	O	O	O	O	This entry Identifies the circuit number assigned by the customer.	36	a/n	
11	TSP	O	O	O	N	O	O	N	O	This entry Indicates the provisioning and restoration priority defined under the TSP Service Vendor Handbook. A TSP ending in 00 indicates that TSP is being removed.	12	a/n	example: TSP12345C-E1 ther is 1 preprinted hyphen
12	SAN	O	O	O	O	O	O	O	O	This entry represents the Subscriber Authorization Number. An entry is required if the first character of TOS=3.	30	a/n	example: AB12345...
13	ECCKT	N	R	R	R	R	R	R	C	This entry represents the Circuit ID which USW will assign and FOC to the Co-Provider. This entry is required on all requests after USW makes the initial assignment. If the ACT=V, this entry is not applicable when converting from USW or Resale to an Unbundled Loop. This entry is required if	20	a/n	examples: 29.LXFU123456..MS (Central 3.LXFU123456..PN (Western) 5.LXFU123456..NW(Eastern)

										converting Unbundled Loop from one Co-Provider to another Co-Provider.			
14	CFA	R	R	R	N	R	R	R	R	This entry identifies the USW carrier system and channel to be used. An entry is required when the LNA=V but is not applicable when the LNA=D.	42	a/n	example: ALT01 VF-2wire 48 ALBQNMMN ALBQNMMNHJ1
15	SYSTEM ID	N	N	N	N	N	N	N	N		5	a/n	
16	CABLE ID	N	N	N	N	N	N	N	N		5	a/n	
17	SHELF	N	N	N	N	N	N	N	N		6	a/n	
18	SLOT	N	N	N	N	N	N	N	N		6	a/n	
19	RELAY RACK	N	N	N	N	N	N	N	N		10	a/n	
20	CHAN/PAIR	N	N	N	N	N	N	N	N		5	a/n	
21	JK CODE	N	N	N	N	N	N	N	N		5	a/n	
22	JK NUM	N	N	N	N	N	N	N	N		2	a/n	
23	JK POS	N	N	N	N	N	N	N	N		2	n	
24	JR	N	N	N	N	N	N	N	N		1	a	
25	NIDR	O	N	N	N	N	O	N	O	The NIDR entry is Y if a NID is requested. When the LNA=D, a NIDR entry is not applicable.	1	a	Y or blank
26	IWJK	O	N	N	N	O	O	N	O	This entry is only valid if the request is in the state of IA, CO, or MN. This entry is not applicable when the LNA=D.	5	a/n	example: RJ21X

27	IWJQ	C	N	N	N	C	C	N	C	This entry is only valid if the request is in the state of IA, CO, or MN. If the field IWJK is populated, then the IWJQ entry must be greater than zero. If IWJK field is blank, then IWJQ must ="blank."	2	n	01 or blank
28	DISC #	N	N	N	N	N	N	N	C	If the ACT=V, this field is required when converting from USW Resale to Unbundled Loop. If the ACT=V and the service is already converted is done Co-Provider to Carrier then this field in non-applicable. Dashes are required in position 4 & 8.	12	a/n	example: **201-555-1212** **there are two preprinted hyphens**
29	TER	N	N	N	N	N	N	N	N		8	a/n	
30	TC OPT	N	N	N	N	N	N	N	C	If the ACT=V and LNA=D, this field is required.	1	a/n	N=None S=Standard T=Split Transfer of Calls
31	TC TO PRI	N	N	N	N	N	N	N	C	If TCOPT=S or T, then an entry is required. Dashes are required in fields 4 & 8.	12	a/n	201-555-1212
32	TC TO SEC	N	N	N	N	N	N	N	C	If TCOPT=T, then an entry is required. Dashes are required	12	a/n	201-555-1212

										in fields 4 & 8.			
33	TCID									If TCOPT=S or T, then an entry is required.	2	n	
34	TC NAME									If TCOPT=S or T, then an entry is required.	35	n	
35	TC PER	N	N	N	N	N	N	N	C	If TCOPT=S or T. then an entry is required.	8	a/n	ccyymmdd
36	REMARKS	O	O	O	N	O	O	O	O		255	a/n	

Ref. #	Field Name	V= Conversion as Specified	Z= Conversion Spec/No Dir Lstgs	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
	Local Service Request (LSR)						
[redacted]							
1	CCNA	R	R	The Co-Provider must provide ZCID on order requests. USW edits to validate certification by state.	3	a/n	
2	PON	R	R	This entry is Co-Provider generated and may be reused 2 years after initial request. This PON will be used for all forms associated with this request.	16	a/n	
3	VER	C	C	USW does not edit this entry. If	2	a/n	

				provided, the VER is returned on the FOC. This VER will be used for all forms associated with this request. Initial orders are assumed to be Version 1. All subsequent supplements should increment (Version to 2,3,etc.) VER is not required for the initial order, but is required for any supplement. The same VER can be used when a Fatal Error is received prior to when the Co-Provider is sent a FOC or a manually generated Error. The VER can also be incremented each time an request/SUP is sent.			
4	LSR NO.	N	N		11	a/n	
5	LOC QTY	N	N		3	n	
6	HTQTY	N	N		2	n	
7	AN	R	R	This entry should represent the existing USW end user account number. If a working telephone number is entered rather than the account number, the USW account number will be provided on the FOC.	12	a/n	303-555-1212 This format assumes two hyphe as part of the entry.
8	ATN	O	O		12	a/n	303-555-1212 This format assumes two hyphe as part of the entry.
9	SC	N	N		4	a/n	
10	PG__OF___	O	O	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total order (LSR, EUI, or LSNP form). Example: If the order has one page for each form, the LSR form would	4	n	

				indicate 1 of 3, the EUI form would indicate 2 of 3, the LSNP form would indicate 3 of 3.			
11	D/TSENT	R	R	This entry is populated using the date and time that the order is sent by the Co-Provider. For manual processing, a mm-dd-ccyy format may be used. For mechanical processing, a cyymmddhhMinMin is required.	17	a/n	mm-dd-ccyy or ccyymmddhhMinMin
12	DDD	R	R	Due date based on either standard due date interval or as negotiated between project managers.	10	a/n	ccyymmdd 99999999 is valid
13	APPTIME	O	O	If a coordinated installation (CHC=Y) is requested, a desired appointment time (APPTIME) may be provided. The Co-Provider has up to 48 hours prior to the DD to pass the appointment time to USW. Appointment times outside of normal work hours require advance approval by USW. Additionally the approving Co-Provider's name and telephone number must be indicated in Remarks to accept charges associated to the out of hours installation.	9	a/n	hhmm Always shown as military time. Mm is always zero.
14	DDDO	N	N		10	a/n	
15	APPTIME	N	N		9	a/n	
16	DFDT	N	N	DFDT is not allowed when NP is combined with Unbundled Loop. The Loop requirements drive a default FDT.	4	a/n	
17	PROJECT	O	O	USW will automatically project manage requests of over 100 telephone numbers to be ported and/or 25 loops or requests requiring out of hours cuts. A Co-Provider can indicate an entry	up to16	a/n	

				of "Requested', however USW will not provide project handling unless the previously defined criteria is met.			
18	CHC	O	O	If CHC=Y, then APPTIME is required for the loop. This indicates the installation request requires coordination. If the CHC entry is Y, then the installation type is defined as "coordinated with testing". If the CHC entry is blank, the installation type is defined as "basic". Edits are based on the Co-Provider contracts and the CHC matrix. NOTE: If "basic installation with test" is required, it must be entered as a REMARK.	1	a	Y or blank
19	REQTYP	R	R	The REQTYP for NP with Loop is BB.	2	a	BB= Loop with NP Firm Order
20	ACT	R	R	When the ACT field entry equals V or Z, the Co-Provider must make a positive entry of TN(s) that they are converting.	1	a	V=Conversion as specified, Z=Conversion as specified Listi as is
21	SUP	C	C	An entry is required on all supplements, but not required on the initial request. Remarks are not required, but support the request.	1	n	1=cancel,2=DD change,3=other
22	EXP	C	C	Expedites are not offered for LNP requests only. However; when the request is for a combination of LNP and Loop, an expedite can be requested for the Loop and if approved would apply to both types of service orders. If EXP=N or blank, the DDD cannot be less than the standard interval. An EXP entry is required when the DDD is less than the USW standard interval. EXP is not allowed when the	1	a	Y=Expedite Charges Authorized N or Blank=Charges Not Authorized

				ACT="D","A", or "R". Expedites require USW approval. If charges are approved by the Co-Provider, their approver's name and TN must be supplied in Remarks before USW will issue the order.			
23	AFO	N	N		5	a	
24	RTR	R	R	If a CDLR (Confirming DLR) is required, it must be entered as a Remark.	1	a	C=Confirmation D=Confirmation and DLR
25	CC	C	C	This entry is expected to represent the New Service Provider on a Port Out . This is the four (4) digit number registered at the NPAC by the New Service Provider. This field is also referred to as the Operating Company Number (OCN) or the Service Provider Indicator (SPI). Required for LNP (NPT on NP Form =D), otherwise optional.	4	a/n	examples: 12A3,9631
26	AENG	O	O	If Y, the approver's name and telephone number are required in the Remarks Field.	1	a	Y or blank
27	ALBR	O	O	If Y, the approver's name and telephone number are required in the Remarks Field.	1	a	Y or blank
28	SCA	O	O	If populated, additional manual processing is needed.	1	a	Y or blank
29	AGAUTH	R	R	The AGAUTH and DATED entries combine to form the LOA for a specific request. AGAUTH must = Y when ACT = Z or V.	1	a	Y = Authorization on file
30	DATED	R	R	This entry is required when AGAUTH is populated.	10	a/n	mm-dd-ccyy
31	AUTHNM	O	O		15	a/n	Name format

32	PORTYP	N	N		1	a	
33	ACTL	N	N		11	a/n	
34	AI	N	N		1	a	
35	APOT	N	N		11	a/n	
36	LST	N	N		11	a/n	
37	LSO	N	N		6	n	
38	TOS	R	R	2nd and 3rd characters are not valid for loop requests.	3	a/n	TOS=1 and 3 will be treated as a Business TOS=2 will be treated Residential
39	SPEC	N	N		7	a/n	
40	NC	R	R	Valid NC Codes are located in Technical Publication 77384. Additionally, DDD validation must be made using NC, NCI , SEC NCI Codes, and standard interval.	4	a/n	
41	NCI	R	R	Valid NCI codes are located in Technical Publication 77384. Additionally, DDD validation must be made using NC, NCI codes, and standard interval. This NCI indicates the termination at the wire center.	5-12	a/n	
42	CHANNEL	N	N		6	a/n	
43	SEC NCI	R	R	Valid SEC NCI codes are located in Technical Publication 77384. Additionally, DDD validation must be made using NC, NCI and SEC NCI codes, and standard interval. This NCI indicates the termination at the end users location.	5-12	a/n	
44	RPON	C	C	When multiple PONs are to be related, the first LSR in the series would have a blank RPON. The subsequent LSRs would all have the PON of the first LSR in this RPON field.	16	a/n	

45	RORD	O	O	USW provided number that will relate USW issued orders together. This entry might be provided on a PON supplement.	9	a/n	
46	LSP AUTH	N	N		4	a/n	
47	LSP AUTH DATE	N	N		10	a/n	
48	LSP AUTH NAME	N	N		15	a/n	
49	LSPAN	N	N		16	a/n	
50	CIC	N	N		4	n	
51	CUST	N	N		25	a/n	
[illegible]	[illegible]						
52	BI1	C	C	An entry is required for Loop with INP (NPT=A,B or C) but is not allowed for Loop with LNP (NPT=D).	1	a	L=Loop
53	BAN1	R	R	The Co-Provider is required to populate appropriate summary bill number for Loop service. The fields 51,52,55-60 will be populated by USW from information on the Co-Provider profile specific to each BAN. Dashes are required in positions 4, 8 and 13._	16	a/n	
54	BI2	C	C	An entry is required for Loop with INP (NPT=A,B or C) but is not allowed for Loop with LNP (NPT=D)	1	a	N=INP
55	BAN2	C	C	The Co-Provider is required to populate the appropriate summary bill number for INP (NPT=A,B or C). The BAN1 cannot=BAN2. Dashes are required in positions 4, 8 and 13.	16	a/n	
56	ACNA	N	N		3	a	
57	EBD	N	N		10	a/n	
58	CNO	N	N		12	a/n	

59	NRI	N	N		1	a	
60	BILLNM	N	N		25	a/n	
61	SBILLNM	N	N		25	a/n	
62	TE	N	N		1	a	
63	EBP	N	N		6	a/n	
64	STREET	N	N		25	a/n	
65	FLOOR	N	N		3	a/n	
66	ROOM	N	N		6	a/n	
67	CITY	N	N		15	a	
68	STATE	N	N		2	a	
69	ZIP CODE	N	N		5	n	
70	BILLCON	N	N		15	a/n	
71	TELNO	N	N		17	a/n	
72	VTA	N	N		17	a/n	
[illegible]	[illegible]						
73	INIT	R	R	The Co-Provider will provide the contact information for the request.	15	a/n	Name format
74	TEL NO	R	R	The Co-Provider will provide the contact information for the request. Dashes are required in positions 4 and 8. Dash is required in position 13 when an extension is included.	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry.
75	EMAIL	O	O		60	a/n	
76	FAX NO	R	R	This entry is only required in a manual mode.	12	a/n	303-555-1212 This format assumes two hyphe as part of the entry.
77	STREET	N	N		25	a/n	
78	FLOOR	N	N		3	a/n	
79	ROOM/MAIL	N	N		10	a/n	
80	CITY	N	N		25	a	
81	STATE	N	N		2	a	

82	ZIP CODE	N	N		5	n	
83	IMPCON	R	R	The Co-Provider will provide the implementation contact name information for the request.	15	a/n	
84	IMPCON TEL NO	C	C	The Co-Provider will provide the implementation contact telephone information for the request. This field can only be populated if IMPCON is populated and field 85 (PAGER) is not populated.	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry. Das is required in position 13 when a extension is included.
85	PAGER	C	C	This field must be populated if field 84 (IMPCON TN) is not populated.	25	a/n	
86	ALT IMPCON	N	N		15	a/n	
87	TEL NO	N	N		17	a/n	
88	PAGER	N	N		25	a/n	
89	DSGCON	C	C	If the RTR=D, then the DRC or DSG FAX are required.	15	a/n	
90	DRC	C	C	If the RTR=D, then the DRC or DSG FAX are required. If the DRC is populated, then the DSG FAX NO is not allowed . This field can only be populated if the DSGCON is populated.	3	a/n	
91	DSG TEL NO	C	C	If the RTR =D, then the DRG TEL NO is required.	17	a/n	
92	DSG FAX NO	C	C	If the RTR=D, then the DRC or DSG FAX are required. If the DSG FAX is populated, then the DRC is not allowed. This field can only be populated if the DSGCON is populated.	12	a/n	
93	DSG EMAIL	N	N		60	a/n	
94	DSG STREET	N	N		25	a/n	
95	DSG FLOOR	N	N		3	a/n	
96	ROOM / MAIL STOP	N	N		10	a/n	

97	DSG City	N	N		25	a	
98	DSG STATE	N	N		2	a	
99	DSG ZIP CODE	N	N		5	n	
100	REMARKS	C	C	Remarks are recommended on all supplements and are preferred if the SUPP=3 to explain the changes made on the LSR. Remarks are required if basic installation with testing is requested. Name and TN are required in Remarks if an out of hours installation is requested and CHC='Y', ALBR='Y', AENG='Y', or EXP='Y'. In case of a held order, use this field to indicate that this LSR is for a held order.	255	a/n	
101	LOCNUM	N	N		3	n	
102	HNUM	N	N		5	n	
103	CB	N	N		8	a/n	
104	HA	N	N		1	a	
105	HID	N	N		12	a/n	
106	TIP	N	N		1	a	
107	TLI	N	N		12	a/n	
108	HNTYP	N	N		1	n	
109	HLA	N	N		1	a	
110	HTSEQ	N	N		10	a/n	
111	NOTYP	N	N		1	a	
112	HTN	N	N		17	a/n	

Ref#	FIELD NAME	N= New Line	D= Disconnect	V= Conversion as Specified	C= Change	T= Outside Move	R= Record	M= Inside Move	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
	End User Information (EUI)											
[redacted]												
1	PON	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	
2	VER	R	R	R	R	R	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	2	n	
3	AN	R	R	R	R	R	R	R	This entry should be the same as the AN entry on the LSR form. This entry is required in a manual mode but not required when using a mechanized mode of service request.	12	a/n	303-555-1212 This format assumes two hyphens as part of the entry
4	ATN	O	O	O	O	O	O	O		12	a/n	
5	DQTY	N	R	N	N	N	N	N		3	n	

6	PG_OF_	R	R	R	R	R	R	R	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total order (LSR, EUI, & LS forms). Example: If the order has one page for each form, the LSR form would indicate 1 of 3, the EUI form would indicate 2 of 3, the LS form would indicate 3 of 3.	4	n	
7	LOCNUM	N	N	N	N	N	N	N		3	n	
8	NAME	R	R	R	R	R	R	R	This entry will be used to validate the ownership of the current USW account.	25	a/n	Name format
9	SAPR	C	C	C	C	C	C	C	This entry is optional when the SANO field is populated and otherwise is not applicable.	5	a/n	
10	SANO	C	C	C	C	C	C	C	This entry is required for numbered addresses and otherwise is not applicable.	8	a/n	
11	SASF	O	O	O	O	O	O	O	This entry is optional for numbered addresses and otherwise is not applicable.	4	a/n	
12	SASD	O	O	O	O	O	O	O	This entry is optional when the SASN field is populated and otherwise is not	2	a	

									applicable.			
13	SASN	R	R	R	R	R	R	R	This entry will be used to support validating the ownership of the current USW account. If the entry is longer than 25 characters, then recap the total street name in the Remarks field.	25	a/n	
14	SATH	C	C	C	C	C	C	C	This entry is optional when the SASN field is populated and otherwise is not applicable.	10	a/n	
15	SASS	C	C	C	C	C	C	C	This entry is optional when the SASN field is populated and otherwise is not applicable.	4	a/n	
16	SADLO	O	O	O	O	O	O	O		100	a/n	
17	FLOOR	O	O	O	O	O	O	O		4	a/n	
18	ROOM	O	O	O	O	O	O	O	This entry is used for APT, LOT, RM, SLIP, UNIT and SUITE.	9	a/n	
19	BLDG	O	O	O	O	O	O	O	This entry is used for BLDG,WNG and PIER.	9	a/n	
20	CITY	R	R	R	R	R	R	R		25	a	
21	STATE	R	R	R	R	R	R	R		2	a	
22	ZIP CODE	R	R	R	R	R	R	R	USW supports five (5) digit zip codes.	5	n	
23	LCON	C	N	C	C	C	N	C	This field is required when the request requires a dispatch and is necessary for all physical changes.	15	a/n	Name format
24	TEL NO	C	N	C	C	C	N	C	Required if LCON is	17	a/n	

									populated. Dashes are required in positions 4&8. A dash is required in position 13 when an extension is included.			
25	EUMI	N	N	N	N	N	N	N		1	a	
26	ACC	C	N	C	C	C	N	C	Required if LSR has request for a new NID (field #24 of the LS Forms. Instructs installer for above work	255	a/n	
27	**WSOP**	N	N	N	N	N	N	N		1	a	
28	**CPE MFR**	N	N	N	N	N	N	N		20	a/n	
29	**CPE MOD**	N	N	N	N	N	N	N		20	a/n	
30	**IBT-ISDN BRI Type**	N	N	N	N	N	N	N		1	n	
17	IWO	N	N	N	N	N	N	N		1	a	
18	IW BAN	N	N	N	N	N	N	N		12	a/n	
19	IWCON	N	N	N	N	N	N	N		25	a/n	
20	TEL NO	N	N	N	N	N	N	N		17	a/n	
21	EAN	N	N	C	N	N	N	N	This field is conditional (C) when the account number is being changed as a result of the request activity. This number is the old (to be removed) account number. Ex. The entire account is not being ported; a sub-sequent number becomes the main number.	16	a/n	303-555-1212 This format assumes two hyphens as part of the entry Or 303-555-1212-123 This format assumes three hyphens as part of the entry
36	EATN	R	R	R	R	R	R	R	This field entry must be	16	a/n	303-555-1212

									either 12 or 16 characters.			This format assumes two hyphens as part of the entry Or 303-555-1212-123 This format assumes three hyphens as part of the entry
37	FBI	N	O	O	N	N	N	N	If converting entire account from US WEST to Co-Provider, and customer requests a different address for the final USW bill, use these fields.	1	a	
38	BILLNM	N	C	C	N	N	N	N	If converting entire account from U S WEST to Co-Provider, and customer requests a different address for the final USW bill, use these fields. This field is required if FBI is populated.	25	a/n	
39	SBILLNM	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider, and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	25	a/n	
40	STREET	N	N	N	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the	63	a/n	

									final USW bill, use these fields. This field may be populated if BILLNM is present.			
41	FLOOR	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	15	a/n	
42	ROOM	N	O	O	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	15	a/n	
43	CITY	N	C	C	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	15	a	
44	STATE	N	C	C	N	N	N	N	If converting the entire account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.	2	a	
45	ZIP CODE	N	C	C	N	N	N	N	If converting the entire	5	n	

									account from USW to the Co-Provider and the customer requests a different address for the final USW bill, use these fields. This field may be populated if BILLNM is present.			
46	BILLCON	N	O	O	N	N	N	N	This field may be populated if BILLNM is present.	15	a/n	
47	TEL NO	N	C	C	N	N	N	N	If a BILLCON is provided, this entry must have a telephone number. A dash is required in position 4 & 8. If an extension is used, a dash is also required in position 13.	17	a/n	303-555-1212-1234 This format assumes three hyphens as part of the entry Dash is required in position 13 when an extension is included.
48	SSN	N	N	N	N	N	N	N		11	a/n	
	[illegible]											
49	DNUM	N	N	N	N	N	N	N		4	n	
50	DISC#	N	N	N	N	N	N	N	This field is used to setup transfer of calls for a line under the disconnected account.	12	a/n	
51	TER	N	N	N	N	N	N	N		8	a/n	
52	TC OPT	N	N	N	N	N	N	N		3	a/n	
53	TC TO PRI	N	N	N	N	N	N	N		12	a/n	
54	TC TO SEC	N	N	N	N	N	N	N		12	a/n	
55	TCID	N	N	N	N	N	N	N		2	n	
56	TC NAME	N	N	N	N	N	N	N		35	a/n	
57	TC PER	N	N	N	N	N	N	N		8	a/n	
58	REMARKS	O	O	O	O	O	O	O		255	a/n	

Ref. #	Field Name	V= Conversion as Specified	Z= Conversion Spec/ No DL	Business Rule Agreement (Options, Conditions, etc.)	Field Length	Field Characteristics	Valid Values
	Loop and Number Port (LSNP)						
1	PON	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	
2	VER	R	R	This entry should be the same as the LSR entry. This entry is required in a manual mode but not required when using a mechanized mode of service request.	2	a/n	
3	AN	R	R	This entry should be the same as the AN entry on the LSR form. This entry is required in a manual mode but not required when using a mechanized mode of service request.	16	a/n	
4	ATN	O	O		12	n	
5	LQTY	R	R	This entry must equal the number of Loops to be created which may differ from the total of LNUMs. For example, an existing End User record may indicate ten lines with associated features	4	n	

				and facilities. A request asks for four loops and all ten numbers to port. In this case, the LQTY=4 and the LNUMs=10.			
6	PG__OF___	R	R	This field is required in a manual mode but not used in a mechanized mode. The following business rule applies to the total order (LSR, EUI, and LSNP form). Example: If the order has one page for each form, the LSR form would indicate 1 of 3, the EUI form would indicate 2 of 3, the LSNP form would indicate 3 of 3.	4	n	
[redacted]							
7	LOCNUM	N	N		3	n	
8	LNUM	R	R	LNUM must be unique within a single request/PON and sequential starting with 0001. Once a LNUM is generated, it cannot change and is retained through the completion of the request.	4	n	
9	LNA	R	R		1	n	Valid entries are V or D.
10	CKR	C	C	This field entry Identifies the circuit number assigned by the customer. An entry is required if NPT=A or C.	36	a/n	
11	TSP	O	O		12	a/n	examples: TSP12345C-E1 there is one preprinted hyphens
12	LRN	N	N		12	n	
13	TDT	C	C	An entry of Y is required when NPT=D.	1	a	Valid entries are Y or blank.
14	SAN	C	C	This entry represents the	30	a/n	

				Subscriber Authorization Number. An entry is required if the first character of TOS=3.			
15	ECCKT	C	C	This entry represents the Circuit ID which USW will assign and FOC to the Co-Provider. This entry is required on all requests after USW makes the initial assignment. If the ACT=V, this entry is not applicable when converting from USW or Resale to an Unbundled Loop. This entry is required if converting Unbundled Loop from one Co-Provider to another Co-Provider.	20	a/n	examples: 29.LXFU123456..MS (Central) 3.LXFU123456..PN (Western) 5.LXFU123456..NW(Eastern)
16	CFA	C	C	This entry identifies the USW carrier system and channel to be used. An entry is required when the LNA=V but is not applicable when the LNA=D.	42	a/n	ex:ALT01 VF-2wire 48 ALBQNMM ALBQNMMNHJ1
17	SYSTEM ID	N	N		5	a/n	
18	CABLE ID	N	N		5	a/n	
19	SHELF	N	N		6	a/n	
20	SLOT	N	N		6	a/n	
21	RELAY RACK	N	N		10	a/n	
22	CHAN/PAIR	N	N		5	a/n	
23	JK CODE	N	N		5	a/n	
24	JK NUM	N	N		2	a/n	
25	JK POS	N	N		2	n	
26	JR	N	N		1	a	
27	NIDR	O	O	The NIDR entry is a Y if a NID is requested. NIDR is not applicable when LNA=D.	1	a	Y or Blank
28	IWJK	O	O	This entry is only valid in the	5	a/n	Ex. RJ21X

				states of IA, CO, or MN and is not applicable when LNA=D.			
29	IWJQ	C	C	This entry is only valid in the states of IA, CO, or MN. If the field IWJK is populated, then the IWJQ entry must be greater than zero. If the field IWJK is blank, then IWJQ must = "blank".	2	n	Ex. 01
30	PORTED #	R	R	The PORTED # is required on all orders.	12	n	Ex. 201-555-1212 there are two preprinted hyphens
31	TNP	C	C	An entry is required when NPT=B.	3	n	Ex. 001-999
32	CFTN	C	C	An entry is required when NPT=B. Dashes are required in positions 4 & 8.	12	a/n	Ex.201-555-1212
33	NPT	R	R	This entry distinguishes between INP and LNP. For INP, either A,B, or C is used. For LNP, D is used. This entry is required if LNA=V or Z. NPT will be blank when LNA=D.	1	a	A=DID B=RCF C= Route Index D=LRN, "blank" = disconnecting a TN during port out.
34	RTI	C	C	An entry is required when NPT=A or C. An entry is not applicable for RCF (NPT=B) or LRN (NPT=D).	6	a/n	Ex. 215
35	NPTG	C	C	An entry is required when NPT=A or C. An entry is not applicable when the request is for RCF (NPT=B) or LRN (NPT=D).	8	a/n	Ex. AK1234
36	BA	O	O	An entry is optional when NPT=A,B,C and not applicable when NPT=D.	1	a	A=Add D=Delete

							Z=Remove all Blocking
37	BLOCK	C	C	If BA=A or D , then BLOCK is required. If BA=Z, then BLOCK is not applicable. An entry is not applicable when NPT=D.	9	a	A=No Collect and 3rd party B=No 3rd party C=No collect call
38	FPI	O	O	An entry is not applicable when NPT=D or when LNA=D.	1	a	A=Freeze Intra S=Remove Intra Freeze
39	LPIC	O	O	An entry is not applicable when NPT=D or when LNA=D.	4	a/n	ex. 0440
40	TC OPT	C	C	If LNA=D, an entry is required,	1	a/n	N=None S=Standard T=Split Transfer of Calls
41	TC TO PRI	C	C	If TCOPT=S or T, then an entry is required. Dashes are required in fields 4 & 8.	12	a/n	201-555-1212
42	TC TO SEC	C	C	If TCOPT=T, then an entry is required. Dashes are required in fields 4 & 8.	12	a/n	201-555-1212
43	TCID	C	C	If TCOPT=S or T, then an entry is required.	2	n	
44	TC NAME	C	C	If TCOPT=S or T, then an entry is required.	35	n	
45	TC PER	C	C	If TCOPT=S or T. then an entry is required.	8	a/n	ccyymmdd
46	REMARKS	O	O		255	a/n	

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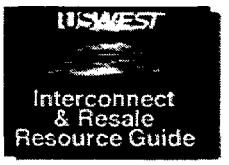
USWEST Carrier Division



1. Business Procedures

2. Pre-Ordering Information

3. Product Information - Resale

4. Product Information - Interconnect

- Access to Poles, Innerducts and Right of Way
- AIN Interconnection
- CCSAC/SS7 Baseline Service
- CMDS Hosting and In-region Hosting
- Customized Routing
- Electronic Directory Assistance (EDA)
- Interim Number Portibility
- LIDB Data Storage
- LIDB Query Storage
- Line Validation Access (LVAS)
- Local Interconnection Service
- Local Number Portibility
- Physical Collocation
- Unbundled Dedicated Interoffice Transport
- Unbundled Loop
- Unbundled Switching
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- Voice Directory Assistance for Facility Based CLEC
- Watchdog Access
- Wholesale Directory Listings
- Wholesale Operator Services
- 8XX Data Base Query Service
- 9-1-1 Interconnection

5. Manual Ordering Process/Forms

Interconnect and Resale Resource Guide

UNBUNDLED SWITCHING

Product Description

Basic product features

Unbundled Switching (UBS) is a network element that provides the functionality required to connect the appropriate lines and trunks wired to the Main Distributing Frame (MDF) or Digital Cross Connect (DSX) panel to a desired line or trunk. UBS will include the features, functions and capabilities a local switch provides.

The services available via an unbundled line side port switching element are:

- Telephone Number
- Directory Listing White page single line
- Dial Tone
- Loop Start or Ground Start Signaling
- On/Off Hook Detection
- Audible and Power Ringing
- Automatic Message Accounting (AMA Recording)
- Access to 911, Operator Services and Directory Assistance
- Blocking Options, for example 900 services
- Basic or enhanced features (switch specific)

Custom Routing of operator and directory assistance can be ordered with the UBS product. A separate pre-order development and installation process is defined under Custom Routing (CR).

Basic product capabilities and restrictions

Unbundled switching consists of three components - Ports; Lineside and Trunkside, Vertical Features, and switching usage based on originating and terminating minutes of use (MOU).

Port:

Types of line-side switch ports available:

- Analog line side port - A two wire connection at the SPOT bay

- DSO/Voice Frequency Switched Lineside - Analog Lineside Port - A two-wire analog line side connection (e.g., a Lineside Port) into U S WEST end office which allows customers access to switch based features and functions.

Types of Trunk-side switch ports available:

- DSO Switched Trunkside - Digital Trunkside Port (e.g., DID/PBX) - A DSO trunkside connection into the U S WEST end office which allows customers access to switch based features and services terminating at a DSO port within U S WEST Digital Cross Connect

System (DSC1-0).

- DSO/Voice Frequency Switched Trunkside - Analog Trunkside Port (e.g., DID/PBX) - An analog trunk side connection (e.g., Trunkside Port, used for DID PBX) into the U S WEST end office which provides customers access to switch trunk based functionality terminating on DSO (metallic) SPOT frame within a U S WEST Central Office.

- DS1 Switched Trunkside Digital Port, (e.g., DID/PBX) - A digital trunkside connection allowing connectivity to the U S WEST end office providing access to DS0 activations within the DS1. DS0 activation allows customers access to switch trunk based functionality.

  Unbundled DS1 Switched Trunkside Port (e.g., DID) installation is available as follows:
  a. DS1 Switched Trunkside Port (e.g., DID) - requires development of connectivity to establish the path.
  b. DS0 activation occurs for each DS0 trunk to be activated on the channels within previously ordered unbundled DS1 Switched Trunkside Ports.

Vertical Features:

Vertical features include custom calling features, CLASS features, and Centrex. These features will be offered on the port based on the signaling capabilities of the switch and the type of line-side port ordered, for example digital or analog.

If the port is served from an office that has SS7 capability, the Enhanced Feature Package will be applicable. If the switch is not SS7 capable, the Basic Feature Package will apply.

Usage:

A per minute usage charge on local originating minutes of use will be assessed. Specific state rates will apply to the MOU: however, it is possible that a specific CLEC per-minute rate may apply.

CLECs may also choose to use U S WEST's operator services and directory assistance.

Directory Assistance/Listings

Directory Assistance

Once a U S WEST end user customer discontinues their local service and decides to obtain service from a CLEC their Directory Assistance information is deleted from the DA database. The CLEC does have the option of obtaining U S WEST Directory Assistance for their end-user. Upon agreement, the U S WEST DA database would be updated to show the listing information that the CLEC has supplied on the UBS LSR Port order form by filling out ÒListing InformationÓ.

DA Service is telephone number information service that U S WEST provides to CLEC, permitting CLEC end users to receive published and

non-listed telephone numbers within the end user's Home- NPA. The listing information is contained in U S WEST's current DA database. U S WEST's DA database contains only those published and non-listed telephone numbers provided by U S WEST, LECs and other Competitive Local Exchange Carriers.

CLEC's are charged for DA Services provided under agreement originating from CLEC's existing exchanges and any CLEC exchanges established in the future. The price for DA Services provided under agreement is specified in the U S WEST Comprehensive Agreement and does not include a free call allowance. The prices are subject to adjustment upon thirty (30) days prior written notice.

CLEC's are required to provide and maintain the equipment, facilities, lines and materials necessary to connect its telecommunication facilities to an agreed upon intraLATA point of connection.

Directory Listings

Competitive Local Exchange Carrier Listings Service ("Listings") consists of U S WEST placing the names, addresses and telephone numbers of CLEC's end users in U S WEST's listing database, based on end user information provided to U S WEST by a CLEC on UBS LSR Port order under Listing Information".

CLECs must provide in standard, mechanized format, and U S WEST will accept at no charge, one primary listing for each main telephone number belonging to CLECs end user customers. Primary listings are as defined for U S WEST end users in U S WEST's general exchange tariffs. CLECs will be charged for premium listings, e.g., additional, foreign, cross reference, informational, etc., at U S WEST's general exchange listing tariff rates. CLECs utilizing Remote Call Forwarding for local number portability can list only one number without charge - either the end customer's original telephone number or the CLEC-assigned number. The standard discounted rate for an additional listing applies to the other number.

E911

The CLEC is responsible for providing the E911 database provider the telephone number and associated end user information in conjunction with Unbundled Network Elements (UNEs) in required NENA standard format. The "LEC number" will be deleted or unlocked from both the ALI and Selective Routing table data that is used for locating the caller and managing E911 traffic. Originating E911 traffic will no longer be associated with that LEC as the Local Service Provider to the end user customer. Originating E911 traffic management uses the caller's ANI provided by the caller's original end-central office. The CLEC is responsible to have the telephone number and associated information loaded into the E911 data base showing the CLEC as the L-PIC.

The local carrier should at the time it terminates local service, also provide notification to the E911 database provider of the requirement to delete or unlock the number from the ALI and Selective Routing table data.

The "CLEC number" must be loaded into the ALI and Selective Routing table data to process an E911 call with selective routing and ALI display functions. This number will be the ANI sent from the caller's originating

end-central office through the purchase of Unbundled Switch, with the end-user's E911 call. ANI is used for table lookups that route the E911 call to the appropriate Public Safety Answering Point (PSAP). ANI is also used for the ALI database bid that displays the E911 caller's name and location at the PSAP. The CLEC responsible for billing the end user customer when purchasing Unbundled Switching is responsible for the integrity and timeliness of the data used to manage and respond to originating traffic, i.e., ANI/ALI matches. Specifically that requirement would be to provide originating TN, Name and Master Street Address Guide (MSAG) compliant location information to the ALI database provider at the time of dialtone provisioning.

With UBS U S WEST will provide and maintain the P.01 grade of service Dedicated Trunking, providing access to the 911 router.

Trunk charge billing will continue for the calls routed by U S WEST end offices to the responsible PSAP.

CLEC will be responsible for collecting the correct end user charges and remitting charges to the appropriate agency (Federal, State, City and County).

Feature interaction

Provides connectivity to transport
Provides connectivity for a loop
Provides availability to Custom Routing
Provides access to Features
Used in Rebundled

Tariff references/price list references

Tariffs available in Colorado, Iowa, Oregon, and Minnesota; otherwise prices negotiated or arbitrated through CLEC Interconnection agreements in all other arrangements.

Service inquiry & manual ordering guideline

All manual requests for unbundled switching service must include:

- a LSR (Local Service Request) form
- an EU (End User Information) form
- a Port Service form
- if CR ordered with UBS, CR process applies

Mediated Access ordering information

This product cannot be ordered through Mediated Access. Vertical Features will be validated through the IMA by USOC.

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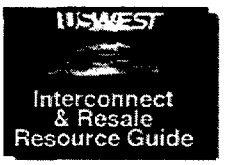

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VIRTUAL COLLOCATION

OVERVIEW

The Telecommunications Act of 1996 requires

U S WEST to provide Collocation for CLECs for interconnector-provided and designated basic transmission equipment necessary for interconnection or access to unbundled network elements at U S WEST premises. Interconnection is accomplished through either Physical or Virtual Collocation.

In order to request Physical or Virtual Collocation for the purpose of interconnection with the local carrier's network for the transmission and routing of telephone exchange service and exchange access, the interconnector must have received state certification and have either negotiated or arbitrated an Interconnection Agreement. This Interconnection Agreement must have Commission approval or pending Commission's approval. Requests for Physical and Virtual Collocation will be accepted once these requirements are met and U S WEST is in receipt of a Quotation Preparation Fee and appropriate Collocation Order Form.

Product Description

Basic product features

Virtual Expanded Interconnection Collocation (VEIC) is a tariffed service offering which provides for the placement of collocator-owned transmission equipment facilities and equipment in U S WEST wire centers for the interconnection of this equipment to U S WEST's network services.

Interconnectors can designate the basic transmission equipment to be placed in the wire center. This equipment is dedicated to their use, as well as, to monitor, control and reconfigure their circuits terminating in the U S WEST wire center.

U S WEST installs, maintains and repairs the interconnector's equipment in the wire center. The interconnector is responsible to ensure functionality between different vendor's SONET equipment.

The interconnector is responsible for obtaining and providing to U S WEST any administrative codes for all interconnector designated equipment. In addition, the interconnector shall provide items such as:

ïall necessary connecting cables (i.e., bay-to-bay and shelf-to-shelf), plug-ins and/or circuit packs,

ïall necessary fiber interconnection cable and connectors between the IDE and the Company-designated fiber distribution panel of the fiber distribution frame equipment side,

ïall necessary cable and connectors from the IDE to the Company's distributing frame designated as the single point of termination (SPOT),

ïall unique tools and test equipment for interconnector-designated equipment,

ïinitial and subsequently added equipment sized and equipped to handle a minimum of twelve (12) months forecasted growth.

ïany necessary equipment for remote monitoring and control and

ïsynchronization (e.g., timing) for the IDE traceable to a stratum 1 primary reference source.

The equipment is purchased by the interconnector and possession of the equipment is transferred to

U S WEST via a no cost lease.

The interconnector will pay to have U S WEST employees trained when their equipment is non-standard.

Virtual Collocation allows interconnectors to connect with U S WEST at a Point of Interconnection (POI) designated by U S WEST. The interconnector will be required to extend their fiber facility to this POI. U S WEST will perform a splice at the POI and provide a shared entrance facility from the POI and terminate at a fiber distribution panel within the wire center. If dual entry is requested by the collocator,

U S WEST will offer two points of entry only if it has at least two entry points. Where all but one of the entry points are at capacity, U S WEST will provide only one entry point.

A Single Point of Termination (SPOT) provided by U S WEST is installed near the collocation arrangement as the official demarcation point between collocated equipment and U S WEST's common cross-connect frames. The collocator will provide the cable from their equipment to the SPOT. U S WEST will notify the collocator of the footage of cable required between their equipment and the SPOT. U S WEST will install the cable to the collocator's termination on the SPOT. U S WEST will terminate the cable on both sides of the SPOT. The collocator is responsible for the inventory of all their terminations and U S WEST is responsible for the inventory on U S WEST's side of the SPOT. The collocator will provide "CLCI" (tie down) information on their side of the SPOT when issuing access service orders for EICT's.

Nonrecurring and Recurring Elements

The following nonrecurring (NRC) and recurring (RC) rate elements are basic components to Virtual Collocation:

Quotation Preparation Fee (QPF) - NRC

Covers the work involved in developing a quotation specific to a collocation request. If the quotation is accepted by the collocator, this amount is deducted from the fifty percent (50%) of the nonrecurring charges quoted to the collocator.

Entrance Facility - NRC/RC

Consists of a fiber optic cable on a per two fiber increment basis from the POI to the fiber termination panel. This consists of a shared fiber facility from the fiber termination panel located near the interconnector-designated equipment to the POI. It includes riser, fiber placement, entrance closure, conduit/innerduct and core drilling.

Cable Splicing - NRC

Applies if USWC is required to perform a splice for the interconnector-provided fiber optic cable to USWC fiber optic cable after the initial installation splice. Includes a per setup and per fiber spliced charge.

48 Volt DC Power Cable Installation - NRC/RC

Provides for the transmission of -48 Volt DC power to the collocator's equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack, local power bay to the closest power distribution bay, the power cables (feeders) A and B from the local power distribution bay to the interconnector designated equipment. The charge is applied on a per foot basis.

48 Volt DC Power - RC

Provides -48 Volt DC power to the collocator's equipment and is charged on a per ampere basis.

Inspector - NRC

Provides for the U S WEST qualified personnel necessary when the collocator requires access to the POI after the initial installation. Per half hour charges would apply for the Inspector's time during normal business hours and out of normal business hours. A call-out of an inspector after business hours is subject to a minimum charge of four hours.

VEIC Equipment Bay - RC

Provides mounting space for the interconnector-designated equipment. Each bay includes the 7 foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation is limited to 78 inches. This charge is applied per shelf required.

VEIC Equipment Engineering Labor - NRC

Provides the planning and engineering of the interconnector-designated equipment at the time of installation, change or removal. It consists of one half hour labor rates during normal business hours and out of normal business hours.

VEIC Equipment Installation Labor - NRC

Provides for the installation, change or removal of the

interconnector-designated equipment. It consists of one half hour labor rates during normal business hours and out of normal business hours.

VEIC Training - NRC

Provides for the billing of vendor-provided training for U S WEST personnel on interconnector-designated equipment which is different from equipment used by U S WEST. U S WEST will require three U S WEST employees to be trained per metropolitan service area in which the virtual equipment is located. Fifty percent (50%) of the amount of training billed to the first interconnector will be refunded to the first interconnector should a second interconnector select the same virtually collocated equipment in the same metropolitan service area. The second interconnector will be charged one half of the original amount paid by the first interconnector for the same metropolitan service area.

VEIC Equipment Maintenance - NRC

Recovers the labor costs for repair of out of service and/or service-affecting conditions and preventative maintenance of the interconnector's equipment. This charge will consist of an half hour charge and will be billed to the customer when services are required. A call-out of a maintenance technician after business hours is subject to a minimum of four hours.

Central Office (CO) Synchronization - RC

CO Synchronization provides Composite Clock and/or DS1 Synchronization signals traceable to a Stratum 1 source. CO Synchronization is available where U S WEST wire centers are equipped with Building Integrated Time Supply (BITS). CO Synchronization is an option ordered by the interconnector on the VEIC Order Form. A recurring charge is applied per port.

Basic product capabilities and restrictions

U S WEST places the following restrictions regarding Virtual Collocation:

- The virtual interconnector does not have physical access to the U S WEST wire center building.
- U S WEST requires proof of insurance and other liability coverage at the time the interconnector provides the fifty percent (50%) down payment of all nonrecurring charges.
- U S WEST does not allow collocators to connect to Dark Fiber.
- U S WEST does not offer copper or coaxial interconnection facilities.
- U S WEST does not allow the placement of enhanced service provider equipment.
- U S WEST is not required to connect interconnector's facilities with any service at a particular wire center if U S WEST does not offer that service at that wire center.

- The interconnector must order Expanded Interconnection Channel Terminations (EICTs) to connect to USWCs network after the collocation request is completed.

How this product works

Virtual Collocation does not have any standard installation intervals. Estimated installation timelines are provided to the interconnector at the time the quotation is provided.

Once a collocator has completed the application process and has submitted fifty percent (50%) of the quoted nonrecurring charges, U S WEST will begin work activities to complete the interconnector's request. Upon completion of the construction activities and the remaining nonrecurring balance has been paid, U S WEST will provide the interconnector a completion form that will initiate the recurring charges. Once this completion form has been signed by the interconnector and the Account Team Representative, the interconnector may begin submitting requests for EICT's.

Feature interaction

Once the collocator's request has been completed, the collocator can then place orders to connect to U S WEST's transport services through the purchase of Expanded Interconnection Channel Terminations (EICT's). EICT's provide a one-to-one dedicated transmission path between the interconnector's network equipment located in the wire center to U S WEST's two-wire and four-wire PLTS Analog PLTS and DDS, DS1, and DS3 Services.

Two-wire and four-wire EICTs are for connection to U S WESTs Analog PLTS and DDS. DS1 and DS3 EICTs provide a 1.544 Mbps or 44.736 Mbps path between the collocator and U S WESTs tariffed DS1 and DS3 Services.

Tariff references/price list references

Virtual Collocation will be provided by U S WEST as outlined in the appropriate tariffs, catalogs or Interconnection Agreements.

Interconnectors can request Virtual Collocation from the FCC No. 5 Tariff, Section 21, based upon its rates, terms and conditions.

When Virtual Collocation is ordered from this tariff, it will only provide connection to Private Line Transport Services (PLTS), Switched Access Service and Frame Relay Service (FRS) as described in Section 21.1. This is not utilized for local interconnection. The following services can be ordered from the FCC No. 5 Tariff to connect to the Virtual collocated equipment:

Private Line Transport Service (PLTS)

- Analog PLTS
- DDS Service

- DS1 Service
- DS3 Service or Central Office Multiplexing Feature

Switched Access Service

- DS1 Capacity
- DS3 Capacity
- Multiplexing Optional Feature

Frame Relay Service (FRS)

- At 56 or 64 Kbps
- At 1.544 Mbps

Service inquiry & manual ordering guidelines

VEIC Collocation Orders:
To request Virtual Collocation the collocator must submit a VEIC Order Form and the appropriate Quotation Preparation Fee (QPF).

Once these are received by U S WEST, within five business days U S WEST will verify if ducts are available and whether training is applicable and provide a response to the interconnector. If ducts are not available, the QPF will be returned to the interconnector. If ducts are available, U S WEST will then develop a quotation (25 business days) specific to the interconnector's request.

A copy of the VEIC Order Form is included in this Resource Guide. Questions on how to complete this VEIC Order Form may be referred to your Account Team Representative.

This would be submitted to the EIC Product Manager, 1801 California Street, Room 2330, Denver, Colorado, 80202.

The EIC Product Manager is responsible for distributing the order form to the Account Team and appropriate departments for review and processing. The Product Manager will compile the quotation information and provide a quotation identifying the nonrecurring and recurring charges and estimated construction intervals to the interconnector. Within 30 days of the date of the quotation, the collocator will be required to provide fifty percent (50%) of the nonrecurring charges to U S WEST or the quotation will expire and the ducts will be returned to available inventory.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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IV. TECHNICAL EQUIPMENT SPECIFICATIONS

1. List of Access Customer-designated equipment and required plug-in units. Indicate the circuit number or slot where the plug-in unit is to be installed. Please attach each product's technical description to include test and turn-up optioning. It is important to list all items of equipment to be provided to USWC. This inventory list will be verified and signed by the Interconnector and a USWC representative prior to completion of this VEIC request. NOTE: Do not include any spare equipment as USWC does not house spares. Make additional copies as needed to list all the items provided to USWC. (Please type or print clearly)

			QUANTITY			
DESCRIPTION	MANUFACTURER/ MODEL #	PHYSICAL DIMENSIONS	IN SVC	PROTECT	CLEI CODE	SLOT/CIRCUIT NO.

- Assistance for Facility Based CLEC
- Watchdog Access
- Wholesale Directory Listings
- Wholesale Operator Services
- 8XX Data Base Query Service
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Signature: Interconnector Signature: U S WEST Representative

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DIRECTORY ASSISTANCE FOR FACILITY-BASED CLECS

Product Features

Directory Assistance provides published and non-listed telephone number information to facilities-based Competitive Local Exchange Carrier (CLECs) end-user customers on behalf of the CLEC when the end user dials 411.

USW offers both local DA and national DA. Local DA provides a telephone number in the same lata or NPA (whichever is greater) from which the caller is dialing. USW operators access the USW DA database for telephone numbers within USW's 14 state region.

National DA includes coverage of all NPA's outside the originating NPA or lata (whichever is greater). USW accesses both it's own DA database for numbers within the region and the database of an external vendor for numbers outside the region.

A maximum of two (2) telephone number requests will be accepted per call to DA or NDA.

Branding

USW is able to announce the CLEC company name at two points during the DA call. The first occurs at the introduction to the call just prior to the request "what city?". This is referred to as "front-end" branding. Example: Thank you for calling ABC Telephone Company, what city?

The second branding opportunity occurs at the conclusion of the call just prior to relaying the number to the caller. This is referred to as "back-end" branding. Example: Thank you for calling ABC Telephone Company, the number is xxx-xxxx".

For carriers who prefer not to order carrier-specific branding, USW will use generic announcements. Examples of generic brands:

front-end	Thank you for calling, what city?
back-end	Thank you for calling. Your number is xxx-xxxx.
call completion:	Thank you for calling. Your number is xxx-xxxx. This call can be automatically connected for you by USW by pressing 1.

Customers have the following options:

carrier specific front-end brand	generic back-end brand
generic back-end brand	carrier specific front-end brand
generic front-end brand	generic back-end brand

Call Completion

USW will complete local calls and intralata toll calls on the USW network if the end-user selects this option. The opportunity is offered to the end-user at the conclusion of the call to DA.

Example: Thank you for calling ABC Telephone Company, the number is xxx-xxxx. This call can be automatically connected for you for an additional_____ (price, if any, to be set by the CLEC) by simply pressing 1".

Pricing

As of 1-14-99, the price per call is:

DA	$.34
NDA	$.385
Branding	no recurring charge
Call Completion	no recurring charge

Non-recurring charges apply for both the front-end and back-end brand:

Washington, Oregon, Idaho, Montana, Utah, Wyoming, Arizona, New Mexico, Colorado	$3065
North Dakota, South Dakota, Minnesota, Nebraska, Iowa	$1016

This charge is for the rental of a vendor's recording studio and the actual recording of the front and back end brands.

There is no charge for generic branding.

CLEC Responsibilities

CLECs who request carrier-specific branding must deliver the end-user DA calls to USW's operator services switch via dedicated trunks.

Ordering Information

USW Account Executives should be contacted for further information and assistance with the ordering process.

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WATCHDOG ACCESS

Product Description

WatchDog Access is a "state of the art" fraud management system for the purpose of reducing Operator Handled Call Fraud. The U S WEST Fraud Investigation Unit (FIU) performs fraud investigations in response to alerts generated by WatchDog. Query detail is accumulated based on the LIDB queries associated with a given telephone line number stored in the U S WEST LIDB.

WatchDog is equipped with thresholds and parameters designed to identify potentially fraudulent situations and issue an alert.

Basic product features

Under development

Basic product capabilities and restrictions

Under development.

How this product works

WatchDog Access is designed to accommodate CLEC specific requirements when the CLEC line information data is stored in the U S WEST LIDB. The FIU will receive system alerts from WatchDog and can fax the appropriate details to the CLEC designated location for CLEC action on the alert.

The expanded service would include Fraud Investigations performed by U S WEST investigators according to the methods and procedures agreed to with the CLEC. Charges for these services are not yet determined.

Feature interaction

WatchDog Access is only available to U S WEST LIDB Data Storage customers

Tariff references/price list references

Not available.

Service inquiry & manual ordering guidelines

Contact the U S WEST Account Manager to order WatchDog Access.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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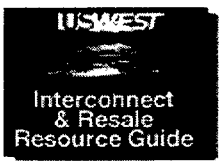

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WHOLESALE DIRECTORY LISTINGS

Product Description

PRODUCTS AVAILABLE:

1. Expanded Use Subscriber List (EUSL)
2. Expanded Use Updates (EUU)

NOTE: An additional product with restricted use for voice directory assistance applications is currently under development.

Basic product features

EUSL

EUSL provides clients with an initial load file containing listed name, address, telephone number information of end users from U S WEST's listing database. EUSL excludes non-published and non-listed end user listings.

EUU

EUU provides clients with daily changes, additions, deletions to listed information of end users from

U S WEST's listing database. EUU excludes non-published and non-listed end user listings.

EUSL and EUU are available to those who want to build and/or update a listing database for unlimited use, including resale, or use for specific applications such as updating a client's print, electronic and voice directories, creating direct marketing lists or publishing a telephone directory.

Basic product capabilities and restrictions

- EUSL can be ordered on a one-time basis, or used in combination with EUU
- EUU can be ordered without ordering EUSL, or can be used to update a EUSL database load
- Unlimited use of EUSL and EUU available, including resale
- Lists can be ordered by residence, business or combined list, by Area Code or Prefix
- Restricted-use EUU options available for use in yellow page sales leads
- Client must honor privacy indicators (omit from consumer lists, etc.)

provided in lists

Tariff references/price list references

EUSL and EUU are offered under separate contract, and market priced. Prices are as follows:

EUSL$.21 per listing

EUSL Volume Discount price of $.13 per listing available when purchasing 1.5M or more listings annually

EUU $.57 per listing update transaction

(unlimited-use option)

$.30 per listing update transaction (update transactions limited for use in yellow page sales leads)

Service inquiry & manual ordering guidelines

EUSL and EUU are not ordered through the LSR or DSR. The Interconnect Service account manager should contact a service representative in the publisher list group within the Operator and Information Services (OIS) organization.

Service Representatives:

Diana Chinn(503) 242-3747

Barbara Sandel (402) 422-7845

The service representative will provide the client with end-to-end service including ordering and provisioning of the lists.

The service representative will go over the contract, order forms and technical specifications with the client prior to ordering. Once a contract has been signed, the service representative in OIS will establish the clientís billing account in BART.

A bill is issued through BART within 30 days from the due date of an EUSL order. Billing for EUU is issued on a monthly basis. The OIS service representative also handles any collection activity on EUSL and EUU accounts.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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WHOLESALE OPERATOR SERVICES

Product Features

Toll/Assist consists of providing local, intralata and interlata (see note) operator assistance and alternate billing services to CLEC end-users who dial "0" or "0+" to reach a U Snbsp;WEST operator.

"0" calls include, but are not limited to:

- dialing assistance
- rate quotes
- handling of emergency local calls
- request to connect to DA
- Busy Line Verify (BLV) when the operator is asked to verify the status of conversation on a line
- Busy Line Interrupt (BLI) when the operator is asked to interrupt a conversation in progress

"0+" calls include alternate billing services such as calling card, third number billing, person-to-person (commercial credit cards are not accepted).

Note: In October 1997, the FCC granted USW's request for a waiver to provide interlata collect, calling card, and billed-to-third number calls all of which require either live attendant or automated operator assistance.

Branding

Branding opportunities on "0" and "0+" calls occur at .

U Snbsp;WEST is able to brand both "0" and "0+" calls regionwide.

Pricing

Toll/Assist calls are priced on a per call type or a per work second usage basis. USW calculates the amount owing both ways and charges the lessor of the two.

A non-recurring charge will apply when branding is requesting. The charge covers the cost of studio rental and the actual recording of the brand. The non-recurring charges are:

Washington, Oregon, Idaho, Montana, Utah, Colorado, New Mexico, Arizona, Wyoming	$3560
North Dakota, South Dakota, Iowa, Minnesota, Nebraska	$1016

The non-recurring charge applies to establishing both the front-end and the back-end brand.

Carrier Responsibilities

CLECs must send operator services calls to USW's operator switches on dedicated trunks.

Ordering Information

USW Account Executives should be contact for further information and assistance with the ordering process.

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8XX DATA BASE QUERY SERVICE

Product Description

Basic product features

8XX Data Base Query Service is an originating service which provides for the forwarding of CLEC end user dialed 8XX-NXX-XXXX calls to a toll carrier, based on the dialed 8XX number. When an 8XX call is originated by a CLEC end user, the CLEC SSP (SS7 equipped end office) will send an 8XX query to the U S WEST 8XX Service Control Point (SCP) through the U S WEST Signaling Transfer Point (STP). The U S WEST SCP will perform the Carrier Identification Function based on the dialed digits to determine the toll carrier trunk group to which the call should be routed in accordance with the SMS/800 information residing in the U S WEST SCP. The SCP will transmit the results of the Carrier Identification Function back to the CLEC SSP through the U S WEST STP. The results of the Carrier Identification Function will be the Carrier Identification Code (CIC) and/or the vertical features associated with the 8XX number call. Routing information in the SMS/800 Data Base reflects the desires of the owner of the 8XX number as entered in the SMS/800 by its chosen responsible organization (Resp Org.) The costs of the 8XX data base query will be billed to the toll carrier whose CIC is returned from the 8XX Data Base Query.

Optional features include:

POTS Translations

Call Handling and Distention (CH&D)

The customer will be expected to order access to the U S WEST local STP (Baseline CCSAC SS7) prior to or in conjunction with 8XX Data Base Query Service.

Feature interaction

It is expected that the SSP's interface with the U S WEST 8XX SCP will meet the requirements as specified in Bellcore Technical Reference TR-NWT-000533, Database Service Switching Points - Toll Free Service.

Tariff references/price list references

The SS7 options activation charge (translations) will apply for the customer to activate or modify 8XX Data Base Query Service.

8XX Data Base Query Service will be billed at the rates in the state specific unbundled and interconnect tariffs for local calls (calls that originate and terminate in the same free calling area). 8XX Data Base Query Service, for all other calls, will be billed at the existing wholesale rate listed in the appropriate Exchange Access Tariff.

Service inquiry & manual ordering guidelines

This product must be ordered through your account manager.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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9-1-1 INTERCONNECTION

Product Description

Basic product features

Emergency number 911 Service is an exchange service whereby a Public Safety Answering Point (PSAP) designated by the customer may receive calls dialed to the telephone number 911. The service includes facilities and equipment needed to switch and transport to the designated PSAP emergency calls originated by persons within the serving area who dial 911.

The 911 customer may be a municipality or other state or local government unit, or an authorized agent of one or more of these units. The customer must be legally authorized to subscribe to the service and have public safety responsibility by law to respond to public emergency calls within the telephone Central Office (CO) areas arranged for 911 calling.

911 Service is offered subject to availability of facilities and equipment. Two types of 911 Services are currently offered:

B911

B911 Service provides for routing all 911 calls originated from telephones within a given CO prefix code to a single PSAP.

E911

E911 Service is an expanded 911 Service with features such as selective routing of 911 calls to a specific PSAP selected from among those within the 911 Service area. E911 has certain other standard and optional features which may or may not be available with B911.

Automatic Number Identification (ANI)

A B911 or E911 feature by which the number associated with the telephone used to dial 911 is displayed at the PSAP at the time the call is answered.

Automatic Location Identification (ALI)

An E911 feature by which the name, address and responding agencies associated with the number of the telephone used to dial 911 is displayed at the PSAP at the time the call is answered.

Selective Routing (SR)

An E911 feature whereby 911 calls are routed to a designated PSAP on the basis of the identified ANI number of the telephone which was used to place the call.

Basic product capabilities and restrictions

(a)U S WEST will charge for selective routing and Automatic

Location Identification (ALI) on interconnected service provider calls.

1. U S WEST will charge for trunking additions as necessitated by increased CLEC/ALEC interconnections to the selective router.

2. Interconnecting service providers must use CAMA format.

3. Future protocol modifications will follow the standard network disclosure process.

4. Access to ALI Data Management System (DMS) will be provided by the CLEC in a manner acceptable to the DMS provider (SCC).

5. U S WEST will provide one copy per quarter of the Master Street Address Guide or Geographic Mapping to requesting LECs/CLECs. Additional copies will be provided for a charge.

6. Future modifications, e.g. NPA Overlay/ duplicate NXX/ PSAP, will be addressed as they arise.

7. Diverse routing of circuits for U S WEST 911 will be provided for CLECs in a similar manner as diverse routing is currently provided for LECs. Diverse routing is available under tariff for a charge. In addition, Interoffice Facility Information will be discussed only to resolve trunking diversity issues.

8. Tandem Location disclosure will be provided by the Account Manager on a need-to-know basis. Any questions referring to Interoffice Facilities will be addressed on a case-by-case basis for diversity issues only.

9. In a ported number environment, it shall be the responsibility of the CLEC/ALEC to ensure that the ALI database is updated as per the processes and contractual agreements with the SCC Communications Corporation at the time a number is ported. It shall be the responsibility of that service provider to ensure that the database integrity and accuracy of information being provided to the ALI database is upheld. In cases where a ported number or customer returns to U S WEST for service, that account will be treated as a new account utilizing established procedures and updates to the 911 database.
10.
11. Prior to CLECs providing local exchange service, they will be required to make available access to 911 services. If

    U S WEST is the former provider of basic emergency service, CLECs will be allowed to interconnect at the selective router (tandem) to provide emergency services to the areas served by the CLEC.

12. If the CLECs are providing the network, or are collocated, the impact to U S WEST will be trunk access into the Selective Router, trunk translations, and routing table updates which are tied to the service order process.

13. The policies contained within represent overall policies applicable to all fourteen (14) states, unless a particular state has taken individual

action which would supersede or mandate other requirements than those contained within the above statements.

14. In order to avoid problems with ANI failure, a CLEC which serves multiple jurisdictions must establish separate trunk groups to reflect each PSAP jurisdiction it serves out of its single switch. If all traffic is sent on a single trunk group and an ANI failure occurs, U S WEST equipment cannot determine by the terminating trunk group which PSAP provider should receive 9-1-1 calls appropriate to their community of interest. In the event a CLEC chooses not to support this requirement for interconnection, U S WEST will be held harmless by all parties and will not be responsible for any actions in the event of ANI failure and the inability of a CLEC's 9-1-1 messages to be properly sent to the PSAP associated with a 9-1-1 caller's jurisdiction.
15.
16. Neither Party shall terminate Switched Access Traffic over Local Interconnection Trunks.

17. N11 codes (i.e. 411, 611, 911) shall not be sent between the Parties' networks over the Local Interconnection Trunk Groups.

How this product works

The interconnection product is transport between the CLEC switch and the U S WEST selective router. Basic provisioning follows the LIS trunking process for dedicated transport. In addition, the CLEC may be required to establish agreements with the U S WEST third party provider for database services SCC, for input to the ALI database.

Tariff references/price list references

See current state tariffs.

Installation intervals

Provisioning intervals will be two to six weeks following initial service meeting to determine specific serving arrangements.

Service inquiry & manual ordering guidelines

Each request will need to be negotiated with the Account team.

In an effort to comply with mandates that U S WEST provide PSAP information to prospective CLECs (Competitive Local Exchange Carrier) and to clarify coordination between the ILEC, PSAPís and CLECs, the following process is recommended in order to facilitate new entrants into the competitive local market.

Since new certified local exchange carriers must provide 9-1-1 for their customers information concerning PSAP locations, tandem locations, PSAP jurisdictions, rate center and wire center data must be exchanged with facilities based providers. The following steps are to be taken by the Account Manager to accomplish successful interconnection and to maintain the integrity and effectiveness of the 9-1-1 networks already in place.

1. At the request of the CLEC or State Regulatory Authority (SRA), the

U S WEST Account Manager should obtain from the CLEC information about how each jurisdiction will be served by the CLEC. The CLEC, U S WEST Interconnection Account Manager (ILEC), PSAP(s) representative, USWC 9-1-1 Cell Site Manager and SRA representatives, should convene in order to clarify jurisdictional boundaries and 9-1-1 Network requirements. Later the U S WEST Account Manager should convene the State Interconnect Manager (SICM) and other technical and marketing personnel to develop specific U S WEST infrastructure serving arrangements needed to support the CLECs 9-1-1 service. SICMs for each state should provide copies of contract language pertaining to 9-1-1 services to the Cell Managers at this time. An outline of costs and timelines for all services requested should be developed at this meeting. Any requests for NXX code assignments should precede all other work since this process will impact all subsequent 9-1-1 provisioning activity.

2. All internal forms should be filled out completely and submitted to the ICS Center and respective Cell Managers for handling. In addition, the CLEC/E911 Customer Agreement and the E911 Service Agreement will need to be completed to begin the ordering and provisioning process. This will require that U S WEST and the CLEC negotiate a date at which time the appropriate individuals are to meet to discuss the specifics of each interconnect agreement and to properly release and to check the information provided.

3. Next the U S WEST ICS Account Manager and CLEC should arrange a meeting with SCC and the USWC 9-1-1 Database Management Group to discuss the database update process. At this point SCC may negotiate a contract for database management services with the CLEC. Database requirements may vary from state to state.

4. After engineering details, including all trunk routes, default routing, and other specific requirements have been documented, a meeting between the

   U S WEST ICS Account Manager, SICM and the CLEC should be arranged. The SICM should confirm all engineering details including equipment availability and terminations within the office switch versus channel bank to ensure CO status and that the correct design is issued. A final outline of costs and specific service dates should be determined at this step of the process.

5. As a final step prior to actual service being in place, it is recommended that a test procedure be established to ensure the service has been correctly provisioned and that the service requested is performing in a manner which will meet the expectations of the CLEC prior to carrying actual customer traffic.

6. After service is established, the ICS Account Manager should host quarterly meetings with the CLEC, SICM and others as needed to obtain trunk and database records forecast from the CLEC. This information will be used for network and systems planning. This information will be considered competitive in nature and will be treated as confidential and proprietary to the mutual interest of the CLEC and U S WEST.

ROLE OF CELL MANAGERS

The Cell Manager plays a vital role to ensure the performance and integrity of the 9-1-1 system is maintained. The Cell Manager should be consulted when initial requests for service are made by a CLEC of U S WEST. The Cell Manager may provide information such as PSAP contacts, current network arrangements and assist the ICS Account Executives on facilitating the exchange of necessary operation detail. This detail may include Emergency Services Numbers (ESN), Trunk Routes, and other necessary data which would not be proprietary to the PSAP. The Account Manager will include the Cell Manager in all initial meetings regarding requests for service.

Mediated Access ordering information

This product cannot be ordered through Mediated Access.

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Manual Ordering/Process Forms (Private)

GENERAL INFORMATION

This section describes the various ordering forms used for requesting local service. The instructions are applicable only to the manual (paper) ordering process when used by the customer to place an order for service under the various provider's tariffs/contracts/agreements. The software form of LSR's know as "LSR-PC" can be ordered from Bellcore Customer Service at 1-800-521-2673.

This section is intended for use as an aid in completing each of the required forms. To obtain a copy of the forms, the customer should refer to **"Bellcore Special Report, SR STS-471070" and/or** contact Alliance For Telecommunication Industry Solutions at 202-434-8822. For your convenience, the special report numbers for each form in the Bellcore document will be referenced for all of the forms discussed in this section.

UNIFORM ORDER FORMS

Local Service is ordered manually by using the uniform order request forms. The Local Service Request (LSR) form contains administrative data which is common to all orders. It is associated with the End User Information (EU) form and one or more order forms which specifically define the requested service configurations.

SERVICE SPECIFIC FORMS

Service specific forms have been designed to accommodate ordering conditions specific to a service type and must be associated with a LSR form. These service specific forms and service types are:

- Loop Service
- Number Portability
- Loop Service with Number Portability
- Resale Service
- Port Service
- Resale Private Line
- Resale Frame Relay
- Directory Service/Listing

For more information, refer to the ordering matrices in SR STS-471070, Section 3.

FORM PREPARATION :

Included at the back of this section are form preparation tips for specific types of service requests, for example new connects, disconnects, moves, etc.

U S WEST INITIATED FORMS :

The Local Service Request Confirmation, Directory Service Request Error Detail and Directory Service Request Completion Notice forms are prepared by U S WEST and forwarded to the customer.

ORDERING RULES :

All local service ordering forms utilize the following general instructions:

- Each request may be submitted for any quantity of services
- Quantity fields are right justified
- Fields with text are left justified
- Fields not following justification rules are so noted

The conventions listed below are used for the population of form entries. These conventions are defined as follows:

- **Required** - the field must be populated
- **Optional** - the field may or may not be populated
- **Prohibited** - the field must not be populated
- **Conditional** - the field is dependent upon the relationship to another entry as specified in the usage statement and is dependent upon the presence, absence or combination of other data entries
- **Alpha/numeric** field composition statements are designed to describe the type of valid entries. If a numeric field is designated as prohibited, it should be left blank and not zero filled.
- **Punctuation** and other symbols (e.g. hyphens, ampersands, etc.) are to be considered alpha characters

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LSR FORM DESCRIPTION

The Local Service Request (LSR) form must always be associated with an End User Information (EU) form and a service specific form containing the loop and location detail necessary for the provisioning of the request.

All of the information required for administrative, billing and contact details is provided for in the various fields contained within the LSR form.

This form is prepared by the customer and is submitted to the Interconnect Service Center (ICS) for the ordering of local service.

A copy of the LSR form and additional information regarding the LSR form entries may be found in Bellcore SR STS-471071.

The following field names and field descriptions are presented in the order in which they appear on the LSR form.

LSR FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
CCNA	Customer Carrier Name Abbreviation - identifies the ZCID/RSID assigned by USWC. This field is required and consists of 3 alpha characters.
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
LSR NO	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
SC	Service Center - identifies the U S WEST service

	center (USWD). This field is required and consists of 4 alpha/numeric characters.
PG_ OF_	Page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.
D/T SENT	Date and Time Sent - identifies the date and time that the LSR is sent by the customer. This field is required and consists of 17 alpha/numeric characters (including hyphens). Example: 05-22-1996-1115AM
DDD	Desired Due Date - identifies the customer's desired due date. This field is required and consists of 10 alpha/numeric characters (including hyphens). Example: 03-22-1996
APPTIME	Not currently used by USWC
DDDO	Desired Due Date Out - identifies the customer's desired date for disconnection of service on ISPNP only. This field is conditional: Required when (1) service is short term and the DDD field is populated with the install date or (2) dual service or when the DDDO is different from the DDD for an outside move. The field consists of 10 alpha/numeric characters (including hyphens).
APPTIME	Not currently used by USWC
DFDT	Desired Frame Due Time - identifies the desired frame cutover time. This field is required for Interim Service Provider Number Portability (SPNP) service only, otherwise the field is prohibited. The field consists of 6 alpha/numeric characters.
PROJECT	Project Identification - identifies the project number to which the LSR is to associated. This field is optional and may consist of up to 16 alpha/numeric characters.
CHC	Coordinated Hot Cut - used with Loop Service only - indicates that the customer is requesting near seamless cutover activity. This field is optional and consists of the alpha character "Y".
REQ TYP	Requisition Type and Status - identifies the type of service being requested and the status of the request. This field is required and consists of 2 alpha characters. The first character of REQTYP specifies the type of service, e. g. A = Loop. The second character of REQTYP specifies the status of the request, e.g. B = firm order. Refer to SR STS-471071 for the specific character entries.
ACT	Activity - identifies the type of activity involved in this service request, e.g. N = new installation

	and/or account. Refer to SR STS-471071 for the specific character entries. This field is required and consists of a single alpha character.
SUP	Supplement Type. A supplement is any new iteration of an LSR. The entry in the SUP field identifies the reason for which the supplement is being issued. Valid entries include: 1 (cancel); 2 (new DD desired); 3 (other). This field is conditional and consists of one numeric character.
EXP	Not currently used by USWC
AFO	Additional Forms - indicates which additional forms are being submitted with this request by the placement of a "Y" in the appropriate character position: Position 1 = End User Information form Position 2 = Directory Assistance Position 3 = Directory Listings Position 4 = Directory Listings Assistance Position 5 = Reserved for future use
RTR	Response Type Requested - identifies the type of confirmation response requested by the customer: C = Confirmation D = Confirmation and DLR F = Facility confirmation N = No response required This field is required and consists of one alpha character.
CC	Not currently used by USWC
AENG	Not currently used by USWC
ALBR	Not currently used by USWC
SCA	Not currently used by USWC
AGAUTH	Agency Authorization Status - indicates that the customer is acting as an end user's agent and has authorization on file. This field is required when the customer is acting as an end user agent and consists of the alpha character "Y".
DATED	Date of the Agency Authorization - identifies the date appearing on the agency authorization that was previously submitted to USWC. This field is required when the AGAUTH field is "Y" and consists of 10 alpha/numeric characters.
AUTHNM	Authorization Name - identifies the end user who signed authorization. This field is optional and consists of 15 alpha/numeric characters.
ACTL	Not currently used by USWC

AI	Not currently used by USWC
APOT	Not currently used by USWC
LST	Not currently used by USWC
LSO	Local Serving Office - identifies the NPA/NXX of the local or alternate serving central office of the customer location or primary location of the end user for Loop Service. This field is required when the RTR field is "C" or "D", the ACT field is "N" or "T" and the first position of the REQTYP field is "D" or "E". The field consists of 6 numeric characters.
TOS	Type of Service - identifies the type of service for the line ordered. The type of service identifies the end user account as business, residential or government. This field is required with Loop Service and consists of 3 alpha/numeric characters, e.g. 1BF. Valid entries include: 1st Character: 1 = Business 2 = Residence 3 = Government 2nd Character: A = Multi-line B = Single line C = Coin D = Advanced services H = ISDN BRI K = ISDN PRI 3rd Character: M = Measured F = Fixed rated
SPEC	Not currently used by USWC
NC	Network Channel Code - identifies the network channel code for the circuit(s) involved for Loop Service only. The network channel code describes the channel being requested. This field is optional and consists of 4 alpha/numeric characters.
NCI	Network Channel Interface Code - identifies the electrical conditions on the circuit at the ACTL/Primary location. This field is populated only when the NC field has been populated and consists of up to a 12 character alpha/numeric code. Refer to SR STS-471071 for the specific character entries.
CHANNEL	Not currently used by USWC
SECNCI	Secondary Network Channel Interface Code - identifies the electrical conditions on the circuit

	at the secondary ACTL or end user location for Loop Service only. The field consists of up to a 12 character alpha/numeric code. Refer to SR STS-471071 for the specific character entries.
RPON	Related Purchase Order Number - identifies the PON of a related service request. This field may be used for relating connect and disconnect service requests, or multiple requests for the same location and due date. This field is optional and consists of up to 16 alpha/numeric characters.
RORD	Not currently used by USWC
LSP AUTH	Not currently used by USWC
LSP AUTH DATE	Not currently used by USWC
LSP AUTH NAME	Not currently used by USWC
CIC	Not currently used by USWC
CUST	Not currently used by USWC

LSR FORM ENTRIES

Bill Section:

FIELD NAME:	DESCRIPTION:
BI1	Billing Account Number Identifier - identifies the service type of the Billing Account Number (BAN). This field is required when more than one BAN field is populated. The field consists of one alpha character. Valid entries include: A = All Services on this Request D = Directory Listings L = Loop N = Number Portability P = Port R = Resale U = Usage V = Loop with NP and Usage W = Loop with NP Z = NP with Usage M = Combined Loop and Unbundled Local Switching (Port)
BAN1	Billing Account Number - identifies the billing account to which the recurring and non-recurring charges for this request will be billed. This field is required and consists of 13 alpha/numeric characters.
BI2	Not currently used by USWC
BAN2	Not currently used by USWC
ACNA	Not currently used by USWC

EBD	Effective Bill Date - identifies the effective date to begin or cease billing when the billing date is different from the desired due date. This field is optional and consists of 10 alpha/numeric characters (including hyphens). Example: 04-02-1997
BILLNM	Billing Name - identifies the name of the person, office, or company to whom the customer has designated that the bill be sent. This field is required when the BAN field is "N". The field consists of up to 25 alpha/numeric characters.
SBILLNM	Secondary Billing Name - identifies the name of a department or group within the designated BILLNM entry. This field is optional and consists of up to 25 alpha/numeric characters.
TE	Tax Exemption - indicates that the customer has submitted a tax exemption form to USWC. This field is required when the BAN field is "N" and consists of one alpha character. Refer to SR STS-471071 for the specific character entries.
EBP	Not currently used by USWC
STREET	Street Address - identifies the street of the billing address associated with the billing name. This field is required when the BAN field is "N" and consists of up to 25 alpha/numeric characters.
FLOOR	Floor - identifies the floor for the billing address associated with the billing name. This field is optional and consists of 3 alpha/numeric characters.
ROOM	Room - identifies the room for the billing address associated with the billing name. This field is optional and consists of 6 alpha/numeric characters.
CITY	City - identifies the city, village, township, etc. of the billing address associated with the billing name. This field is required when the BAN field is "N" and consists of up to 25 alpha/numeric characters.
STATE	State - identifies the two character postal code for the state of the billing address associated with the billing name. This field is required when the BAN field is "N" and consists of 2 alpha characters.
ZIP CODE	Zip Code - identifies the zip code or postal code of the billing address associated with the billing name. This field is required when the BAN field is "N" and consists of 10 alpha/numeric characters.
BILLCON	Billing Contact - identifies the name of the

	person or office to be contacted on billing matters. This field is required when the BAN field is "N" and consists of up to 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the telephone number of the billing contact. This field is required when the BAN field is "N" and consists of 17 numeric characters (including 3 pre-printed hyphens)
VTA	Variable Term Agreement - identifies the duration, identifying USOC, contract date or contract identification number of any variable term agreement that may be offered by a provider. This field is optional and consists of 17 alpha/numeric characters.

&nsbp;

LSR FORM ENTRIES

Contact Section:

FIELD NAME:	DESCRIPTION:
INIT	Initiator Identification - identifies the customer's representative who originated this request. This is the person who should be contacted if there are any questions regarding this request. Any authorizations of charges or changes are the responsibility of this person. This field is required and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the telephone number of the initiator. This field is required and consists of 17 numeric characters (including 3 pre-printed hyphens).
EMAIL	Electronic Mail Address - identifies the electronic mail address of the initiator. This field is optional and consists of 60 alpha/numeric characters.
FAX NO	Facsimile Number - identifies the fax number of the initiator. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
STREET	Initiator Street Address - identifies the initiator's street address. This field is required and consists of 25 alpha/numeric characters.
FLOOR	Floor - identifies the floor of the initiator's address. This field is optional and consists of 3 alpha/numeric characters.
ROOM/MAIL STOP	Identifies the room or mail stop of the initiator's address. This field is optional and consists of 10 alpha/numeric characters.
CITY	Identifies the city, village, township, etc. of the

	initiator's address. This field is required and consists of 25 alpha characters.
STATE	Identifies the two character postal code for the state of the initiator's address. This field is required and consists of 2 alpha characters.
ZIP CODE	Identifies the zip code or postal code of the initiator's address. This field is required and consists of 10 alpha/numeric characters.
IMPCON	Implementation Contact - identifies the customer's representative or office responsible for control of installation and completion for Loop Service or Port Service only. This field is optional and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the telephone number of the implementation contact. This field is required when the IMPCON field is populated - otherwise the field is prohibited. When populated, this field consists of 17 numeric characters (including 3 pre-printed hyphens).
PAGER	Pager Number - identifies the pager number of the implementation contact. This field is optional and consists of 25 alpha/numeric characters.
ALT IMPCON	Alternate Implementation Contact - identifies the customer's alternative representative or office responsible for control of installation and completion. This field is optional and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the telephone number of the alternate implementation contact. This field is required when the ALT IMPCON field is populated - otherwise the field is prohibited. When populated, this field consists of 17 numeric characters (including 3 pre-printed hyphens).
PAGER	Pager Number - identifies the pager number of the alternative implementation contact. This field is optional and consists of 25 alpha/numeric characters.
DSGCON	Design/Engineering Contact - identifies the representative of the customer or agent that should be contacted on design/engineering matters. This field is optional and consists of 15 alpha/numeric characters.
DRC	Design Routing Code - identifies the customer location routing code for the transmission of the Design Layout Report for this request. This field is optional and consists of 3 alpha/numeric characters. The routing code represents the following information:

	• Company • Street • Floor • Room • City • State/Province • Zip Code
TEL NO	Telephone Number - identifies the telephone number of the design/engineering contact. This field is required when the DSGCON field is populated, otherwise it is optional. The field consists of 17 numeric characters (including 3 pre-printed hyphens).
FAX NO	Facsimile Number - identifies the fax number of the design/engineering contact. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
EMAIL	Electronic Mail Address - identifies the electronic mail address of the design/engineering contact. This field is optional and consists of 60 alpha/numeric characters.
STREET	Street Address - identifies the street address for the design/engineering contact. This field is required when the DSGCON field is populated and consists of 25 alpha/numeric characters.
FLOOR	Identifies the floor of the design/engineering contact's address. This field is optional and consists of 3 alpha/numeric characters.
ROOM/MAIL STOP	Identifies the room or mail stop of the design/engineering contact's address. This field is optional and consists of 10 alpha/numeric characters.
CITY	Identifies the city, village, township, etc. of the design/engineering contact's address. This field is required when the DSGCON field is populated and consists of 25 alpha characters.
STATE	Identifies the two character postal code for the state of the design/engineering contact's address. This field is required when the DSGCON field is populated and consists of 2 alpha characters.
ZIP CODE	Identifies the zip code or postal code of the design/engineering contact's address. This field is required when the DSGCON field is populated and consists of 10 alpha/numeric characters.
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and may consist of up to 160 alpha/numeric characters.

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EU FORM DESCRIPTION

The End User Information (EU) form must always be associated with the LSR form and service specific forms which contain administrative, bill detail and service details necessary for the provisioning of the request.

All location and access information required for ordering local service is provided in the various fields contained within the EU form.

The EU form provides entries for the specification of ordering options such as inside wire and disconnect information. The Location and Access Section provides entries for describing end user locations including entries which may be necessary for gaining access for installation purposes.

The field entries contained within the EU form are provided by the customer. The customer is defined as the individual or organization ordering the local service.

A copy of the EU form and additional information regarding the EU form entries may be found in Bellcore SR STS-471072.

The following field names and field descriptions are presented in the order in which they appear on the EU form.

EU FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
DQTY	Disconnect Quantity - identifies the quantity of telephone numbers affected by this service request. This field is required when the DISC # field is

	populated, otherwise it is optional. The field consists of 3 numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

EU FORM ENTRIES

Location and Address Section:

FIELD NAME:	DESCRIPTION:
NAME	End User Name - identifies the name of the end user. The name in this field is not intended to be used for directory services. This field is required and consists of 25 alpha/numeric characters.
SAPR	Service Address House Prefix - identifies the prefix for the house number of the service address when grid type numbering is used. This field is optional when the SANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SANO	Service Address House Number - identifies the house number of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
SASF	Service Address House Number Suffix - identifies the suffix for the house number of the service address. This field is optional when the SASN and SANO fields are populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SASD	Service Address Street Directional - identifies the street directional for the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
SASN	Service Address Street Name - identifies the service address and street name. If no street name exists, it may be a rural route, general delivery or other description for the delivery/service destination. This field is required and consists of 50 alpha/numeric characters.
SATH	Service Address Thoroughfare - identifies the thoroughfare portion of the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
SASS	Service Address Street Suffix - identifies the suffix to the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.

SADLO	Service Address Descriptive Location - identifies additional location information about the service address. This field is optional and consists of 100 alpha/numeric characters.
FLOOR	Identifies the floor at the end user location. This field is optional and consists of 3 alpha/numeric characters.
ROOM	Identifies the room, slip, lot, unit or apartment at the end user location. When entering other than a room number, include "slip", "lot", "suite", etc. as part of the entry. When unknown due to building construction, enter TBD (to be determined). This field is optional and consists of 9 alpha/numeric characters.
BLDG	Building - identifies the specific building at the end user location. This field is optional and consists of 9 alpha/numeric characters.
CITY	Identifies the city, village, township, etc. of the end user location. This field is required and consists of 25 alpha characters.
STATE	State/Province - identifies the two character postal code for the state/province of the end user location. This field is required and consists of 2 alpha characters.
ZIP CODE	Identifies the zip code or postal code of the end user service location. This field is required and consists of 10 alpha/numeric characters.
LCON	Local Contact - identifies the local contact name for access to the service location. This field is optional and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the telephone number of the local contact for the service location. This field is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).
EUMI	Not currently used by USWC
ACC	Not currently used by USWC
WSOP	Not currently used by USWC
CPE MFR	Not currently used by USWC
CPE MOD	Not currently used by USWC

EU FORM ENTRIES

Inside Wire Section:

FIELD NAME:	DESCRIPTION:
IWO	Not currently used by USWC
IWBAN	Not currently used by USWC
IWCON	Not currently used by USWC
TEL NO	Not currently used by USWC

EU FORM ENTRIES

Bill Section:

FIELD NAME:	DESCRIPTION:
EAN	Existing Account Number - identifies the customer's summary bill account number assigned by the current NSP. This field is required for conversion of end user accounts. Otherwise the field is optional and consists of 20 alpha/numeric characters.
EATN	Existing Account Telephone Number - identifies the end user's existing account telephone number assigned by the current NSP. This field is required for conversion of an end user account, otherwise the field is optional. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
FBI	Final Bill Information Indicator - indicates whether a final bill should be sent to either the existing billing address or a different address. Valid entries are "D" for different or "E" for existing. When the entry is "D", the BILLNM, STREET, STATE, and ZIP CODE fields must be populated. This field is optional and consists of one alpha character.
BILLNM	Bill Name - identifies the end user bill name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha/numeric characters.
SBILLNM	Secondary Bill Name - identifies the name of a department or group within the designated BILLLNM entry. This field is optional and consists of 25 alpha/numeric characters.
STREET	Street Address - identifies the street of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha/numeric characters.
FLOOR	Identifies the floor for the billing address associated with the billing name. This field is optional and consists of 3 alpha/numeric characters.
ROOM	Identifies the room for the billing address associated with the billing name. This field is optional and consists of 9 alpha/numeric characters.
CITY	Identifies the city, village, township, etc. of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha characters.
STATE	State/Province - identifies the two character postal code for the state/province of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 2 alpha characters.
ZIP CODE	Identifies the zip code or postal code of the billing

	address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 10 alpha/numeric characters.
BILLCON	Billing Contract - identifies the name of the person or office to be contacted on billing matters. This field is required when the FBI field is populated and/or this entry is different from the BILLNM field. Otherwise this is an optional field and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the end user's billing contact telephone number. This field is required when the BILLCON field is populated, otherwise it is optional. The field consists of 17 numeric characters (including 3 pre-printed hyphens).
SSN	Social Security Number - identifies the social security number of the end user in the BILLNM field. This field is optional and consists of 11 numeric characters (including 2 pre-printed hyphens).

EU FORM ENTRIES

Disconnect Information Section:

This section is used only with requests involving number portability.

FIELD NAME:	DESCRIPTION:
REF NUM	Reference Number - identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and it is returned on the confirmation notice to the ordering customer. This field is required when the DISC # field is populated, otherwise it is optional. The field consists of 4 numeric characters.
DISC #	Disconnect Telephone Number - identifies the end user telephone number to be disconnected. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
TER	Terminal Number - identifies a non-lead line in a multiline group. This field is optional and consists of 8 alpha/numeric characters.
TC OPT	Transfer of Call Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are: Custom Code Identifier N = None S = Standard
TC TO	Transfer of Calls To - identifies thee telephone number to which calls are to be transferred. This field is required when the TC OPT field is not "N", otherwise it is optional. This field consists of 12 numeric

characters (including 2 pre-printed hyphens).

TC PER — Transfer of Calls Period - indicates the requested date that the transfer of calls specified in the TC TO field is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field consists of 10 alpha/numeric characters (including 2 hyphens).

EU FORM ENTRIES

Remarks Section:

This section is used to provide a free flowing field which can be use to expand upon and clarify other data on this form. This field is optional and consists of 160 alpha/numeric characters.

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LS FORM DESCRIPTION

The Loop Service (LS) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

All information required for ordering Loop Service is provided for in the various fields contained within the LS form.

The field entries contained within the LS form are to be provided by the AC.

A copy of the LS form and additional information regarding the preparation of the LS form may be found in Bellcore SR STS-471073.

The following field names and field descriptions are presented in the order in which they appear on the LS form.

LS FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
LQTY	Loop Quantity - identifies the quantity of loops involved in this service request. This field is required and consists of 3 numeric characters.
PG OF	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

LS FORM ENTRIES

Service Details Section:

FIELD NAME:	DESCRIPTION:
REF NUM	Reference Number - identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
LNA	Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are: • N = New installation and/or account • C = Change an existing account • D = Disconnection • M = Inside move of physical termination in a building • T = Outside move of end user location • R = Record activity ordering administrative changes • V = Conversion of service to a new LSP • W = Conversion as is
TSP	Telecommunications Service Priority - indicates the provisioning and restoration priority as defined under the TSP Service Vendor Handbook. This field is optional and consists of 12 alpha/numeric characters (including 1 pre-printed hyphen)
SAN	Subscriber Authorization Number - identifies a number equivalent to the end user Purchase Order Number. This may, at the option of the customer, be a requirement when providing service to some government agencies. This field is optional and consists of 30 alpha/numeric characters.
ECCKT	Not currently used by USWC
CFA	Connecting Facility Assignment - identifies the provider carrier system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric characters. The facility identification consists of the following elements: 1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters).

2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters).
3. The Channel/Pair number of the facility that is being used to provide the service (variable length, 1-5 characters).
4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.
5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.
6. Virgules (/) are used as delimiters to separate the different elements of the CFA.

SYSTEM ID	Not currently used by USWC
CABLE ID	Not currently used by USWC
SHELF	Not currently used by USWC
SLOT	Not currently used by USWC
RELAY RACK	Not currently used by USWC
CHAN/PAIR	Not currently used by USWC
JK CODE	Not currently used by USWC
JK NUM	Not currently used by USWC
JK POS	Not currently used by USWC
JR	Not currently used by USWC
NIDR	Not currently used by USWC
IWJK	Not currently used by USWC
IWJQ	Not currently used by USWC
DISC #	Disconnect Telephone Number - identifies the end user telephone number to be disconnected. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
TER	Terminal Number - identifies a non-lead line in a multi-line hunt group. This field is optional and consists of 8 alpha/numeric characters.
TC OPT	Transfer of Calls Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are: Custom Code Identifier N = None S = Standard
TC TO	Transfer of Calls To - identifies the telephone number to which calls are to be referred. This field is required when the TC OPT field is not "N", otherwise it is optional. The field consists of 12 numeric characters

	(including 2 pre-printed hyphens).
TC PER	Transfer of Calls Period - indicates the requested date that the transfer of calls, specified in the TC TO field, is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field is optional when the TC TO field is populated, otherwise it is prohibited. The field consists of 10 alpha/numeric characters (including 2 hyphens).
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and consists of 160 alpha/numeric characters.

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NP FORM DESCRIPTION

The Number Portability (NP) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

All information required for ordering Number Portability is provided for in the various fields contained within the NP form.

The field entries contained within the NP form are to be provided by the customer.

A copy of the NP form and additional information regarding the preparation of the NP form may be found in Bellcore SR STS-471074.

The following field names and field descriptions are presented in the order in which they appear on the NP form.

DESCRIPTION: This field is required when the TC OPT field is not "N", otherwise it is optional. The field consists of 12 numeric characters (including 2 pre-printed hyphens).

NP FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
NPQTY	Number Portability Quantity - identifies the quantity of ported numbers involved in this service request. This field is required and consists of 3 numeric characters.

PG_ OF	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

NP FORM ENTRIES

Service Details Section:

FIELD NAME:

REF NUM	Reference Number - Identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
LNA	Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are: • N = New installation and/or account • C = Change an existing account • D = Disconnection • M = Inside move of physical termination in a building • T = Outside move of end user location • R = Record activity ordering administrative changes • V = Conversion of service to a new LSP • W = Conversion as is
LRN	Location Routing Number - identifies a number used to uniquely identify a switch that has ported numbers and is used to route a call to the switch that owns the NPA-NXX portion of the LRN. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are NPA-NXX or NPA-NXX-XXXX
TDT	Ten Digit Trigger - indicates the request for the activation of a ten digit trigger for local routing number portability. This field is optional and consists of one alpha character. Valid entries are "Y" (Yes) or "N" (No).
ECCKT	Not currently used by USWC
PORTED #	Ported Telephone Number - identifies the telephone number to be retained. This number may also identify the billing account number of the ported number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
TNP	Total Number of Paths - identifies the total number of

talk paths, including the initial path, associated with the ported number. This field is required when the ACT field on the LSR form is "N" or "V" and the NPT field is "A", "B", or "C", otherwise it is optional. The field consists of 3 numeric characters.

CFTN — Call Forward To Number - identifies the telephone number to which calls will be directed.

This field is required when the NPT field is "B", otherwise it is optional. This field consists of 12 numeric characters (including 2 pre-printed hyphens).

NPT — Number Portability Type - indicates the type of number portability for this request. This field is required when the ACT field on the LSR form is "N" or "V", otherwise it is optional. The field consists of one alpha character. Valid entries are:

A = DID
B = RCF
C = Route Index
D = Local Routing Number

RTI — Route Index - identifies the routing index to be used by USWC's switching equipment to forward/port USWC's telephone number to the customer's non-RCF trunk group. This field is optional and consists of 6 alpha/numeric characters.

NPTG — Number Portability Trunk Group - identifies the two six code (TSC) of a dedicated trunk group, from the porting switch to the customer's point of interface (POI), used to complete NP calls. This field is optional and consists of 8 alpha/numeric characters.

BA — Blocking Activity - indicates the activity for blocking of calls. This field is required when the BLOCK field is populated, otherwise it is prohibited. The field consists of one alpha character. Valid entries are:

A = Add
D = Delete
N = No Change
Z = Remove all blocking

BLOCK — Block - identifies the type of blocking on the telephone number. This field is optional and consists of 9 alpha characters. Valid entries are:

A = No collect and third party
B = No third party
C = No collect call
D = No 1+
E = No O+
F = No 1+ and O+
G = No 011
H = No directory assistance
J = No 700

K = No 976
L = No 915
M = No 900
N = No casual calling

FPI — Freeze PIC Indicator - indicates the customer's requested freeze option for the LPIC. This field is optional and consists of one alpha character. Valid entries are:

A = Freeze Intra
B = Remove Intra Freeze

LPIC — IntraLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) of the carrier the customer has selected for intraLATA traffic for the ported telephone number. This field is optional and consists of 4 alpha/numeric characters. Valid entries are:

Valid PIC code
None
NA = Not applicable
DFLT = Default
NC = No Change

TC OPT — Transfer of Calls Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are:

Custom Code Identifier
N = None
S = Standard

TC TO — Transfer of Calls To - identifies the telephone number to which calls are to be referred.

TC PER — Transfer of Calls Period - indicates the requested date that the transfer of calls, specified in the TC TO field, is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field is optional when the TC TO field is populated, otherwise it is prohibited. The field consists of 10 alpha/numeric characters (including 2 hyphens).

REMARKS — Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and consists of 160 alpha/numeric characters.

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LSNP FORM DESCRIPTION

The Loop Service with Number Portability (LSNP) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

All information required for ordering Loop Service with Number Portability is provided for in the various fields contained within the LSNP form.

The field entries contained within the LSNP form are to be provided by the customer.

A copy of the LSNP form and additional information regarding the preparation of the LSNP form may be found in Bellcore SR STS-471075.

The following field names and field descriptions are presented in the order in which they appear on the LSNP form.

LSNP FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
LQTY	Loop Quantity - identifies the quantity of loops involved in this service request. This field is required and consists of 3 numeric characters.
PG_ OF	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

LSNP FORM ENTRIES

Service Details Section:

FIELD NAME:	DESCRIPTION:
REF NUM	Reference Number - Identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
LNA	Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are: N = New installation and/or account C = Change an existing account D = Disconnection M = Inside move of physical termination in a building T = Outside move of end user location R = Record activity ordering administration changes V = Conversion of service to a new LSP W = Conversion as is
TSP	Telecommunications Service Priority - indicates the provisioning and restoration priority as defined under the TSP Service Vendor Handbook. This field is optional and consists of 12 alpha/numeric characters (including 1 pre-printed hyphen)
LRN	Location Routing Number - identifies a number used to uniquely identify a switch that has ported numbers and is used to route a call to the switch that owns the NPA-NXX portion of the LRN. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are NPA-NXX or NPA-NXX-XXXX
SAN	Subscriber Authorization Number - identifies a number equivalent to the end user Purchase Order Number. This may, at the option of the customer, be a requirement when providing service to some government agencies. This field is optional and consists of 30 alpha/numeric characters.
ECCKT	Not currently used by USWC
CFA	Connecting Facility Assignment - identifies the provider carrier system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric

characters. The facility identification consists of the following elements:

1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters).
2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters).
3. The Channel/Pair number of the facility that is being used to provide the service (variable length, 1-5 characters).
4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.
5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.
6. Virgules (/) are used as delimiters to separate the different elements of the CFA.

SYSTEM ID	Not currently used by USWC
CABLE ID	Not currently used by USWC
SHELF	Not currently used by USWC
SLOT	Not currently used by USWC
RELAY RACK	Not currently used by USWC
CHAN/PAIR	Not currently used by USWC
JK CODE	Not currently used by USWC
JK NUM	Not currently used by USWC
JK POS	Not currently used by USWC
JR	Not currently used by USWC
NIDR	Not currently used by USWC
IWJK	Not currently used by USWC
IWJQ	Not currently used by USWC
PORTED #	Ported Telephone Number - identifies the telephone number to be retained. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
TNP	Total Number of Paths - identifies the total number of talk paths, including the initial path, associated with the ported number. This field is required when the

ACT field on the LSR form is "N" or "V" and the NPT field is "A", "B", or "C", otherwise it is optional. The field consists of 3 numeric characters.

CFTN — Call Forward To Number - identifies the telephone number to which calls will be directed. This field is required when the NPT field is "B", otherwise it is optional. This field consists of 12 numeric characters (including 2 pre-printed hyphens).

NPT — Number Portability Type - indicates the type of number portability for this request. This field is required when the ACT field on the LSR form is "N" or "V", otherwise it is optional. The field consists of one alpha character. Valid entries are:

A = DID
B = RCF
C = Route Index
D = Local Routing Number

RTI — Route Index - identifies the routing index to be used by USWC's switching equipment to forward/port USWC's telephone number to the customer's non-RCF trunk group. This field is optional and consists of 6 alpha/numeric characters.

NPTG — Number Portability Trunk Group - identifies the two six code (TSC) of a dedicated trunk group, from the porting switch to the customer's point of interface (POI), used to complete NP calls. This field is optional and consists of 8 alpha/numeric characters.

BA — Blocking Activity - indicates the activity for blocking of calls. This field is required when the BLOCK field is populated, otherwise it is prohibited. The field consists of one alpha character. Valid entries are:

A = Add
D = Delete
N = No Change
Z = Remove all blocking

BLOCK — Block - identifies the type of blocking on the telephone number. This field is optional and consists of 9 alpha characters. Valid entries are:

A = No collect and third party
B = No third party
C = No collect call
D = No 1+
E = No O+
F = No 1+ and O+
G = No 011
H = No directory assistance
J = No 700
K = No 976
L = No 915
M = No 900
N = No casual calling

FPI — Freeze PIC Indicator - indicates the customer's

	requested freeze option for the LPIC. This field is optional and consists of one alpha character. Valid entries are: A = Freeze Intra B = Remove Intra Freeze
LPIC	IntraLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) of the carrier the customer has selected for intraLATA traffic for the ported telephone number. This field is optional and consists of 4 alpha/numeric characters. Valid entries are: Valid PIC code None NA = Not applicable DFLT = Default NC = No Change
TC OPT	Transfer of Calls Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are: Custom Code Identifier N = None S = Standard
TC TO	Transfer of Calls To - identifies the telephone number to which calls are to be referred. This field is required when the TC OPT field is not "N", otherwise it is optional. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
TC PER	Transfer of Calls Period - indicates the requested date that the transfer of calls, specified in the TC TO field, is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field is optional when the TC TO field is populated, otherwise it is prohibited. The field consists of 10 alpha/numeric characters (including 2 hyphens).
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and consists of 160 alpha/numeric characters.

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RS FORM DESCRIPTION

The Resale Service (RS) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

The field entries contained within the RS form provide the hunting and service details necessary for the provisioning of the request. A copy of the RS form and additional information regarding the preparation of the RS form may be found in Bellcore SR STS-471076.

The following field names and field descriptions are presented in the order in which they appear on the RS form.

RS FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
RSQTY	Resale Quantity - identifies the quantity of resale services (e.g., lines, circuits, trunks, etc.) involved in this service request. This field is required and consists of 3 numeric characters.
ORD	Order Number - identifies USWC's order number for the service requested. This field is optional and consists of 20 alpha/numeric

	characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

RS FORM ENTRIES
Hunting Section:

FIELD NAME:	DESCRIPTION:
HA	Hunt Group Activity - identifies the activity associated with the hunt group on the request. This field is optional and consists of one alpha character. Valid entries are: N = New E = Existing/No Change C = Change to Hunt Group Sequence D = Remove Hunt Group Arrangement
HNTYP	Hunting Type Code - identifies the type of hunting involved. This field is required when the HA field is populated, otherwise it is optional. The field consists of 1 numeric character. Valid entries are: 1 = Preferential 2 = Sequential 3 = Circular 4 = Combination (CENTREX) 5 = Multi-line
HUNT	SEQ Hunting Sequence - identifies the desired hunting sequence. This field is required when the HA field is populated, otherwise it is optional. The field consists of 60 alpha/numeric characters.

RS FORM ENTRIES
Service Details Section:

FIELD NAME:	DESCRIPTION:
REF	NUM Reference Number - Identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.
RNEX	Reference Number Extension - provides an extension to the reference number field for use when multiple ISDN BRI directory

numbers (TNs) are assigned to a single ISDN BRI line for one service order/PON/REF NUM. This field is required when the ACT field on the LSR form is "C", "D', "R', "V', "X", "P", "L", "Y", or "H" and the second character of the TOS field on the LSR form is "H". Otherwise, this field is optional. The field consists of 2 numeric characters.

LNA

Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are:

N = New installation and/or account
C = Change an existing account
D = Disconnection
M = Inside move of physical termination in a building
T = Outside move of end user location
R = Record activity ordering administration changes
V = Conversion of service to a new LSP
W = Conversion as is

TN

Telephone Number - Identifies the telephone number (TN)/terminal number (TER)/maintenance number (MCTE)/ISDN BRI directory number or sequential range of TNs/TERs/MTCEs for the service request. This field is required and consists of 23 alpha/numeric characters (including 2 pre-printed hyphens).

OTN

Out Telephone Number - identifies the existing telephone number that is being changed. This field is required when the LNA field is "X", otherwise it is prohibited. The field consists of 12 numeric characters (including 2 pre-printed hyphens).

PRIBD

ISDN PRI "B" and "D" Channel Configuration - identifies the ISDN PRI B and D channel configuration per DS-1. The field is required when the second position of the TOS field on the LSR form is "K", otherwise it is prohibited. The field consists of 7 alpha/numeric character codes where the:

1. First two numeric characters identify the sequencing of the first and all subsequent ISDN PRI DS-1s.

2. The next two numeric characters are required and represent the quantity of B channels ordered per DS-1 (between 1 and 24)

3. The next two numeric characters are required and represent the quantity of D channels ordered per DS-1 (between 0 and 2)

4. The next alpha character is required to designate Non-Facility Associated Signaling (NFAS), allowing multiple PRIs to share a single D channel.

TSP	Telecommunications Service Priority - indicates the provisioning and restoration priority as defined under the TSP Service Vendor Handbook. This field is optional and consists of 12 alpha/numeric characters (including 1 pre-printed hyphen).
SAN	Subscriber Authorization Number - identifies a number equivalent to the end user Purchase Order Number. This may, at the option of the customer, be a requirement when providing service to some government agencies. This field is optional and consists of 30 alpha/numeric characters.
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
ECCKT	Not currently used by USWC
FPI	Freeze PIC Indicator - indicates the customer's requested freeze option for the PIC or LPIC. This field is optional and consists of one alpha character. Valid entries are: A = Freeze Intra B = Freeze Both E = Freeze Inter R = Remove Inter Freeze S = Remove Intra Freeze T = Remove Both
TC	OPT Transfer of Calls Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are: Custom Code Identifier

N = None
S = Standard

SDI

Switched Data Identifier - identifies the type of switched data for ISDN BRI in instances of multiple IXC selection, e.g. one IXC is requested as the PIC for one B channel providing voice and data and another IXC is requested as the PIC for the second B channel providing just data. This field is optional and consists of one alpha character. Valid entries are:

E = Circuit Switched Data and Voice
F = Packet Switched Data
G = Packet Switched Data and Voice
H = Circuit Switched Data, Packet Switched Data and Voice

I = Circuit Switched Data, Packet Switched Data
J = Packet Switched Data on D Channel
K = Switched Data on B Channel 56 Kbps
L = Switched Data on B Channel 64 Kbps
M = Voice Only

PIC

InterLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) for the carrier the customer has selected for InterLATA traffic. This field is required and consists of 4 alpha/numeric characters. Valid entries are:

Valid PIC code
None
NA = Not applicable
DFLT = Default
NC = No Change

LPIC

IntraLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) of the carrier the customer has selected for intraLATA traffic. This field is required and consists of 4 alpha/numeric characters. Valid entries are:

Valid PIC code
None
NA = Not applicable
DFLT = Default

	NC = No Change
MATN	Main/Alternate Telephone Number - indicates the dialable telephone number(s) assigned to the ISDN BRI line. If the same number cannot be used for both B channels, then the main number will be assigned to B--channel 1, and the alternate number will be assigned to B-channel 2. This field is optional and consists of one alpha character. Valid entries are "M" (Main Telephone Number) or "A" (Alternate Telephone Number).
TC	TO Transfer of Calls To - identifies the telephone number to which calls are to be referred. This field is required when the TC OPT field is not "N", otherwise it is optional. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
TC	PER Transfer of Calls Period - indicates the requested date that the transfer of calls, specified in the TC TO field, is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field is optional when the TC TO field is populated, otherwise it is prohibited. The field consists of 10 alpha/numeric characters (including 2 hyphens).
JK CODE	Not currently used by USWC
JK NUM	Not currently used by USWC
JK POS	Not currently used by USWC
JR	Not currently used by USWC
NIDR	Not currently used by USWC
IWJK	Not currently used by USWC
IWJQ	Not currently used by USWC
SGNL	Signaling - identifies the type of signaling requested. This field is optional and consists of 2 alpha/numeric characters. Valid entries are: LS = Loop Start GS = Ground Start WS = Wink Start DD = Delayed Dial IM = Immediate E1 = E + M1 E2 = E + M2 E3 = E + M3

PULSE

Type of Pulsing - identifies the type of pulsing requested for the service. This field is optional and consists of 4 alpha characters. Valid entries are:

DP = Dial Pulse
MF = Multi Frequency
DTMF = Dual-tone Multi Frequency

BA

Blocking Activity - indicates the activity for blocking of calls. This field is required when the BLOCK field is populated, otherwise it is prohibited. The field consists of one alpha character. Valid entries are:

A = Add
D = Delete
N = No Change
Z = Remove all blocking

BLOCK

Block - identifies the type of blocking on the telephone number. This field is optional and consists of 9 alpha characters. Valid entries are:

A = No collect and third party
B = No third party
C = No collect call
D = No 1+
E = No O+
F = No 1+ and O+
G = No 011
H = No directory assistance
J = No 700
K = No 976
L = No 915
M = No 900
N = No casual calling

CFA

Connecting Facility Assignment - identifies the provider carrier system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric characters. The facility identification consists of the following elements:

1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters).

2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters).

3. The Channel/Pair number of the facility that is being used to provide the service (variable length, 1-5 characters).

4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.

5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.

6. Virgules (/) are used as delimiters to separate the different elements of the CFA.

FA	Feature Activity - indicates the activity type for the feature. This field is required when the FEATURE field is populated, other it is prohibited. The field consists of one alpha character. Valid entries are: N = Add/Install C = Change to feature detail D = Disconnect I = Insert listing/data O = Delete listing/data V = Conversion to new LSP as specified W = Conversion as is
FEATURE	Feature Codes - identifies the type of feature associated with the line. Codes for feature identification may include: USOCs, FIDs, TCIF maintained EDI codes or ISDN ordering codes. This field is required when the FA field is populated, otherwise it is prohibited. The field consists of 6 alpha/numeric characters.
FEATURE DETAIL	Identifies additional information for the type of feature associated with the line. This field is required and consists of 24 alpha/numeric characters.

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PS FORM DESCRIPTION

The Port Service (PS) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

All hunting information and service details are provided for in the various fields contained within the PS form.

The field entries contained within the PS form are to be provided by the customer.

A copy of the PS form and additional information regarding the preparation of the PS form may be found in Bellcore SR STS-471077.

The following field names and field descriptions are presented in the order in which they appear on the PS form.

PS FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
PQTY	Port Quantity - identifies the quantity of ports involved in this service request. This field is required and consists of 3 numeric characters.

ORD	Order Number - identifies USWC's order number for the service requested. This field is optional and consists of 20 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

PS FORM ENTRIES
Hunting Section:

FIELD NAME:	DESCRIPTION:
HA	Hunt Group Activity - identifies the activity associated with the hunt group on the request. This field is optional and consists of one alpha character. Valid entries are: N = New E = Existing/No Change C = Change to Hunt Group Sequence D = Remove Hunt Group Arrangement
HNTYP	Hunting Type Code - identifies the type of hunting involved. This field is required when the HA field is populated, otherwise it is optional. the field consists of 1 numeric character. Valid entries are: 1 = Preferential 2 = Sequential 3 = Circular 4 = Combination (CENTREX) 5 = Multi-line
HUNT	SEQ Hunting Sequence - identifies the desired hunting sequence. This field is required when the HA field is populated, otherwise it is optional. The field consists of 60 alpha/numeric characters.

PS FORM ENTRIES
Service Details Section:

FIELD NAME:	DESCRIPTION:
REF NUM	Reference Number - Identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.

LNA	Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are: N = New installation and/or account C = Change an existing account D = Disconnection M = Inside move of physical termination in a building T = Outside move of end user location R = Record activity ordering administration changes V = Conversion of service to a new LSP W = Conversion as is
TN	Telephone Number - Identifies the telephone number (TN)/terminal number (TER)/maintenance number (MCTE)/ISDN BRI directory number or sequential range of TNs/TERs/MTCEs for the service request. This field is required and consists of 23 alpha/numeric characters (including 2 pre-printed hyphens).
OTN	Out Telephone Number - identifies the existing telephone number that is being changed. This field is required when the LNA field is "X", otherwise it is prohibited. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
FPI	Freeze PIC Indicator - indicates the customer's requested freeze option for the PIC or LPIC. This field is optional and consists of one alpha character. Valid entries are: A = Freeze Intra B = Freeze Both E = Freeze Inter R = Remove Inter Freeze S = Remove Intra Freeze T = Remove Both
PIC	InterLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) for the carrier the customer has selected for InterLATA traffic. This field is required and consists of 4 alpha/numeric characters. Valid entries are:

Valid PIC code
None
NA = Not applicable
DFLT = Default
NC = No Change

LPIC	IntraLATA Presubscription Indicator Code - identifies the presubscription indicator code (PIC) of the carrier the customer has selected for intraLATA traffic. This field is required and consists of 4 alpha/numeric characters. Valid entries are: Valid PIC code None NA = Not applicable DFLT = Default NC = No Change
PORTTYP	Port Type - identifies the type of unbundled port orders from USWC. This field is required when the ACT field on the LSR form in "N", otherwise it is optional. The field consists of one alpha character. Valid entries are "L" (line port) or "T" (trunk port).
TSP	Telecommunications Service Priority - indicates the provisioning and restoration priority as defined under the TSP Service Vendor Handbook. This field is optional and consists of 12 alpha/numeric characters (including 1 pre-printed hyphen).
SAN	Subscriber Authorization Number - identifies a number equivalent to the end user Purchase Order Number. This may, at the option of the customer, be a requirement when providing service to some government agencies. This field is optional and consists of 30 alpha/numeric characters.
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
ECCKT	Not currently used by USWC
TC OPT	Transfer of Calls Options - identifies the type of transfer of call option the end user has requested. This field is optional and consists of 3 alpha/numeric characters. Valid entries are: Custom Code Identifier

	N = None S = Standard
TC TO	Transfer of Calls To - identifies the telephone number to which calls are to be referred. This field is required when the TC OPT field is not "N", otherwise it is optional. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
TC PER	Transfer of Calls Period - indicates the requested date that the transfer of calls, specified in the TC TO field, is to be removed and the standard recorded announcement is to be provided. When the standard period of transfer is acceptable, the field is to be left blank. This field is optional when the TC TO field is populated, otherwise it is prohibited. The field consists of 10 alpha/numeric characters (including 2 hyphens).
SYSTEM	Not currently used by USWC
CABLE	Not currently used by USWC
SHELF	Not currently used by USWC
SLOT	Not currently used by USWC
CHAN/PAIR	Not currently used by USWC
CFA	Connecting Facility Assignment - identifies the provider carrier system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric characters. The facility identification consists of the following elements: 1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters). 2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters). 3. The Channel/Pair number of the facility that is being used to provide the service (variable length, 1-5 characters).

4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.

5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.

6. Virgules (/) are used as delimiters to separate the different elements of the CFA.

SGNL

Signaling - identifies the type of signaling requested. This field is optional and consists of 2 alpha/numeric characters. Valid entries are:

LS = Loop Start
GS = Ground Start
WS = Wink Start
DD = Delayed Dial
IM = Immediate
E1 = E + M1
E2 = E + M2
E3 = E + M3

PULSE

Type of Pulsing - identifies the type of pulsing requested for the service. This field is optional and consists of 4 alpha characters. Valid entries are:

DP = Dial Pulse
MF = Multi Frequency
DTMF = Dual-tone Multi Frequency

BA

Blocking Activity - indicates the activity for blocking of calls. This field is required when the BLOCK field is populated, otherwise it is prohibited. The field consists of one alpha character. Valid entries are:

A = Add
D = Delete
N = No Change
Z = Remove all blocking

BLOCK

Block - identifies the type of blocking on the telephone number. This field is optional and consists of 9 alpha characters. Valid entries are:

A = No collect and third party
B = No third party
C = No collect call
D = No 1+
E = No O+
F = No 1+ and O+
G = No 011
H = No directory assistance
J = No 700
K = No 976
L = No 915
M = No 900
N = No casual calling

FA	Feature Activity - indicates the activity type for the feature. This field is required when the FEATURE field is populated, other it is prohibited. The field consists of one alpha character. Valid entries are: N = Add/Install C = Change to feature detail D = Disconnect I = Insert listing/data O = Delete listing/data V = Conversion to new LSP as specified W = Conversion as is
FEATURE	Feature Codes - identifies the type of feature associated with the line. Codes for feature identification may include: USOCs, FIDs, TCIF maintained EDI codes or ISDN ordering codes. This field is required when the FA field is populated, otherwise it is prohibited. The field consists of 6 alpha/numeric characters.
FEATURE DETAIL	Identifies additional information for the type of feature associated with the line. This field is required and consists of 24 alpha/numeric characters.
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and consists of 160 alpha/numeric characters.

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RPL FORM DESCRIPTION

The Resale Private Line (RPL) form is designed for ordering of point-to-point non-switched, dedicated private line service. The RPL must always be associated with an administrative LSR form.

All information required for ordering Resale Private Line service is provided in the various field entries contained within the RPL form.

A copy of the RPL form and additional information regarding the preparation of the RPL form may be found in Bellcore SR STS-471078.

The following field names and field descriptions are presented in the order in which they appear on the RPL form.

RPL FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
RSQTY	Resale Quantity - identifies the quantity of resale services (e.g., lines, circuits, trunks, etc.) involved in this service request. This field is required when the DISC ECCKT field is populated, otherwise it is optional and consists of 3 numeric characters.

DQTY	Disconnect Quantity - identifies the quantity of private lines to be disconnected with this request. This field is required when the DISC ECCKT field is populated, otherwise it is optional and consists of 3 numeric characters.
LOCBAN	Local Billing Account Number (Primary Location) - identifies the end user's billing account number which may also be the end user's local exchange telephone number. This field is optional and consists of 20 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and consists of 4 numeric characters.

RPL FORM ENTRIES
Primary Location Section:

FIELD NAME:	DESCRIPTION:
LOCTYP	Location Type (Primary Location) - identifies the location type. This field is required when the PRILOC or SECLOC field is populated, otherwise it is optional. The field consists of one alpha character. Valid entries are: E = End user C = CLLI code
PRILOC	Primary Location - identifies the primary end of the service being provided. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 25 alpha/numeric characters.
SAPR	Service Address House Prefix (Primary Location) - identifies the prefix for the house number of the service address when grid type numbering is used. This field is optional when the SANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SANO	Service Address House Number

	(Primary Location) - identifies the house number of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
SASF	Service Address House Number Suffix (Primary Location) - identifies the suffix for the house number of the service address. This field is optional when the SASN and SANO fields are populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SASD	Service Address Street Directional (Primary Location) - identifies the street directional for the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
SASN	Service Address Street Name (Primary Location) - identifies the service address and street name. If no street name exists, it may be a rural route, general delivery or other description for the delivery/service destination. This field is required and consists of 50 alpha/numeric characters.
SATH	Service Address Thoroughfare (Primary Location) - identifies the thoroughfare portion of the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
SASS	Service Address Street Suffix (Primary Location) - identifies the suffix to the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.
SADLO	Service Address Descriptive Location (Primary Location) - identifies additional location information about the service address. This field is optional and consists of 100 alpha/numeric characters.

RLSO	Resale Local Serving Office (Primary Location) - identifies the NPA/NXX of the local serving office of the end user location. This field is optional and consists of 6 numeric characters.
BLDG	Building (Primary Location) - identifies the specific building at the end user location. This field is optional and consists of 9 alpha/numeric characters.
FLOOR	Floor (Primary Location) -identifies the floor at the end user location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 9 alpha/numeric characters.
ROOM	Room (Primary Location) - identifies the room, slip, lot, unit or apartment at the end user location. When entering other than a room number, include "slip", "lot", "suite", etc. as part of the entry. When unknown due to building construction, enter TBD (to be determined). This field is optional and consists of 9 alpha/numeric characters.
CITY	City (Primary Location) - identifies the city, village, township, etc. of the end user location. This field is required and consists of 25 alpha characters.
STATE	State/Province (Primary Location) - identifies the two character postal code for the state/province of the end user location. This field is required and consists of 2 alpha characters.
ZIP CODE	Zip Code (Primary Location) - identifies the zip code or postal code of the end user service location. This field is required and consists of 10 alpha/numeric characters.
ALOC	Additional Location Details (Primary Location) - identifies any necessary location information which cannot be described in other fields and indicates further definition of the physical point of termination at the primary location. This field is required when the IWO (PRI) field is populated. Otherwise it is optional and consists of 106

	alpha/numeric characters.
LCON	Local Contact (Primary Location) - identifies the local contact name for access. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 15 alpha/numeric characters.
ACTEL NO	Access Telephone Number (Primary Location) - identifies the telephone number of the local contact for the service location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).
ALCON	Alternate Local Contact (Primary Location) - identifies the alternate local contact name for access to the service location. This field is optional and consists of 15 alpha/numeric characters.
AACTEL	Alternate Access Telephone Number (Primary Location) - identifies the alternate telephone number of the local contact name for the service location. This field is optional and consists of 17 numeric characters (including 3 pre-printed characters).
IWO	Inside Wiring Options (Primary Location) - identifies the requirement for inside wire services. This field is optional and consists of one alpha character. Valid entries are: R = referral for inside wiring S = provide inside wire repair plan and bill the customer T= provide inside wire repair plan and bill the end user U = provide inside wiring and repair plan and bill the customer V = provide inside wiring and repair plan and bill the end user W = provide inside wiring and bill the customer Y = provide inside wiring and bill the end user
IWCON	Inside Wire Contact (Primary

	Location) - identifies the name of the person to be contacted for inside wire. This field is required when the IWO (PRI) field is populated. Otherwise the field is optional and consists of 25 alpha/numeric characters.
TEL NO	Inside Wire Contact Telephone Number (Primary Location) - identifies the telephone number of the person to be contacted for inside wire. This field is required when the IWCON (PRI) field is populated. Otherwise the field is prohibited. It consists of 17 numeric characters (including 3 pre-printed hyphens).
GBTN	General Exchange Tariff Options Billing Telephone Number (Primary Location) - identifies the billing telephone number or billing account number for charges associated with options such as inside wire and material charges. This field is optional and consists of 20 alpha/numeric characters. Valid entries are: Telephone Number Billing Account Number N = New Billing Account Number Requested E = Use Existing BAN
ACC	Access Information (Primary Location) - indicates the access instructions for the end user location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is prohibited. The field consists of 45 alpha/ numeric characters.

RPL FORM ENTRIES
Secondary Location Section:

FIELD NAME:	DESCRIPTION:
LOCTYP	Location Type (Secondary Location) - identifies the location type. This field is required when the PRILOC or SECLOC field is populated, otherwise it is optional. The field consists of one alpha character. Valid entries are: E = End user C = CLLI code

PRILOC	Primary Location - identifies the primary end of the service being provided. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 25 alpha/numeric characters.
SAPR	Service Address House Prefix (Secondary Location) - identifies the prefix for the house number of the service address when grid type numbering is used. This field is optional when the SANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SANO	Service Address House Number (Secondary Location) - identifies the house number of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
SASF	Service Address House Number Suffix (Secondary Location) - identifies the suffix for the house number of the service address. This field is optional when the SASN and SANO fields are populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SASD	Service Address Street Directional (Secondary Location) - identifies the street directional for the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
SASN	Service Address Street Name (Secondary Location) - identifies the service address and street name. If no street name exists, it may be a rural route, general delivery or other description for the delivery/service destination. This field is required and consists of 50 alpha/numeric characters.

SATH	Service Address Thoroughfare (Secondary Location) - identifies the thoroughfare portion of the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
SASS	Service Address Street Suffix (Secondary Location) - identifies the suffix to the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.
SADLO	Service Address Descriptive Location (Secondary Location) - identifies additional location information about the service address. This field is optional and consists of 100 alpha/numeric characters.
RLSO	Resale Local Serving Office (Secondary Location) - identifies the NPA/NXX of the local serving office of the end user location. This field is optional and consists of 6 numeric characters.
BLDG	Building (Secondary Location) - identifies the specific building at the end user location. This field is optional and consists of 9 alpha/numeric characters.
FLOOR	Floor (Secondary Location) -identifies the floor at the end user location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 9 alpha/numeric characters.
ROOM	Room (Secondary Location) - identifies the room, slip, lot, unit or apartment at the end user location. When entering other than a room number, include "slip", "lot", "suite", etc. as part of the entry. When unknown due to building construction, enter TBD (to be determined). This field is optional and consists of 9 alpha/numeric characters.

CITY	City (Secondary Location) - identifies the city, village, township, etc. of the end user location. This field is required and consists of 25 alpha characters.
STATE	State/Province (Secondary Location) - identifies the two character postal code for the state/province of the end user location. This field is required and consists of 2 alpha characters.
ZIP CODE	Zip Code (Secondary Location) - identifies the zip code or postal code of the end user service location. This field is required and consists of 10 alpha/numeric characters.
ALOC	Additional Location Details (Secondary Location) - identifies any necessary location information which cannot be described in other fields and indicates further definition of the physical point of termination at the primary location. This field is required when the IWO (PRI) field is populated. Otherwise it is optional and consists of 106 alpha/numeric characters.
LCON	Local Contact (Secondary Location) - identifies the local contact name for access. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 15 alpha/numeric characters.
ACTEL NO	Access Telephone Number (Secondary Location) - identifies the telephone number of the local contact for the service location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).
ALCON	Alternate Local Contact (Secondary Location) - identifies the alternate local contact name for access to the service location. This field is optional and consists of 15 alpha/numeric characters.

AACTEL identifies the alternate telephone number of the local contact name for the service location. This field is optional and consists of 17 numeric characters (including 3 pre-printed characters).	Alternate Access Telephone Number (Secondary Location) -
IWO	Inside Wiring Options (Secondary Location) - identifies the requirement for inside wire services. This field is optional and consists of one alpha character. Valid entries are: R = referral for inside wiring S = provide inside wire repair plan and bill the customer T= provide inside wire repair plan and bill the end user U = provide inside wiring and repair plan and bill the customer V = provide inside wiring and repair plan and bill the end user W = provide inside wiring and bill the customer Y = provide inside wiring and bill the end user
IWCON	Inside Wire Contact (Secondary Location) - identifies the name of the person to be contacted for inside wire. This field is required when the IWO (PRI) field is populated. Otherwise the field is optional and consists of 25 alpha/numeric characters.
TEL NO	Inside Wire Contact Telephone Number (Secondary Location) - identifies the telephone number of the person to be contacted for inside wire. This field is required when the IWCON (PRI) field is populated. Otherwise the field is prohibited. It consists of 17 numeric characters (including 3 pre-printed hyphens).
GBTN	General Exchange Tariff Options Billing Telephone Number (Secondary Location) - identifies the billing telephone number or billing account number for charges associated with options such as inside wire and material charges. This field is optional and consists of 20 alpha/numeric characters. Valid entries are:

	Telephone Number Billing Account Number N = New Billing Account Number Requested E = Use Existing BAN
ACC	Access Information (Secondary Location) - indicates the access instructions for the end user location. This field is required when the ACT field on the LSR form is "N", "C", "M", "T", "V", or "W" and the PRILOC field is an end user name. Otherwise the field is prohibited. The field consists of 45 alpha/ numeric characters.

RPL FORM ENTRIES Bill Section:

FIELD NAME:	DESCRIPTION:
HA	Hunt Group Activity - identifies the activity associated with the hunt group on the request. This field is optional and consists of one alpha character. Valid entries are: N = New E = Existing/No Change C = Change to Hunt Group Sequence D = Remove Hunt Group Arrangement
FBI	Final Bill Information Indicator - indicates whether a final bill should be sent to either the existing billing address or a different address. Valid entries are "D" for different or "E" for existing. When the entry is "D", the BILLNM, STREET, STATE, and ZIP CODE fields must be populated. This field is optional and consists of one alpha character.
BILLNM	Bill Name - identifies the end user bill name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha/numeric characters.
SBILLNM	Secondary Bill Name - identifies the name of a department or group within the designated BILLLNM entry. This field is optional and consists of 25 alpha/numeric characters.
STREET	Street Address - identifies the street of

	the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha/numeric characters.
FLOOR	Identifies the floor for the billing address associated with the billing name. This field is optional and consists of 3 alpha/numeric characters.
ROOM/MAIL STOP	Identifies the room or mail stop for the billing address associated with the billing name. This field is optional and consists of 10 alpha/numeric characters.
CITY	Identifies the city, village, township, etc. of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 25 alpha characters.
STATE	State/Province - identifies the two character postal code for the state/province of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 2 alpha characters.
ZIP CODE	Identifies the zip code or postal code of the billing address associated with the billing name. This field is required when the FBI field is "D", otherwise it is optional. The field consists of 10 alpha/numeric characters.
BILLCON	Billing Contract - identifies the name of the person or office to be contacted on billing matters. This field is required when the FBI field is populated and/or this entry is different from the BILLNM field. Otherwise this is an optional field and consists of 15 alpha/numeric characters.
TEL NO	Telephone Number - identifies the end user's billing contact telephone number. This field is required when the BILLCON field is populated, otherwise it is optional. The field consists of 17 numeric characters (including 3 pre-printed hyphens).
SSN	Social Security Number - identifies the social security number of the end user in the BILLNM field. This field

is optional and consists of 11 numeric characters (including 2 pre-printed hyphens).

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Interconnect and Resale Resource Guide

RFR FORM DESCRIPTION

The Resale Frame Relay (RFR) form must always be associated with LSR and EU forms which contain administrative and bill detail necessary for the provisioning of the request.

All information required for ordering Resale Frame Relay services is provided in the various field entries contained within the RFR form.

The field entries contained within the RFR form are provided by the customer.

A copy of the RFR form and additional information regarding the preparation of the RFR form may be found in Bellcore SR STS-471079.

The following field names and field descriptions are presented in the order in which they appear on the RFR form.

RFR FORM ENTRIES Administrative Section:

FIELD NAME: DESCRIPTION:

PON Purchase Order Number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of 16 alpha/numeric characters.

VER Not currently used by USWC

AN Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.

ATN Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.

LOCBAN Local Billing Account Number - identifies the end user's billing account number which may also be the end user's local exchange telephone number. This field is optional and consists of 20 alpha/numeric characters.

RFR FORM ENTRIES UNI Circuit Detail Section:

FIELD NAME: DESCRIPTION:

LNA Line Activity - identifies the activity involved at the line level. This field is required and consists of one alpha character. Valid entries are:

N = New installation and/or account

C = Change an existing account

D = Disconnection

R = Record activity ordering admin. changes

X = Telephone number change

V = Conversion of service to a new LSP

W = Conversion as is

P = PIC Change

L = Seasonal

Y = Deny

H = Short term

CKR Customer Circuit Reference - identifies the circuit number or sequential range of numbers assigned by the customer. This field is optional and consists of 44 alpha/numeric characters.

ECCKT Not currently used by USWC

JK CODE Not currently used by USWC

JK NUM Not currently used by USWC

JK POS Not currently used by USWC

JR Not currently used by USWC

NIDR Not currently used by USWC

IWJK Not currently used by USWC

IWJQ Not currently used by USWC

CFA Connecting Facility Assignment - identifies the provider carrier system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric characters. The facility identification consists of the following elements:

1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters).

2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters).

3. The Channel/Pair number of the facility that is being used to provide the service (variable length, 1-5 characters).

4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.

5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.

6. Virgules (/) are used as delimiters to separate the different elements of the CFA.

CLK Clock Source - indicates the source of the timing for the port which carries the frame relay end user interface on the frame relay switching system. This field is optional and consists of one numeric character. Valid entries are:

1 = Internal

2 = External

3 = Loop

NVC Number of Virtual Connections (VC) - identifies the number of VCs requested. An entry in this field requires that the RFR form be submitted. This field is optional and consists of 3 numeric characters.

PSPEED Port Speed - identifies the speed of the port. This field is optional and consists of 6 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

LMP Link Management Protocol - identifies the VC status signaling protocol. This field is optional and consists of one numeric character. Valid entries are:

1 = LEI

2 = Annex A

3 = Annex D

4 = Auto

5 = Other (i.e., RAMI version)

6 = None

ZLG Zero Logic - identifies if the customer's frame relay customer premises equipment (CPE) is unable to support B8ZS. This field is optional and consists of one alpha character (Y or N).

RFR FORM ENTRIES Virtual Circuit Detail Section:

FIELD NAME: DESCRIPTION:

VC NUM Virtual Connection Number - identifies each VC as a unique number. The VC NUM is customer assigned and is returned on the confirmation to the ordering customer. This field is required and consists of 4 numeric characters.

VCACT VC Activity Indicator - identifies the type of activity associated with the VC. The field is required and consists of one alpha character. Valid entries are:

N = New

C = Change

D = Disconnect

R = Record Activity

DLCI Data Link Connection Identifier - identifies the logical connection address between the provider's switch and the ECCKT. This field is required when the VCACT field is "C", "D", or "R", otherwise it is optional. The field consists of 4 numeric characters.

CIR Committed Information Rate - identifies the rate of ingress traffic across the ECCKT under normal conditions. This field is required when the VCACT field "N", "C", or "R", otherwise it is prohibited. The field consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

Bc Committed Burst Size - identifies the maximum amount of data that a user is permitted to offer to the network during time interval (Tc) across the ECCKT. This field is optional and consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

Be Excess Burst Size - identifies the maximum amount of data that a user is permitted to offer to the network that exceeds Bc during time interval (Tc) across the ECCKT. This field is optional and consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

RFR FORM ENTRIES Related Circuit Detail Section:

FIELD NAME: DESCRIPTION:

RPON Related Purchase Order Number - identifies the PON which is establishing the physical connection for this end of the VC. This field is required when the RECCKT and RORD fields are not populated, otherwise it is optional. The field consists of 16 alpha/numeric characters.

RECCKT Related Exchange Company Circuit Identification - identifies USWC's related physical circuit ID against which the VC activity is requested. This field is required when the RPON and RORD fields are not populated, otherwise it is optional. The field consists of 53 alpha/numeric characters.

RORD Related Order Number - identifies USWC's order number that is establishing the physical link. This field is required when the RECCKT and RPON fields are populated, otherwise it is optional. The field consists of 17 alpha/numeric characters.

RDLCI Related Data Link Connection Identifier - identifies the logical

connection address between the USWC switch and the RECCKT. This field is required when the VCACT field is "C", "D", or "R", otherwise it is optional. The field consists of 4 numeric characters.

RCIR Related Committed Information Rate - identifies the rate of ingress traffic across the RECCKT under normal conditions. This field applies to asymmetrical virtual connections and is required when this entry differs from the CIR field, otherwise it is prohibited. This field consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

RBc Related Committed Burst Size - identifies the maximum amount of data that a user is permitted to offer to the network during time interval (Tc) across the RECCKT. This field is optional and consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

RBe Related Excess Burst Size - identifies the maximum amount of data that a user is permitted to offer to the network that exceeds Bc during time interval (Tc) across the RECCKT. This field is optional and consists of 5 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

RACNA Not currently used by USWC

RPSPEED Related Port Speed - identifies the speed of the port of the related circuit. This field is optional and consists of 6 alpha/numeric characters. The last character in the field is always expressed in megabits (M) or kilobits (K).

REMARKS Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and consists of 124 alpha/numeric characters.

PG_ OF_ Identifies the page number and total number of pages contained in this transaction. This field is required and consists of 6 numeric characters.

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Local Service Request Confirmation Form

The Local Service Request Confirmation (LSC) form provides the customer with the information necessary for control and tracking of the applicable request(s) for the provisioning of local service.

The Directory Section of the LSC form provides the customer with the information necessary for control and tracking of the applicable requests for directory services.

The LSC form is prepared by USWC and is forwarded to the customer. This form provides the customer with information regarding:

- Critical Dates
- Circuit Identification
- Disconnect Telephone Number(s)
- Order Numbers
- Tie down information associated with the customer's request for service

When a LSC is issued in response to a Firm Order LSR, its issuance signifies USWC's good faith effort to provide the local service as ordered by the customer on the matching version of the referenced LSR form.

When a DSC is issued in response to a Directory Service Request (DSR), its issuance signifies USWC's good faith effort to provide the service as ordered by the customer on the matching version of the referenced DSR form.

A copy of the LSC form and additional information regarding the LSC form entries may be found in Bellcore SR STS-471099.

The following field names and field descriptions are presented in the order in which they appear on the LSC form.

DL FORM ENTRIES Administrative Section:

FIELD NAME:	**DESCRIPTION:**
CCNA	Customer Carrier Name Abbreviation - identifies the COMMON LANGUAGE IAC code for the customer submitting the LSR and receiving the confirmation. The CCNA is equal to the ZCID assigned by USWC. This field is required and consists of 3 alpha characters.

PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
AN	Account Number - identifies the main account number for the customer's summary bill. This field is required and consists of 20 alpha/numeric characters. Valid entries are the account number or "N" for a new account.
ATN	Account Telephone Number - identifies the end user's account telephone number. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens). Valid entries are the account telephone number or "N" for a new connect.
LSR NO	Not currently used by USWC
ORD	Order Number - identifies the USWC order number for the service requested. This field is optional and consists of 20 alpha/numeric characters.

INIT	Initiator Identification - identifies the initiator as specified on the LSR form by the customer. This field is required and consists of 15 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.
CD/T SENT	Confirmation Date and Time Sent - identifies the date and time that the confirmation is sent by USWC. This field is required and consists of 17 alpha/numeric characters (including 3 hyphens). Example: 05-22-1996-1115AM
REP	USWC Contact Representative - identifies the USWC representative handling this service request. This field is required and consists of 15 alpha/numeric characters.

ST	Switch Type - indicates the type of local serving office (LSO) switch that is used to provide the BRI. This information may be needed to correctly configure the end user's customer premises equipment (CPE). This field is required when the second position of the TOS field on the LSR form is "H", otherwise prohibited. The field consists one numeric character.
IBT	ISDN BRI Type - indicates the type of national ISDN BRI. This field is optional and consists of one numeric character. Valid entries are: 1 = NI -1 2 = NI - 2 3 = NI - 3
TEL NO	Telephone Number - identifies the telephone number of the USWC representative handling this request. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
CN TYP	Confirmation Type - identifies the type of confirmation being returned to the customer. This field is required and consists of one alpha character. Valid entries are: B = Firm Order with Facility Information C = Firm Order Confirmation F = Facility Confirmation

CHC	Coordinated Hot Cut - used with Loop Service only - indicates that USWC acknowledges the coordinated hot cut. This field is optional and consists of the alpha character "Y".
FDT	Frame Due Date - identifies frame cutover time. This field is prohibited when the first position of the REQTYP field is "G", "H", or "J". Otherwise the field is optional and consists of 6 alpha/numeric characters.
DD	Due Date - identifies the date the service order requested is due to be completed. This field is required and consists of 10 alpha/numeric characters (including 2 hyphens).
EBD	Effective Bill Date - identifies the effective date to begin or cease billing when the billing date is different from the desired due date. This field is optional and consists of 10 alpha/numeric characters (including 2 hyphens). Example: 04-02-1997

BI1	Billing Account Number Identifier 1 - identifies the service type of the Billing Account Number (BAN). This field is required when more than one BAN field is populated, otherwise it is optional. The field consists of one alpha character. Valid entries include: A = All Services on this Request B = Directory Listings L = Loop M = Combined Loop and Unbundled Local Switching (PORT) N = Number Portability P = Port R = Resale U = Usage V = Loop with NP and Usage W = Loop with NP Z = NP with Usage
BAN1	Billing Account Number 1 - identifies the billing account to which the recurring and non-recurring charges for this request will be billed. This field is required and consists of 13 alpha/numeric characters.
BI2	Not currently used by USWC
BAN2	Not currently used by USWC

EC VER	Exchange Carrier Version - identifies the USWC version when the confirmation is a correction copy or a resend copy. This field is required for subsequent issuance of a confirmation notice. Otherwise the field is optional and consists of 3 alpha characters.
DSGCON	Not currently used by USWC
NSP DSGCON	Not currently used by USWC
TEL NO	Not currently used by USWC
REF NUM	Reference Number - identifies the first line or trunk as a unique number and each additional line or trunk segment as a unique number. The REF NUM is customer assigned and is returned on the confirmation notice to the ordering customer. This field is required and consists of 4 numeric characters.

RNEX	Reference Number Extension - provides an extension to the reference number field for use when multiple ISDN BRI directory numbers (TNs) are assigned to a single ISDN BRI line for one service order/PON/REF NUM. This field is required when the ACT field on the LSR form is "C","D", "R", "V","X","P", "L", "Y", or "H" and the second character of the TOS field on the LSR form is "H". Otherwise the field is optional and consists of 2 numeric characters.
ECCKT	Not currently used by USWC
TN	Telephone Number - Identifies the telephone number (TN)/terminal number (TER)/maintenance number (MCTE)/ISDN BRI directory number or sequential range of TNs/TERs/MTCEs for the service request. This field is required when the LNA field on the service specific form is "X" and the out telephone number is also shown in the OTN field on the service specific form. Otherwise this field is prohibited. The field consists of 23 alpha/numeric characters (including 2 pre-printed hyphens).

MATN	Main/Alternate Telephone Number - indicates the dialable telephone number(s) assigned to the ISDN BRI line. If the same number cannot be used for both B channels, then the main number will be assigned to B--channel 1, and the alternate number will be assigned to B-channel 2. This field is optional and consists of one alpha character. Valid entries are "M" (Main Telephone Number) and "A" (Alternate Telephone Number).
CKR	Customer Circuit Reference - identifies the circuit number assigned by the customer. This field is optional and consists of 36 alpha/numeric characters.
ISPID	ISDN Service Profile Identification - provides a code that must be programmed into the ISDN BRI customer premises equipment (CPE). This code is transmitted from the CPE over the ISDN BRI D-channel to the LSO switch. It must be present in order for the BRI to become active. This field is required when the second position of the TOS field on the LSR form is "H", otherwise it is prohibited. The field consists of 14 numeric characters.
CFA	Connecting Facility Assignment - identifies the provider carrier

system and channel to be used. This field is required when utilizing Hi-Cap facilities and the customer has assignment control, otherwise it is optional. The field consists of 42 alpha/numeric characters. The facility identification consists of the following elements:

1. The Facility Designation which uniquely identifies a particular facility type between two terminal locations (variable length, 1-5 characters).

2. The Facility Type which is usually identified through the use of a code set found in the Bellcore Practice BR 795-450-100 (variable length, 1-6 characters).

3. The Channel/Pair number of the Wideband or Hi-Cap facility that is being used to provide the service (variable length, 1-5 characters).

4. The "A" Location, which is the location of the facility termination that has the lower alpha/numeric CLLI code.

5. The "Z" Location, which is the location of the facility termination that has the higher alpha/numeric CLLI code.

6. Virgules (/) are used

	as delimiters to separate the different elements of the CFA.
LORD	Loop Order Number - identifies the USWC order number for the loop. This field is required when the first position of the REQTYP field on the LSR form is "A" or "B", otherwise it is prohibited. The field consists of 20 alpha/numeric characters.
NPORD	Number Portability Order Number - identifies the USWC order number for number portability. This field is required when the first position of the REQTYP field on the LSR form is "C", otherwise it is optional. The field consists of 20 alpha/numeric characters.
PORTED #	Ported Telephone Number - identifies the telephone number to be retained. This field is required when the first position of the REQTYP field on the LSR form is "C" or "B", otherwise it is prohibited. The field consists of 12 numeric characters (including 2 pre-printed hyphens).

RTI	Route Index - identifies the routing index to be used by USWC's switching equipment to forward/port USWC's telephone number to the customer's non-RCF trunk group. This field is optional when the NPT field on the NP form is "A" or "C", otherwise it is prohibited. The field consists of 6 alpha/numeric characters.
DISC#	Disconnect Telephone Number - identifies the end user telephone number to be disconnected. This field is required when the DISC # field on the EU or Loop form is populated, otherwise it is prohibited. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
TER	Terminal Number - identifies a non-lead line in a multiline group. This field is required when the TER field on the EU or Loop form is populated, otherwise it is optional. The field consists of 8 alpha/numeric characters.
DISC ORD	Disconnect Order Number - identifies the USWC order number for the disconnect of end user service associated with this request. This field is optional and consists of 20 alpha/numeric characters.

LSC FORM ENTRIES Tie Down Section:

FIELD NAME:	DESCRIPTION:
SYSTEM ID	Not currently used by USWC
CABLE ID	Not currently used by USWC
SHELF	Not currently used by USWC
SLOT	Not currently used by USWC
RELAY RACK	Not currently used by USWC
CHAN/PAIR	Not currently used by USWC
UNIT	Not currently used by USWC

LSC FORM ENTRIES Facility Transmission Section:

FIELD NAME:	DESCRIPTION:
PGI	Pair Gain Indicator - indicates whether pair gain will be used for this service. This field is optional when the CN TYP field is "B" or "F", otherwise it is prohibited. The field consists of one alpha character, "Y".
DEMARC	Demarc Designation - identifies the point where USWC terminates service at the end user premises. This field is optional when the CN TYP field is "B" or "F", otherwise it is prohibited. The field consists of 12 alpha/numeric characters.

OOR	Out of Range Indicator - identifies the loop as out of range and additional engineering and/or an extended range card may be required. This field is optional when the CN TYP field is "B" or "F", otherwise it is prohibited. The field consists of one alpha character, "Y".
NID	Network Interface Device - indicates if the existing network interface device (NID) will be reused. This field is optional when the CN TYP field is "B" or "F", otherwise it is prohibited. The field consists of one alpha character, "Y".

LSC FORM ENTRIES SECLOC Section:

VC NUM	Virtual Connection Number - identifies each VC as a unique number. The VC NUM is customer assigned and is returned on the confirmation to the ordering customer. This field is required when the first position of the REQTYP field on the LSR form is "L" and the VC NUM field on the RFR form is populated, otherwise it is prohibited. The field consists of 4 numeric characters.

DLCI	Data Link Connection Identifier - identifies the logical connection address between the USWC switch and the ECCKT. This field is required when the first position of the REQTYP field on the LSR form is "L" and the NVC field on the RFR form is populated, otherwise it is prohibited. The field consists of 4 numeric characters.
RECCKT	Related Exchange Company Circuit Identification - identifies USWC's related physical circuit ID against which the VC activity is requested. This field is required when the RECCKT field on the RFR form is not populated, otherwise it is prohibited. The field consists of 53 alpha/numeric characters.
LST	Not currently used by USWC
RDLCI	Related Data Link Connection Identifier - identifies the logical connection address between the USWC switch and the RECCKT. This field is required when the first position of the REQTYP field on the LSR form is "L" and the NVC field on the RFR form is populated, otherwise it is prohibited. The field consists of 4 numeric characters.

LSC FORM ENTRIES Directory Section:

ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listing. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
DCNR	Directory Confirmation Type Returned - identifies the type of confirmation response returned by USWC. This field is required and consists of one alpha character. Valid entries are: C = Confirmation W = Confirmation with errors E = Errors only P = USWC initiated
CC	Company Code - identifies the Exchange Carrier requesting service. This field is required when the CCNA field is "CUS" and the customer has an industry assigned code, otherwise it is optional. The field consists of 4 alpha/numeric characters.
DOR	Date of Receipt - identifies the date this directory service request was received. This field is required and consists of 10 alpha/numeric characters (including 2 hyphens).

DLORD	Directory Listing Order Number - identifies the order number assigned by USWC. This field is optional and consists of 17 alpha/numeric characters.
DAORD	Directory Assistance Order Number - identifies the order number assigned by USWC for directory assistance. This field is optional and consists of 17 alpha/numeric characters.
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service. This field is required on all supplements when furnished by USWC, otherwise it is optional. The field consists of 18 alpha/numeric characters.
DDA	Date of Availability in DA - identifies the date this listing will appear in or be deleted from Directory Assistance (DA). This field is required and consists of 10 alpha/numeric characters (including 2 hyphens).

DINIT	Directory Request Initiator - identifies the name of the customer's representative or group initiating this directory request. This field is required and consists of 15 alpha/numeric characters.
DCHC	Directory Assistance Coordinated Hot Cut - indicates that the customer has requested near seamless cutover activity. This field is optional and consists of the alpha character "Y".
DADT	Directory Assistance Due Date - identifies the directory assistance due date. This field is prohibited when the first position of the REQTYP field on the DSR form is "H", otherwise it is optional. The field consists of 6 alpha/numeric characters.

DBI1	Directory Billing Account Number Identifier 1 - identifies the service type of the Directory Billing Account Number (DBAN). This field is required when the DBI1 field on the DSR form is populated, otherwise it is optional. The field consists of one alpha character. Valid entries include: A = All Services on this Request C = Directory Assistance Listings and Directory Listings D = Directory Listings L = Loop M = Combined Loop and Unbundled Local Switching (PORT) N = Number Portability O = Directory Assistance Listings P = Port R = Resale U = Usage V = Loop with NP and Usage W = Loop with NP Z = NP with Usage
DBAN1	Directory Billing Account Number 1 - identifies the billing account to which the recurring and non-recurring charges for this request will be billed. This field is required when the DBI1 field is populated. Otherwise the field is optional and consists of 13 alpha/numeric characters.
DBI2	Not currently used by USWC

DBAN2	Not currently used by USWC
DLCONT INIT	Name of Contact at USWC - identifies the USWC representative that should be contacted on directory/listing matters. The field is optional and consists of 15 alpha/numeric characters.
DLCONT TN	Directory Contact Telephone Number - identifies the telephone number of the USWC directory/listing contact. The field is required when the DLCONT INIT field is populated. Otherwise it is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).
DACONT INIT	Name of Contact at USWC - identifies the USWC representative that should be contacted on directory assistance listing matters, if different from the DLCONT INIT. This field is optional and consists of 15 alpha/numeric characters.
DACONT TN	Directory Contact Telephone Number - identifies the telephone number of the USWC directory assistance listing contact. The field is required when the DACONT INIT field is populated. Otherwise it is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).

LQTYR	Number of Listings Received - indicates the number of listing detail sections (control, instructions and indicator) received for this request. This field is required and consists of 3 numeric characters.
SQTYR	Service Address Quantity Received - indicates the quantity of service address segments received for this request. This field is required and consists of 1 numeric character.
DDQTYR	Number of Delivery Segments Received - indicates the number of delivery address/information segments received for this request. This field is required when the DDQTY field on the DSR form is populated. Otherwise it is optional and consists of 2 numeric characters.
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and may consist of up to 160 alpha/numeric characters.

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Interconnect and Resale Resource Guide

DSR FORM DESCRIPTION

The Directory Service Request (DSR) form will always be associated with the applicable directory specific form(s), e.g. Directory Listing form, Directory Service Caption Request form, etc. The DSR form may be used as a stand alone request or it may be associated with a Local Request Service (LSR) form, an End User Information (EU) form and a service specific form containing the loop and location detail necessary for the provisioning of the request.

All of the information required for administrative, billing and contact details is provided for in the various fields contained within page 1 of the DSR form. The second page of this form provides field for the Directory Service and Delivery information.

This form is prepared by the customer and is submitted to the Interconnect Service Center (ICS) for the processing of directory service requests. All fields for directory listings and captions are supplied in upper and lower case unless otherwise specified in the ISI.

A copy of the DSR form and additional information regarding the DSR form entries may be found in Bellcore SR STS-471101.

The following field names and field descriptions are presented in the order in which they appear on the DSR form.

DSR FORM ENTRIES

Administrative Section:

FIELD NAME:	DESCRIPTION:
CCNA	Customer Carrier Name Abbreviation which is equal to the ZCID/RSID assigned by USWC. This field is required and consists of 3 alpha characters.
PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service. This field is required on all supplements when furnished by USWC, otherwise it is

	optional. The field consists of 18 alpha/numeric characters.
ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listings. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
SC1	Service Center 1 - identifies the USWC service center. This field is required when it is a stand alone request or if different from the SC field on the LSR form. The field consists of the 4 alpha characters, "USWD".
SC2	Service Center 2 - identifies the USWC service center for processing directory assistance (DA) listings. This field is required when the SC2 field is different from the SC1 field, otherwise it is optional. The field consists of 4 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.
PPTN	Previous Provider Telephone Number - identifies the end user's previous listed telephone number if the user is changing providers. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
D/T SENT	Date and Time Sent - identifies the date and time that the DSR is sent by the customer. This field is required and consists of 17 alpha/numeric characters (including hyphens). Example: 05-22-1996-1115AM
EDD	Expected Due Date - identifies the customer's expected due date. This field is required and consists of 10 alpha/numeric characters (including 2 hyphens). Example: 03-22-1996
SCD	Service Completion Date - identifies the date dial tone is completed and listing information can be released to directory assistance and white pages systems for a post complete request. This field is optional and consists of 10 alpha/numeric characters (including 2 hyphens).
EDDO	Expected Due Date Out - identifies the customer's expected date for suspension or disconnection of service. This field is conditional: Required when (1) the service is to be suspended and the EDD field is populated with a restoral date; (2) service is short term and the EDD field is populated with the install date;

	(3) dual service or when the EDDO is different from the EDD for an outside move. The field consists of 10 alpha/numeric characters (including 2 hyphens).
PROJECT	Project Identification - identifies the project number to which the DSR is to be associated. This field is optional and may consist of up to 16 alpha/numeric characters.
DCHC	Directory Assistance Coordinated Hot Cut - indicates that the customer is requesting near seamless cutover activity. This field is optional and consists of the alpha character "Y".
DADT	Directory Assistance Due Time - identifies directory assistance due time. This field is prohibited when the REQTYP field is "H", otherwise it is optional. The field consists of 6 alpha/numeric characters.
REQ TYP	Requisition Type and Status - identifies the type of service being requested and the status of the request. The first character of REQTYP specifies the type of service, e. g. A = Loop. The second character of REQTYP specifies the status of the request, e.g. B = firm order. Refer to SR STS-471101 for the specific character entries. This field is required and consists of 2 alpha characters.
ACT	Activity - identifies the type of activity involved in this service request, e.g. N = new installation and/or account. Refer to SR STS-471101 for the specific character entries. This field is required and consists of a single alpha character.
DSUP	Directory Supplement Type - a supplement is any new iteration of a DSR. The entry in the DSUP field identifies the reason for which the supplement is being issued. Valid entries include: 1 (cancel); 2 (date change); 3 (other). This field is prohibited on initial requests. Otherwise it is optional and consists of one numeric character.
EXP	Not currently used by USWC
DRTR	Directory Response Type Requested - identifies the type of confirmation response requested by the customer: C = Confirmation W = Confirmation with errors E = Errors only N = No response required This field is required and consists of one alpha character.
CC	Not currently used by USWC

AGAUTH	Agency Authorization Status - indicates that the customer is acting as an end user's agent and has authorization on file. This field is required when the customer is acting as an end user agent and consists of the alpha character "Y".
DATED	Date of the Agency Authorization - identifies the date appearing on the agency authorization that was previously submitted to USWC. This field is required when the AGAUTH field is "Y" and consists of 10 alpha/numeric characters.
AUTHNM	Authorization Name - identifies the end user who signed authorization. This field is optional and consists of 15 alpha/numeric characters.
TOS	Type of Service - identifies the type of service for the line ordered. The type of service identifies the end user account as business, residential or government. This field is required when the ACT field is "N", "C", "V", or "T" and the first position of the REQTYP field is "E". Otherwise it is optional and consists of 4 alpha/numeric characters. Valid entries are:

1st Character:	1 = Business 2 = Residence 3 = Government
2nd Character:	A = Multi-line B = Single line C = Coin D = Advanced services E = Centrex H = ISDN BRI J = PBX K = ISDN PRI
3rd Character:	M = Measured F = Fixed rated
4th Character:	F = FXS G = Semi-Pub N = Normal P = Prison/inmate R = RCF W = WATS

DLORD	Directory Listing Order Number - identifies the order number assigned by USWC. This field is optional and consists of up to 17 alpha/numeric characters.
DAORD	Directory Assistance Order Number - identifies the order number assigned by USWC for directory assistance. This field is optional and consists of up to 17 alpha/numeric characters.
DRPON	Directory Related Purchase Order Number - identifies the PON of a related directory request.

	This field may be used for relating connect and disconnect service requests, or multiple requests for the same location and due date. This field is optional and consists of up to 16 alpha/numeric characters.
DLRORD	Directory Related Order Number - identifies a related USWC order number. This field is required when USWC has preassigned a related order number, otherwise it is prohibited. This field consists of up to 17 alpha/numeric characters.
DARORD	Directory Assistance Related Order Number - identifies the order number assigned by USWC when a separate order number is assigned for directory assistance listings. This field is required when USWC has preassigned a related order number for directory assistance listings, otherwise it is optional. This field consists of up to 17 alpha/numeric characters.
LSP AUTH	Not currently used by USWC
LSP AUTH DATE	Not currently used by USWC
LSP AUTH NAME	Not currently used by USWC
CUST	Customer Name -identifies the name of the customer that originated this request when that customer has not been assigned a CCNA. This field is required when the CCNA field is "CUS" and the CC field is not populated. Otherwise the field is optional and consists of 25 alpha/numeric characters.
LQTY	Number of Listings - identifies the number of listing detail sections (control, instructions, and indicators) in this service request. This field is required and consists of 3 numeric characters.
SQTY	Service Address Quantity - identifies the quantity of service addresses for this service request. This field is required and consists of 1 numeric character.
DDQTY	Number of Delivery Segments - identifies the number of delivery address/information segments in this service request. This field is required when any delivery address/information segments are different from the service address or when directories are to be delivered to multiple addresses. Otherwise the field is optional and consists of 2 numeric characters.

DSR FORM ENTRIES

Bill Section:

FIELD NAME:	DESCRIPTION:
DBI1	Directory Billing Account Number Identifier 1 - identifies the service type of the Directory Billing Account Number (DBAN). This field is required when more than one DBAN field is populated and a billing profile is not established, otherwise it is optional. The field consists of one alpha character. Valid entries include: A = All Services on this Request C = Directory Assistance Listings and Directory Listings D = Directory Listings L = Loop N = Number Portability O = Directory Assistance Listings P = Port R = Resale U = Usage V = Loop with NP and Usage W = Loop with NP Z = NP with Usage
DBAN1	Directory Billing Account Number 1 - identifies the billing account to which the recurring and non-recurring charges for this request will be billed. This field is required when a billing profile is not established. Otherwise it is optional and consists of 13 alpha/numeric characters.
DBI2	Not currently used by USWC
DBAN2	Not currently used by USWC
ACNA	Not currently used by USWC
DEBD	Effective Bill Date - identifies the effective date to begin or cease billing when the billing date is different from the desired due date. This field is optional and consists of 10 alpha/numeric characters (including hyphens). Example: 04-02-1997
DBILLNM	Directory Billing Name - identifies the name of the person, office, or company to whom the customer has designated that the bill be sent. This field is required when the DBAN1 field is "N"and a billing profile is not established, otherwise it is optional. The field consists of up to 25 alpha/numeric characters.
DSBILLNM	Directory Secondary Billing Name - identifies the name of a department or group within the designated DBILLNM entry. This field is optional and consists of up to 25 alpha/numeric characters.
DTE	Directory Tax Exemption - indicates that the

	customer has submitted a tax exemption form to USWC. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of one alpha character. Refer to SR STS-471101 for the specific character entries.
DSTREET	Directory Street Address - identifies the street of the billing address associated with the billing name. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of up to 25 alpha/numeric characters.
DFLOOR	Directory Floor - identifies the floor for the billing address associated with the billing name. This field is optional and consists of 3 alpha/numeric characters.
DROOM	Directory Room - identifies the room for the billing address associated with the billing name. This field is optional and consists of 6 alpha/numeric characters.
DCITY	Directory City - identifies the city, village, township, etc. of the billing address associated with the billing name. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of up to 25 alpha/numeric characters.
DSTATE	Directory State - identifies the two character postal code for the state of the billing address associated with the billing name. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of 2 alpha characters.
DZIP CODE	Directory Zip Code - identifies the zip code or postal code of the billing address associated with the billing name. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of 12 alpha/numeric characters.
DBILLCON	Directory Billing Contact - identifies the name of the person or office to be contacted on billing matters. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of up to 15 alpha/numeric characters.
DTEL NO	Directory Telephone Number - identifies the telephone number of the billing contact. This field is required when the DBAN1 field is "N" and a billing profile is not established. Otherwise the field is optional and consists of 17 numeric characters (including 3 pre-printed hyphens)

DSR FORM ENTRIES

Contact Section:

FIELD NAME:	DESCRIPTION:
DINIT	Directory Initiator Identification - identifies the customer's representative who originated this request. This is the person who should be contacted if there are any questions regarding this request. Any authorizations of charges or changes are the responsibility of this person. This field is required and consists of 15 alpha/numeric characters.
DTEL NO	Directory Telephone Number - identifies the telephone number of the initiator. This field is required and consists of 17 numeric characters (including 3 pre-printed hyphens).
DEMAIL	Directory Electronic Mail Address - identifies the electronic mail address of the initiator. This field is optional and consists of 60 alpha/numeric characters.
DFAX NO	Directory Facsimile Number - identifies the fax number of the initiator. This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
DSTREET	Directory Initiator Street Address - identifies the initiator's street address. This field is required when a customer does not have a customer initiator contact address profile. Otherwise it is optional and consists of 25 alpha/numeric characters.
DFLOOR	Directory Floor - identifies the floor of the initiator's address. This field is optional and consists of 3 alpha/numeric characters.
DROOM/MAIL STOP	Directory Room/Mail Stop - identifies the room or mail stop of the initiator's address. This field is optional and consists of 10 alpha/numeric characters.
DCITY	Directory City - identifies the city, village, township, etc. of the initiator's address. This field is required when a customer does not have a customer initiator contact address profile. Otherwise it is optional and consists of 25 alpha/numeric characters.
DSTATE	Directory City - identifies the two character postal code for the state of the initiator's address. This field is required when a customer does not have a customer initiator contact address profile. Otherwise it is optional and consists of 2 alpha/numeric characters.

DZIP CODE	Directory Zip Code - identifies the zip code or postal code of the initiator's address. This field is required when a customer does not have a customer initiator contact address profile. Otherwise it is optional and consists of and consists of 12 alpha/numeric characters.

DSR FORM ENTRIES

Advertising Section:

FIELD NAME:	DESCRIPTION:
EA	Existing Advertising - identifies the end user's advertising status. This field is required and consists of 1 alpha character. Valid entries are: Y = End user has existing advertising N = End user does not have existing advertising U = Unknown
ADVCONT	Advertising Contact - identifies the name of the person to contact to discuss the advertising. This field is required when the EA field is "Y". Otherwise it is optional and consists of 25 alpha/numeric characters.
ADVCONT TN	Advertising Contact Telephone Number - identifies the telephone number of the advertising contact. This field is required when the EA field is "Y". Otherwise it is optional and consists of 17 numeric characters (including 3 pre-printed hyphens)
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and may consist of up to 160 alpha/numeric characters.

DSR FORM ENTRIES

Service Address Section:

FIELD NAME:	DESCRIPTION:
AACT	Address Activity - indicates the address activity for this request. This field is required and consists of one alpha character. Valid entries are: N = New service D = Delete service I = Insert new address O = Delete old address Z = No change to address When changing a service or delivery address, two transactions are required: 1. The first transaction would have an AACT of "O" to specify the data to be deleted.

	2. The second transaction would have an AACT of "I" to specify the new data.
SAPR	Service Address House Prefix - identifies the prefix for the house number of the service address when grid type numbering is used. This field is optional when the SANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SANO	Service Address House Number - identifies the house number of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
SASF	Service Address House Number Suffix - identifies the suffix for the house number of the service address. This field is optional when the SASN and SANO fields are populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
SASD	Service Address Street Directional - identifies the street directional for the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
SASN	Service Address Street Name - identifies the service address and street name. If no street name exists, it may be a rural route, general delivery or other description for the delivery/service destination. This field is required and consists of 50 alpha/numeric characters.
SATH	Service Address Thoroughfare - identifies the thoroughfare portion of the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
SASS	Service Address Street Suffix - identifies the suffix to the street name of the service address. This field is optional when the SASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.
SALO	Service Address Location - identifies additional location information about the service address such as an apartment number, suite, floor, etc. This field is optional when the SASN field is populated, otherwise it is prohibited. The field consists of 30 alpha/numeric characters.
SADLO	Service Address Descriptive Location - identifies additional location information about

	the service address. This field is optional and consists of 100 alpha/numeric characters.
SALOC	Service Address Locality - identifies the locality or community where the service is located. This field is required and consists of 35 alpha/numeric characters.
SAST	Service Address State/Province - identifies the two character postal code for the state/province where the service is located. This field is required and consists of 2 alpha characters.
SAZC	Service Address Zip Code - identifies the zip code or postal code of the service address. This field is required and consists of 12 alpha/numeric characters.

DSR FORM ENTRIES

Service Address/Information Section:

FIELD NAME:	DESCRIPTION:
DREF NUM	Directory Reference Number - identifies the delivery address/information segment and each additional delivery address/information segment as a unique number. The DREF NUM is customer assigned. This field is required when there are multiple delivery address/information segments. Otherwise it is optional and consists of 4 numeric characters.
DDAPR	Directory Address House Prefix - identifies the prefix for the house number of the delivery address. This field is optional when the DDASN field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
DDANO	Directory Address House Number - identifies the house number of the directory address. This field is optional when the DDASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
DDASF	Directory Address House Number Suffix - identifies the suffix for the house number of the directory address. This field is optional when the DDANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
DDASD	Directory Address Street Directional - identifies the street directional for the delivery address. This field is optional when the DDASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
DDASN	Directory Address Street Name - identifies the

	directory address and street name. This field is required when the delivery address differs from the service address. Otherwise it is optional and consists of 50 alpha/numeric characters.
DDATH	Directory Address Thoroughfare - identifies the thoroughfare portion of the street name of the directory address. This field is optional when the DDASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
DDASS	Directory Address Street Suffix - identifies the suffix to the street name of the directory address. This field is optional when the DDASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.
DDALO	Directory Address Location - identifies additional location information about the directory address such as an apartment number, suite, floor, etc. This field is optional when the DDASN field is populated, otherwise it is prohibited. The field consists of 30 alpha/numeric characters.
DDADLO	Directory Address Descriptive Location - identifies the additional location information about how to physically deliver directories. This field is optional when the DDASN field is populated, otherwise it is prohibited. The field consists of 100 alpha/numeric characters.
DDALOC	Directory Address Locality - identifies the locality or community where the directory is to be delivered. This field is required when the delivery address differs from the service address. Otherwise it is optional and consists of 35 alpha/numeric characters.
DDAST	Directory Address State/Province - identifies the two character postal code for the state/province where the directory is to be delivered. This field is required when the delivery address differs from the service address. Otherwise it is optional and consists of 2 alpha characters.
DDAZC	Directory Address Zip Code - identifies the zip code or postal code of the delivery address. This field is required when the delivery address differs from the service address. Otherwise it is optional and consists of 12 alpha/numeric characters.
DIRIDDW	Directory ID for White Page Delivery - identifies the primary directory code of the book to be delivered. This field is optional and consists of the 6 alpha/numeric characters that identify the YPPA Code.

DIRANW	Number of White Page Books for Annual Delivery - identifies the number of white page or co-bound directories to be delivered on an annual basis. This field is optional and consists of 5 numeric characters.
DIRNEWW	Number of White Page Books Delivered on New Connect - identifies the number of white page or co-bound directories to be delivered at the time of new connect. This field is optional and consists of 5 numeric characters.
DIRIDDY	Directory ID for Yellow Page Delivery - identifies the primary yellow page directory that a customer is requesting when there are separate white and yellow page directories and/or multiple yellow page directories. This field is optional and consists of the 6 alpha/numeric characters that identify the YPPA Code.
DIRANY	Number of Yellow Page Books for Annual Delivery - identifies the number of yellow page directories to be delivered on an annual basis. This field is required when the number of yellow pages desired is different from the number of white pages requested. Otherwise the field is optional and consists of 5 numeric characters.
DIRNEWY	Number of Yellow Page Books Delivered on New Connect - identifies the number of directories to be delivered at the time of new connect. This field is required when the number of yellow pages desired is different from the number of white pages requested. Otherwise the field is optional and consists of 5 numeric characters.
DIRIDDB	Directory ID for Business to Business Book Delivery - identifies the primary directory code of the book to be delivered. This field is optional and consists of the 6 alpha/numeric characters that identify the YPPA Code.
DIRANB	Number of Business to Business Books - identifies the number of business to business directories to be delivered on an annual basis. This field is optional and consists of 5 numeric characters.
DIRNEWB	Number of Business to Business Books Delivered on a New Connect - identifies the number of business to business directories to be delivered at the time of new connect. This field is optional and consists of 5 numeric characters.
DIRIDDO	Directory ID for Other Book Delivery - identifies the primary directory code of the book to be delivered. This field is optional and consists of the 6 alpha/numeric characters that identify the YPPA Code.

DIRANO	Number of Other Books for Annual Delivery - identifies the number of other directories to be delivered on an annual basis. This field is optional and consists of 5 numeric characters.
DIRNEWO	Number of Other Books Delivered on a New Connect - identifies the number of directories to be delivered at the time of a new connect. This field is optional and consists of 5 numeric characters.

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Directory Listing Form

DL FORM DESCRIPTION : The Directory Listing (DL) form will always be associated with the Directory Service Request (DSR) form and may be associated with a Directory Service Caption Request (DSCR) form.

All of the information required for ordering listings is provided for in the various fields contained within the DL form.

This form is prepared by the customer and is submitted to USWC for the processing of directory service requests.

A copy of the DL form and additional information regarding the DL form entries may be found in Bellcore SR STS-471102.

The following field names and field descriptions are presented in the order in which they appear on the DL form.

DL FORM ENTRIES Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service. This field is required on all supplements when furnished by USWC, otherwise it is

	optional. The field consists of 18 alpha/numeric characters.
ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listings. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
SC1	Service Center 1 - identifies the USWC service center. This field is required when it is a stand alone request or if different from the SC field on the LSR form. The field consists of the 4 alpha characters "USWD".
SC2	Service Center 2 - identifies the USWC service center for processing directory assistance (DA) listings. This field is required when the SC2 field is different from the SC1 field, otherwise it is optional. The field consists of 4 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.

DL FORM ENTRIES Listing Control Section:

FIELD NAME:	DESCRIPTION:
LACT	Listing Activity Indicator - identifies the type of activity involved in this listing request. This field is required and consists of a single alpha character. Valid entries are: N = New listing D = Delete listing I = Change listing O = Change listing Z = No change to listing
ALI	Alpha/Numeric Listing Identifier Code - identifier assigned to each listing to uniquely identify a listing for an ATN from a Customer. This field is required and consists of 3 alpha/numeric characters.

RTY	Record Type - identifies the type of listing being submitted with respect to pricing and tariffs. This field is required and consists of 3 alpha characters. Valid entries are: 1st Character (area): F = Foreign L = Local 2nd & 3rd Characters (type): AC = Alternate call listing AL = Additional listing AM = Additional main AS = Answer service AU = Alternate user listing CM = Client main CR = Cross reference listing EN = Enterprise ET = Enterprise EU = Enterprise EV = Enterprise ML = Main listing SL = Secondary listing XL = Extra listing line
LTY	Listing Type - identifies the type of listing being submitted with respect to publication and directory assistance (DA) appearance rules. This field is required and consists of 1 numeric character. Valid entries are: 1 = Listed 2 = Non-listed 3 = Non Pub 4 = Non Pub Emergency 5 = Non Pub Special 6 = Omit DA

TT	TTY or TDD Indicator - identifies that this listing should have special TTY or TDD phrase included. This field is optional and consists of one numeric character. Valid entries are: 1 = TDD only 2 = TTY only 3 = TTY-TDD only 4 = TDD-TTY only 5 = Voice and TTY 6 = Voice and TDD 7 = TTY and voice 8 = TDD and voice
STYC	Style Code - identifies whether the listing is a straight line, caption header, etc. This field is required and consists of 2 alpha characters. Valid entries are: CH = Caption header CI = Caption indent CS = Caption sub header SH = SLU header SI = SLU indent SL = Straight line

TOA	Type of Account - identifies the type of account for this listing. The type of account determines placement in split directories and directory assistance. This field is required and consists of 2 alpha characters. Valid entries are: B = Business C = County Government F = Federal Government L = Local or City Government R = Residence S = State Government BP = Business class, person name MI = Military PO = Port RE = Regional RP = Residence class, business name SC = School SD = Special District TR = Tribal TW = Township
WPP	White Page Products - identifies information about the White Page Products, Signature Listings, Personality Logo and Lines of Distinction. This field is optional and consists of 5 alpha/numeric characters.
DOI	Degree of Indent - identifies the degree of indentation for this listing. This field is required and consists of one numeric character. Valid entries are 0-7.

DL FORM ENTRIES Listing Instruction Section:

FIELD NAME:	DESCRIPTION:

LTN	Listing Telephone Number - identifies the telephone to be placed in the directory and quoted in Directory assistance (DA) as appropriate, based on the LTY, RTY, and STYC field entries. This field is required when the NSTN field is not populated and there is to be a published or non pub telephone number. Otherwise the field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
NSTN	Non Standard Telephone Number - identifies a telephone number which is not in the standard North American Numbering Plan format, e.g., vanity numbers, Enterprise, or 911. This field is required when the LTN field is not populated and there is to be a published or non pub telephone number. Otherwise the field is optional and consists of 20 alpha/numeric characters.
OMTN	Omit TN - indicates whether or not a telephone number is to be omitted from the listing. This field is optional and consists of 1 alpha character.

LEX	Local Exchange - indicates the USWC local NPA and NXX. This field is optional and consists of 7 numeric characters (including 1 pre-printed hyphen).
LNLN	Listed Name Last - indicates the first word for business listings or the complete last name for residence listings. This field is required and consists of 50 alpha/numeric characters.
LNFN	Listed Name First - indicates all except the first word for business listings or all of the first name or names and middle name or initials for residence listings. This field is optional and consists of 100 alpha/numeric characters.
LNPL	Listed Name Placement - identifies the placement of the listing based on the LNLN field. This field is optional and consists of one alpha character. Valid entry is "L" = letter placement.
PLA	Place Listing As - identifies the special filing words that should be used instead of the listed name if the customer wishes to override the normal sequencing. This field is optional and consists of 80 alpha/numeric characters.

DES	Designation - indicates the professional designation phrase of a business listing. This field is optional and consists of 25 alpha/numeric characters.
TL	Title of Lineage - indicates a phrase used to designate lineage of a listed person, e.g. Jr, Sr, III, etc. This field is optional and consists of 12 alpha/numeric characters.
TITLE1	Title of Address 1 - indicates a phrase to address a listed person, e.g. Mr, Dr, etc. This field is optional and consists of 12 alpha/numeric characters.
TITLE2	Title of Address 2 - indicates additional phrases used to address a listed person, e.g. Ms, Mr, Dr, etc. This field is optional and consists of 12 alpha/numeric characters.
NICK	Nickname - indicates the listed person's nickname. This field is optional and consists of 12 alpha/numeric characters.
LAPR	Listed Address House Prefix - identifies the prefix for the house number of the listed address. This field is optional when the LANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.

LANO	Listed Address House Number - identifies the house number of the listed address. This field is optional when the LASN field is populated; otherwise the field is prohibited. The field consists of 8 alpha/numeric characters.
LASF	Listed Address House Number Suffix - identifies the suffix for the house number of the listed address. This field is optional when the LANO field is populated; otherwise the field is prohibited. The field consists of 5 alpha/numeric characters.
LASD	Listed Address Street Directional - identifies the street directional for the listed address. This field is optional when the LASN field is populated; otherwise the field is prohibited. The field consists of 2 alpha/numeric characters.
LASN	Listed Address Street Name - identifies the street name of the listed address. This field is optional and consists of 50 alpha/numeric characters.

LATH	Listed Address Thoroughfare - identifies the thoroughfare portion of the street name of the listed address. This field is optional when the LASN field is populated; otherwise the field is prohibited. The field consists of 10 alpha/numeric characters.
LASS	Listed Address Street Suffix - identifies the suffix to the street name of the listed address. This field is optional when the LASN field is populated; otherwise the field is prohibited. The field consists of 4 alpha/numeric characters.
LALO	Listed Address Location - identifies additional location information about the listed address such as an apartment number, suite, floor, etc. This field is optional and consists of 30 alpha/numeric characters.
LALOC	Listed Address Locality - identifies the locality or community to be listed. This field is optional and consists of 35 alpha/numeric characters.
LAST	Listed Address State/Province - identifies the state/province to be listed. This field is optional and consists of 2 alpha characters.

LAZC	Listed Address Zip Code - identifies the zip code or postal code of the listed address. This field is optional and consists of 12 alpha/numeric characters.
TNTL	TN Text Left - identifies the special telephone text phrases, i.e., dialing instructions. This field is prohibited when the OMTN field is "O", otherwise it is optional. The field consists of 50 alpha/numeric characters.
TNTC	TN Text Centered - identifies the special telephone text phrases, i.e., dialing instructions. This field is prohibited when the OMTN field is "O", otherwise it is optional. The field consists of 50 alpha/numeric characters.
TNTR	TN Text Right - identifies the special telephone text phrases, i.e., dialing instructions. This field is prohibited when the OMTN field is "O", otherwise it is optional. The field consists of 50 alpha/numeric characters.

CR	Cross Reference - identifies the text portion of a cross reference listing or tie back text. This field is required when the RTY field is "CR". Otherwise the field is optional and consists of 50 alpha/numeric characters.
ITEXT	Indent Text - identifies the text that will appear on a caption sub-header or caption/SLU indent along with the address and telephone number on an indent. This is text for the listing being requested. This field is required when an indent has text other than address and/or telephone number. Otherwise the field is optional and consists of 50 alpha/numeric characters.
LOI	Line of Information - identifies the descriptive or informative text that will appear in the directory to assist the end user. This field is optional and consists of 100 alpha/numeric characters.
YPH	Yellow Page Heading Code - identifies the heading under which a business listing will appear in the Yellow Pages. This field is required on business listings when the YPHV field is not populated. Otherwise the field is optional and consists of 8 alpha/numeric characters.

YPHV	Yellow Page Heading Verbiage - identifies the heading under which a business listing will appear in the Yellow Pages. This field is required on business listings when the YPH field is not populated. Otherwise the field is optional and consists of 200 alpha/numeric characters.

DL FORM ENTRIES Listing Indicators Section:

FIELD NAME:	DESCRIPTION:
ADI	Address Indicator - indicates that the address information should not be shown in DA or the directory. This field is required when the address is not to be in DA and the directory, otherwise it is prohibited. The field consists of one alpha character ("O" = Omit).
DIRIDL	Directory Identifier - identifies the directory in which to place the listing. This field is required when the first position of the RTY field is "F". Otherwise the field is optional and consists of the 6 alpha/numeric characters that identify the YPPA Code.

DIRSUB	Directory Subsection - identifies the subsection of a directory in which to place the listing. This field is required when the valid entry in the DIRIDL field specifies a sectionalized book. Otherwise the field is optional and consists of the 14 alpha/numeric characters.
LID1	Scoping Zip - identifies the zip code or postal code which will aid in identifying the directory in which to place the listing. This field is optional and consists of 12 alpha/numeric characters.
LID2	Additional Scoping Information - identifies additional scoping information required to identify the directory in which to place the listing. This field is optional and consists of 10 alpha/numeric characters.
ADV	Advance to Directory Indicator - indicates a request that the listing be advanced to the directory publisher in order to meet a book close. This field is optional and consists of one alpha character ("Y").
STR	Street Address Directory - indicates whether the listing is to be omitted from the street address (reverse) directory. This field is optional and consists of one alpha character ("O" = Omit).

DML	Direct Mail List - indicates whether this listing is to be omitted from any direct mail lists. This field is optional and consists of one alpha character ("O" = Omit).
NOSL	No Solicitation Indicator - indicates that this listing is not to be used for solicitation purposes. This field is optional and consists of one alpha character ("Y").
OMSD	Omit From Secondary Directory - indicates which secondary directory or directories this listing is not to appear. This field is optional and consists of 83 alpha/numeric characters. Valid entries = YPPA code.
TMKT	Telemarketing - indicates that the listing is to be omitted from any telemarketing lists. This field is optional and consists of one alpha character ("O" = Omit).
DLNM	Dual Name Listing - indicates that the listing contains multiple first names (e.g., Smith Betty & John) and that both names should appear in Directory Assistance. This field is required when the first name field is a dual name, otherwise it is prohibited. The field consists of one alpha character ("Y").

BRO	Business/Residence Placement Override - identifies an override of the normal placement of business or residence listings. This field is optional and consists of one alpha character. Valid entries are: A = Place listing in both business and residence sections in directory and DA. B = Place listing only in the business section in directory and DA. R = Place listing only in the residence section in directory and DA.
PROF	Professional Identifier - indicates that this is a professional listing. This field is optional and consists of one alpha character ("Y").
REMARKS	Identifies remarks pertaining to the listing on this service request. This field is optional and may consist of up to 160 alpha/numeric characters

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DIRECTORY SERVICE CAPTION REQUEST FORM

DSCR FORM DESCRIPTION

The Directory Service Caption Request (DSCR) form will always be associated with the Directory Service Request (DSR) form and Directory Listing (DL) forms.

All of the information required for captions and degree of indent level detail is provided for in the various fields contained within the DSCR form.

This form is prepared by the customer and is submitted to USWC for the processing of directory service requests.
A copy of the DSCR form and additional information regarding the DSCR form entries may be found in Bellcore SR STS-471103.

The following field names and field descriptions are presented in the order in which they appear on the DSCR form.

DSCR FORM ENTRIES Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service.
ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listings. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
SC1	Service Center 1 - identifies the USWC service center. This field is required when it is a stand alone request or if different from the SC field on the LSR form. The field consists of the 4 alpha characters

	"USWD".
SC2	Service Center 2 - identifies the USWC service center for processing directory assistance (DA) listings. This field is required when the SC2 field is different from the SC1 field, otherwise it is optional. The field consists of 4 alpha/numeric characters.
ALIR	All Reference - uniquely identifies the listing associated with this caption set. This field is required and consists of 3 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.

DSCR FORM ENTRIES ALIR Sequencing Section:

FIELD NAME:	**DESCRIPTION:**
SO	Sequence Override - identifies that normal alphabetic sequencing in captions should be overridden for this listing. This field is optional and consists of one alpha character. Valid entries are: A = File after F = File first
SEQTEXT	Sequence Text - identifies indent text that a 'sequence override after' should follow. This field is required when the SO field is "A" and the referenced indent has text. Otherwise the field is optional and consists of 85 alpha/numeric characters.
SEQADDR	Sequence Address - identifies the address text of an indent that a 'sequence override after' should follow. This field is required when the SO field is "A" and the referenced indent has an address. Otherwise the field is optional and consists of 100 alpha/numeric characters.
SEQTN	Sequence Telephone Number - identifies the telephone number of an indent line that a 'sequence override after' should follow. This field is required when the SO field is "A" and the referenced indent has a listed telephone number. Otherwise the field

is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).

DSCR FORM ENTRIES Indent Information Section - Level 0:

FIELD NAME:	**DESCRIPTION:**
LVL	Level of Indent - indicates the degree of indent requested by the customer for this caption listing. This field is required and consists of one numeric character. Valid entries are 0-6.
SM	Sequence Merge - identifies that this caption is to merge with other caption listings. This field is required and consists of one alpha character. Valid entries are: Y = Merge across customers N = Do not merge between customers
HS	Header Status - identifies whether this is a new header or a recap of an existing header supplied to define placement within the caption set. This field is required when the STYC field on the DL form is "CI", "CS", or "CH". Otherwise this field is optional and consists of one alpha character. Valid entries are: E = Existing N = New
HTN	Header Telephone Number - identifies the telephone number on Level 0 (caption header or SLU header). This field is optional and consists of 12 numeric characters (including 2 pre-printed hyphens).
HNSTN	Header Non Standard Telephone Number - identifies a non standard telephone number on caption header or SLU header. This field is optional and consists of 20 alpha/numeric characters.
HADDR	Header Address - identifies the caption or SLU header address as it appears in the directory. This field is optional and consists of 100 alpha/numeric characters.

DSCR FORM Indent Information Section - Levels 1-6:
ENTRIES

FIELD NAME:	**DESCRIPTION:**
INS1	Indent Level 1 Status - identifies whether this is a new level 1 or a recap of an existing level 1 supplied to define placement within the caption set. This field is required when the DOI field on the DL form is greater than 1 and optional when the DOI field on the DL form is equal to 1. Otherwise the field is prohibited. The field consists of 1 alpha characters. Valid entries are: E = Existing indent or sub-cap N = New sub-cap
SO1	Sequence Override Level 1 - identifies whether to override normal sequencing in caption. This field is optional when the INS1 field is "N", otherwise it is prohibited. The field consists of one alpha character. Valid entries are: A = File after F = File first
SEQTEXT1	Sequence Text Level 1 - identifies indent text that a 'sequence override after' should follow. This field is required when the SO1 field is "A", the INS1 field is "N" and the referenced indent has text. Otherwise the field is prohibited. The field consists of 85 alpha/numeric characters.
SEQADDR1	Sequence Address Level 1 - identifies the address text of an indent that a 'sequence override after' should follow. This field is required when the SO1 field is "A", the INS1 field is "N" and the referenced indent has an address. Otherwise the field is prohibited. The field consists of 100 alpha/numeric characters.
SEQTN1	Sequence Telephone Number Level 1 - identifies the telephone number of an indent line that a 'sequence override after' should follow. This field is required when the SO1 field is "A", the INS1 field is "N" and the

	referenced indent has a telephone number. Otherwise the field is prohibited. The field consists of 12 numeric characters (including 2 pre-printed hyphens).
INTN	Indent Level Telephone Number - identifies the telephone number on the prior level indent. This field is required when the recapped indent has a listed telephone number, otherwise it is prohibited. The field consists of 12 numeric characters (including 2 pre-printed).
INNSTN	Indent Level Non Standard Telephone Number - identifies a non standard telephone number on the prior level indent. This field is required when the recapped indent has a non standard telephone number, otherwise the field is prohibited. The field consists of 20 alpha/numeric characters.
INTEXT	Indent Level Text - identifies the text on the prior level indent. This field is required when the recapped indent has indent text, otherwise it is prohibited. The field consists of 50 alpha/numeric characters.
INADDR	Indent Level Address - identifies the address on the prior level indent. This field is required when the recapped indent has a listed address, otherwise it is prohibited. The field consists of 100 alpha/numeric characters.

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DIRECTORY SERVICE REQUEST COMPLETION NOTICE

DSCN FORM DESCRIPTION

The Directory Service Request Completion Notice (DSCN) provides the customer with the information necessary for control and tracking of the applicable request(s) for directory services. This form provides the customer with administrative and listing appearance information associated with the customer's request.

When a DSCN form is issued in response to a Directory Service Request (DSR), its issuance signifies USWC's good faith effort to provide the listing(s) as ordered by the customer on the matching version of the referenced DSR form.

This form is prepared by USWC and is forwarded to the customer.

A copy of the DSCN form and additional information regarding the DSCN form entries may be found in Bellcore SR STS-471109.

The following field names and field descriptions are presented in the order in which they appear on the DSCN form.

DSCN FORM ENTRIES Administrative Section:

FIELD NAME:	DESCRIPTION:
CCNA	Customer Carrier Name Abbreviation which is equal to the ZCID/RSID assigned by USWC. This field is required and consists of 3 alpha characters.
PON	Purchase order number - identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listings. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
DCNR	Directory Confirmation Type Returned - identifies the type of confirmation response by USWC. This field is required and consists of one alpha character. Valid entries are:

	C = Confirmation W = Confirmation with errors E = Errors only P = USWC initiated
CC	Not currently used by USWC
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may consist of up to 4 numeric characters.
DOR	Date of Receipt - identifies the date this DSR was received. This field is required and consists of 10 alpha/numeric characters (including hyphens).
DLORD	Directory Listing Order Number - identifies the order number assigned by USWC. This field is optional and consists 17 alpha/numeric characters.
DAORD	Related Order Number - identifies the related order number assigned by USWC. This field is optional and consists 17 alpha/numeric characters.
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service. This field is required on all supplements when furnished by USWC, otherwise it is optional. The field consists of 18 alpha/numeric characters.
DD/TSENT	Date/Time Confirmation Sent - identifies the date and time that the completion notice is sent by USWC. This field is required and consists of 17 alpha/numeric characters (including hyphens). Example: 05-22-1996-1115AM
DDA	Date of Availability in DA - identifies the date this listing will appear in or be deleted from Directory Assistance (DA). This field is optional and consists 10 alpha/numeric characters (including 2 hyphens).
DINIT	Directory Request Initiator - identifies the name of the customer's representative or group initiating this directory request. This field is required

	and consists of 15 alpha/numeric characters.
DCHC	Directory Assistance Coordinated Hot Cut - indicates that the customer is requesting near seamless cutover activity. This field is optional and consists of the alpha character "Y".
DADT	Directory Assistance Due Time - identifies directory assistance due time. This field is prohibited when the REQTYP field on the DSR is "G", "H", or "J", otherwise it is optional. The field consists of 6 alpha/numeric characters.
DBI1	Directory Billing Account Number Identifier 1 - identifies the service type of the Directory Billing Account Number (DBAN). This field is required when the DBI1 field on the DSR form is populated, otherwise it is optional. The field consists of one alpha character. Valid entries include: • A = All Services on this Request • C = Directory Assistance Listings and Directory Listings • D = Directory Listings • L = Loop • N = Number Portability • O = Directory Assistance Listings • P = Port • R = Resale • U = Usage • V = Loop with NP and Usage • W = Loop with NP • Z = NP with Usage
DBAN1	Directory Billing Account Number 1 - identifies the billing account to which the recurring and non-recurring charges for this request will be billed. This field is required when the DBI1 field is populated. Otherwise it is optional and consists of 13 alpha/numeric characters.
DBI2	Not currently used by USWC
DBAN2	Not currently used by USWC
DLCONT INIT	Name of Contact at Providing Company - identifies the USWC representative that should be contacted on directory/listing matters. This field is optional and consists of 15 alpha/numeric characters.
DLCONT TN	Directory Contact Telephone Number -

	identifies the telephone number of the USWC directory/listing contact. This field is required when the DLCONT INIT field is populated. Otherwise it is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).
DACONT INIT	Name of Contact at Providing Company - identifies the USWC representative that should be contacted on directory assistance listing matters, if different from the DLCONT INIT. This field is optional and consists of 15 alpha/numeric characters.
DACONT TN	Directory Contact Telephone Number - identifies the telephone number of the USWC directory assistance listing contact. This field is required when the DACONT INIT field is populated. Otherwise it is optional and consists of 17 numeric characters (including 3 pre-printed hyphens).

DSCN FORM ENTRIES Listing Section:

FIELD NAME:	**DESCRIPTION:**
ALI	Alpha/numeric Listing Identifier Code - identifier assigned to each listing to uniquely identify a listing for an ATN from a customer. This field is required and consists of 3 alpha/numeric characters.
LISTTN	Listed Telephone Number - identifies the telephone number to be placed in the directory and quoted in Directory Assistance (DA). This field is required when the STYC field is "SL" or "CL". Otherwise the field is optional and consists of 20 alpha/numeric characters.
LISTTNDA	Listed Telephone Number DA - identifies the telephone number as it will be given in Directory Assistance (DA). This field is required when this entry is different from the published directory. Otherwise the field is optional and consists of 20 alpha/numeric characters.
LACT	Listing Activity Indicator - identifies the type of activity involved in this listing request. This field is required and consists of a single alpha character. Valid entries are:

N = New listing
D = Delete listing
I = Change listing
O = Change listing
Z = No change to listing

LTY

Listing Type - identifies the type of listing provided with respect to publication and directory assistance (DA) appearance rules. This field is required and consists of 1 numeric character. Valid entries are:

1 = Listed
2 = Non-listed
3 = Non Pub
4 = Non Pub Emergency
5 = Non Pub Special
6 = Omit DA

STYC

Style Code - identifies that the listing provided is a straight line, caption header, etc. This field is required and consists of 2 alpha characters. Valid entries are:

CH = Caption header
CI = Caption indent
CS = Caption sub header
SH = SLU header
SI = SLU indent
SL = Straight line

TOA

Type of Account - identifies the type of account for this listing. The type of account determines placement in split directories and directory assistance. This field is required and consists of 2 alpha characters. Valid entries are:

- B = Business
- C = County Government
- F = Federal Government
- L = Local or City Government
- R = Residence
- S = State Government
- BP = Business class, person name
- MI = Military
- PO = Port
- RE = Regional
- RP = Residence class, business name
- SC = School
- SD = Special District
- TR = Tribal

- TW = Township

DOI	Degree of Indent - identifies the degree of indentation for this listing. This field is required and consists of one numeric character. Valid entries are 0-7.
WPP	White Page Products - identifies information about the White Page Products, Signature Listings, Personality Logo and Lines of Distinction. This field is optional and consists of 5 alpha/numeric characters.
BOOK	Book - identifies the directory in which the listing is placed. This field is required when the first position of the RTY field is "F". Otherwise the field is optional and consists of the 6 alpha/numeric character YPPA code.
SECTION	Section - identifies the sub-section of a directory in which the listing is placed. This field is required when the YPPA code in the BOOK field specifies a sectionalized book. Otherwise the field is optional and consists of 14 alpha/numeric characters.

DSCN FORM ENTRIES Listing Appearance Section:

FIELD NAME:	**DESCRIPTION:**
LISTNM	Listed Name - identifies the name contained in the listing. It contains the elements that were received in the LNLN, LNFN, DES, TL, TITLE1, TITLE2, and NICK fields on the directory service request. This field is required and consists of 252 alpha/numeric characters.
LISTADR	Listed Address - identifies the combined elements from the request that provide the address as it will appear in the Directory and/or DA. This field is optional and consists of 150 alpha/numeric characters.
LIST TEXT	Listing Text - identifies the text that appears on this listing other than name and address. This field is required when the STYC field is "CS" or when there is text other than the address and/or telephone number. The field consists of 150 alpha/numeric characters.
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify

other data on this form. This field is optional and may consist of up to 160 alpha/numeric characters.

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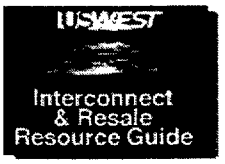

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DIRECTORY SERVICE REQUEST ERROR DETAIL FORM

DSRED FORM DESCRIPTION

The Directory Service Request Error Detail (DSRED) provides the customer with the error detail information necessary for control, tracking, and correction of errors from the applicable request(s) for directory services. This form provides the customer with administrative and listing appearance information associated with the customer's request.

This form is prepared by USWC and is forwarded to the customer. It is returned as a result of a Directory Service Request (DSR) form requesting listing(s). The DSRED form will be returned if the requester specifies that the confirmation should contain error detail. The form may be initiated at any time by USWC when errors are encountered in processing a directory listing request.

A copy of the DSRED form and additional information regarding the DSRED form entries may be found in Bellcore SR STS-471110.

The following field names and field descriptions are presented in the order in which they appear on the DSRED form.

DSRED FORM ENTRIES Administrative Section:

FIELD NAME:	DESCRIPTION:
PON	Purchase order number -

	identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement. This field is required when this is a response to a DSR. Otherwise the field is optional and consists of up to 16 alpha/numeric characters.
VER	Not currently used by USWC
DSR NO	Directory Service Request Number - identifies the number that may be generated by USWC mechanized systems, pre-assigned to the customer by USWC or manually assigned by USWC to identify a customer's request for service. This field is required on all supplements when furnished by USWC, otherwise it is optional. The field consists of 18 alpha/numeric characters.
ATN	Account Telephone Number - identifies the end user main telephone number used to associate the main listing with any additional listings. This field is required and consists of 12 numeric characters (including 2 pre-printed hyphens).
SC1	Service Center 1 - identifies the USWC service center. This field is required when it is a stand alone request or if different from the SC field on the LSR form. The field consists of the 4 alpha characters "USWD".
SC2	Service Center 2 - identifies the USWC service center for processing directory assistance (DA) listings. This field is required when the SC2 field is different from the SC1 field, otherwise it is optional. The field consists of 4 alpha/numeric characters.
PG_ OF_	Identifies the page number and total number of pages contained in this request. This field is required and may

consist of up to 4 numeric characters.

DSRED FORM ENTRIES Error Detail Section:

FIELD NAME:	**DESCRIPTION:**
ALI	Alpha/numeric Listing Identifier Code - identifier assigned to each listing to uniquely identify a listing for an ATN from a customer. This field is required when the ALI field on the DL form is populated. Otherwise the field is optional and consists of 3 alpha/numeric characters.
LISTTN	Listed Telephone Number - identifies the telephone number to be placed in the directory and quoted in Directory Assistance (DA). This field is optional and consists of 20 alpha/numeric characters.
LECODE	Listing Error Code - identifies an error condition discovered while processing this listing request. This information may be provided based upon the DRTR field on the DSR form or it may be USWC initiated. This field is required and consists of 6 alpha/numeric characters.
REMARKS	Identifies a free flowing field which can be used to expand upon and clarify other data on this form. This field is optional and may consist of up to 160 alpha/numeric characters.

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DIRECTORY ASSISTANCE/WHITE PAGE LISTINGS ORDER REQUEST FORM

DA/WP LISTINGS ORDER REQUEST FORM DESCRIPTION

The Directory Assistance/White Page Listings Order Request (DA/WPLO) form will be always be associated with the Directory Service Request (DSR) form and the applicable directory specific form(s), e.g. Directory Listing form, Directory Service Caption Request form, etc.

This form is prepared by the customer and is submitted to the Interconnect Service Center (ICS) for the processing of directory service requests. All fields for directory listings and captions are supplied in upper and lower case unless otherwise specified.

Copies of the Directory Assistance/White Page Listings Order Request form are obtained from your USWC Directory Listings contact.

A copy of the Directory Assistance/White Page Listings Order Request form is located on the following page. This form has been noted with the corresponding item numbers of the field names and field descriptions which are provided later in this section in the order in which they appear on the Directory Assistance/White Page Listings Order Request form.

U S WEST Communications
Directory Assistance/White Page Listings Order Request Form
(ONE LISTING PER ORDER)
Date _____(1)_____

- Resale Frame Relay Form
- Local Service Request Confirmation Form
- Directory Service Request Form
- Directory Listing Form
- Directory Service Caption Request Form
- Directory Service Request Completion Notice
- Directory Service Request Error Detail Form
- Directory Assistance/White Page Listings Order Request Form
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CLEC Name (2)	*This order request form may be used as a FAX*
CIC Code: (3) ACNA Code: (4)	FAX To: ( ) (8) (USWC)
Contact Name: (5)	Telephone Number: ( ) (9)
Telephone Number: ( ) (6)	FAX Number: ( ) (10)
FAX Number: ( ) (7)	
HEADER RECORD DATA	A-1 RECORD DATA
Record Group Type (11) (Refer to Section 2.1) ■ "S" - Straight Line ■ "C" - Caption Data Source Code (12) (Refer to Section 3.4) ■ "C" - Central ■ "E" - Eastern ■ "W"- Western	Completion Date (13) (Date listing is effective. Future dates are not accepted.) Activity Type: ■ "I"-Insert ■ "C"-Change ■ "D"-Delete (14) Class of Service: ■ "B"-Business (15) ■ "R"-Residential Order Number (16).....(A unique 5 digit number)
C RECORD DATA	
■ IN Listing	■ OUT Listing
Telephone Number: (17)	Telephone Number: (23)
FID: (18) Name: (19) (Valid Listed Name FID-LN,AC,AL,CR,FL,NLST, NP-Refer to Section 5.3.2)	FID: (24) Name: (25) (Valid Listed Name FID-LN,AC,AL,CR,FL,NLST, NP-Refer to Section 5.3.2)
Address: (20)	Address: (26)
FDN: (21) (Refer to Section 8.3)	FDN: (27) (Refer to Section 8.3)
Notes:_____(22)_____	Notes:_____(28)_____
USWC Use Only (29) LSS Analyst: LSS Updated: _____	
NOTES:	

DA/WPLO FORM ENTRIES

Administrative Section:

ITEM #	FIELD NAME:	DESCRIPTION:
1	Date	Date form is prepared.

		Format is mm/dd/yy.
2	CLEC	Your company name.
3	CIC Code	Company Identification Code. May be 3 or 4 digits.
4	ACNA	Access Carrier Name Abbreviation code
5	Contact Name	Name of CLEC person issuing the order
6	Phone Number	Telephone number of CLEC person issuing the order
7	FAX Number	Fax number of CLEC person issuing the order
8	FAX To	LSS analyst name
9	Telephone Number	Telephone number of LSS analyst
10	FAX Number	FAX number of LSS analyst

DA/WPLO FORM ENTRIES

Header Record Data Section:

ITEM #	FIELD NAME:	DESCRIPTION:
11	Record Group Type	This field identifies the type of listing. Mark one box.
12	Data Source Code	This field identifies the USWC area that the listing should appear. Mark one box.

DA/WPLO FORM ENTRIES

A-1 Record Data Section:

ITEM #	FIELD NAME:	DESCRIPTION:
13	Completion Date	The date when the listing is effective. Future dates will not be accepted.
14	Activity Type	This field identifies the activity type on the

		listing. Mark one box.
15	Class of Service	Identify if the service is business or residential. Mark one box.
16	Order Number	Enter a unique five digit number. If you do not use order numbers, you may use a simple sequence of numbers, e.g. I00001, C00002, D00003.

DA/WPLO FORM ENTRIES

C Record Data/IN Listing Section:

This section identifies whether the listing is to be inserted as new or is the "changed to" listing.

ITEM #	FIELD NAME:	DESCRIPTION:
17	Telephone Number	Enter the new or changed telephone number.
18	FID	Field Identifier - identifies the type of listing being inserted or changed.
19	Name	Enter the name of the new or changed listing exactly as it should appear in the directory and DA.
20	Address	Enter the address of the new/changed listing exactly as it should appear in the directory and DA.
21	FDN	Fixed Directory Name - identifies the area in which the listing should appear in the directory and DA.
22	Notes	Optional field which may be used for miscellaneous information.

DA/WPLO FORM ENTRIES
C Record Data/OUT Listing Section:

This section identifies whether the listing is to be deleted or is the "changed from" listing.

ITEM #	FIELD NAME:	DESCRIPTION:
23	Telephone Number	Enter the deleted or "changed from" telephone number.
24	FID	Field Identifier - identifies the type of listing being deleted or changed.
25	Name	Enter the name of the deleted or "changed from" listing exactly as it should appear in the directory and DA.
26	Address	Enter the address of the deleted or "changed from" listing exactly as it should appear in the directory and DA.
27	FDN	Fixed Directory Name - identifies the area in which the listing should appear in the directory and DA.
28	Notes	Optional field which may be used for miscellaneous information.

DA/WPLO FORM ENTRIES
USWC Use Only Section:

29	This section is reserved for use by U S WEST only.

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FORM PREPARATION BY SERVICE REQUEST

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FORM PREPARATION

The following pages provide guidelines to assist the customer in determining which service request forms are required for several of the differing types of service requests. For example, service requests for a:

New connect
Conversion as is
Disconnect
To/From (T&F)

In addition, the fields on each form that must be populated to process a particular type of service request are also defined.

NEW CONNECT FORM PREPARATION The forms required for a new connect service request are:

Local Service Request (LSR) form
End User Information (EU) form
Resale Service form
Directory Listing form

REQUIRED FIELDS

The required fields within the designated sections of each form that must be included in a new connect service request are provided below.

LSR FORM

Administration Section:

CCNA, PON,
AN/ATN*, PG_OF,
D/TSENT, DDD,
REQTYP, ACT*,
AGAUTH, DATED,
AUTHNM
*Populate the AN or ATN field with "N" to indicate a new account; ACT field is "N".
Bill Section:
BAN1
Contact Section:
INIT, TEL NO, FAX NO, STREET, CITY, STATE, ZIP CODE

EU FORM

Administration Section:

PON, AN/ATN*,
PG_OF
*Populate the AN or ATN field with "N" to

indicate a new account.
Location and Access Section:
NAME, SASN, CITY, STATE, ZIP CODE
Bill Section
EAN field may be populated to reference other existing service of end user.

RESALE SERVICE FORM

Administration Section:

PON, AN or ATN, RSQTY, PG_OF
Service Details Section:
REF NUM, LNA, TN, PIC, LPIC, FA, FEATURE, FEATURE DETAIL
Note: Additional fields may be required depending on the order details.

DIRECTORY LISTING FORM

Administration Section:

PON, ATN, PG_OF
Listing Control Section
LACT, ALI, RTY, LTY, STYC, TOA, DOI
Listing Instruction Section
LTN, LNLN, LASN
Note: Some fields may be conditional depending on the type of listing, e.g. non-published versus published.

CONVERSION "AS IS" FORM PREPARATION

The forms required for a conversion "as is" service request are:

Local Service Request (LSR) form
End User Information (EU) form
Resale Service form

REQUIRED FIELDS

The required fields within the designated sections of each form that must be included in a conversion "as is" service request are provided below.

LSR FORM	Administration Section: CCNA, PON, PG_OF, D/TSENT, DDD, REQTYP, ACT*, AGAUTH, DATED, AUTHNM * Populate the ACT field with "W" for conversion as is or "V" for conversion as is to a new LSP. Bill Section: BAN1 Contact Section: INIT, TEL NO, FAX NO, STREET, CITY, STATE, ZIP CODE
EU FORM	Administration Section: PON, PG_OF Location and Access Section: NAME, SASN, CITY, STATE, ZIP CODE Bill Section EAN, EATN
RESALE SERVICE FORM	Administration Section: PON, RSQTY, PG_OF Service Details Section: REF NUM, LNA, TN, PIC, LPIC **Note:** Additional fields may be required depending on the order details.
DIRECTORY LISTING FORM	Not required if no change in listing is required for conversion "as is".
DISCONNECT FORM PREPARATION	The forms required for a disconnect service request are: Local Service Request (LSR) form End User Information (EU) form Resale Service form Directory Listing form
REQUIRED FIELDS	Administration Section: CCNA, PON, PG_OF,

	D/TSENT, DDD, REQTYP, ACT*, AGAUTH, DATED, AUTHNM * Populate the ACT field with "D" to indicate a disconnect. Bill Section: BAN1 Contact Section: INIT, TEL NO, FAX NO, STREET, CITY, STATE, ZIP CODE
EU FORM	Administration Section: PON, PG_OF Location and Access Section: NAME, SASN, CITY, STATE, ZIP CODE Bill Section EAN and EATN fields must be populated on all conversion requests. Disconnect Information Section: This section must be completed with requests to disconnect main telephone numbers and/or account numbers which involve number portability.
RESALE SERVICE FORM	Administration Section: PON, RSQTY, PG_OF Service Details Section: REF NUM, LNA, TN, PIC, LPIC **Note:** Additional fields may be required to disconnect service on a specific line basis. Refer to LSOG, Section SR STS-471076 for complete instructions.
T&F ORDER FORM PREPARATION	The forms required for a T&F service request are: Local Service Request (LSR) form End User Information (EU) form

	Resale Service form Directory Listing form
REQUIRED FIELD	The required fields within the designated sections of each form that must be included in a T&F service request are provided below
LSR FORM	Administration Section: CCNA, PON, PG_OF, D/TSENT, DDD, DDDO, REQTYP, ACT*, AGAUTH, DATED, AUTHNM * Populate the ACT field with "T". Bill Section: BAN1 Contact Section: INIT, TEL NO, FAX NO, STREET, CITY, STATE, ZIP CODE
EU FORM	Administration Section: PON, PG_OF Location and Access Section: NAME, SASN, CITY, STATE, ZIP CODE **Note:** The information entered should be for the new location.
RESALE SERVICE FORM	Administration Section: PON, RSQTY, PG_OF Service Details Section: REF NUM, LNA, TN, PIC, LPIC **Note:** Additional fields may be required depending on the order details.
DIRECTORY LISTING FORM	This form may be completed if a listing change or deletion is desired. Administration Section: PON, ATN, PG_OF Listing Control Section LACT, ALI, RTY, LTY, STYC, TOA, DOI Listing Instruction

Section
LTN, LNLN, LASN
Note: Some fields may be conditional depending on the type of listing, e.g. non-published versus published.

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Production Readiness Verification

U S WEST Information Technologies

Local Service Provider
Implementation & Deployment

The purpose of this document is to define the approach that the Local Service Provider Implementation and Deployment team (I&D) uses for Production Readiness Verification (PRV) when working to implement the Local Service Provider's (LSP's) services as they relate to Information Technology. This document defines the process, but it is also a "work in progress" and portions of it will likely change as the Production Readiness Verification effort progresses. This document defines the PRV scope for resale products only, and will be augmented to include wholesale products and services as the methodology is solidified. The PRV process document will be shared with all Local Service Providers, Account Executives, and affected U S WEST staff.

This document is comprised of the following sections:

1. Overview of LSP Production Readiness Verification
2. Roles and Responsibilities
3. Production Readiness Verification Entry Criteria
4. Flow of LSP Production Readiness Verification
5. Production Readiness Verification Exit Criteria
6. Environment and Production Readiness Verification Data
7. Assumptions and Dependencies
8. Appendices

1. OVERVIEW OF PRODUCTION READINESS VERIFICATION

Production Readiness Verification is defined as a trial of business capability in a production environment. The primary objective of PRV is to provide a means for the LSP to confirm business functionality. The goal is to ensure the business readiness of the LSP to provide resale service to their clients. The I&D team member serves as a project manager for the LSP's PRV and coordinates the efforts of all involved with the PRV effort. The mission of the PRV function is limited to a broad look at basic business capability. The PRV is *not* designed to be a scenario that verifies every potential business capability. Instead, the PRV is a small number of representative cases that will be used to demonstrate a basic level of business capability for the LSP.

Before the actual PRV can be executed, the I&D Project Manager and Account Executive are responsible for several different activities. Throughout the process, the I&D Project Manager and Account Executive also follow up on issues and help to determine resolution of outstanding problems.

The LSP Production Readiness Verification process is comprised of confirmation of business functionality in the following areas:

- Input method, whether electronic (IMA, EDI, or EXACT interface) or paper (fax)
- Firm Order Confirmation (FOC) or Local Service Request Commitment (LSRC)
- Completion Report
- Loss Report
- Post to U S WEST billing system
- Usage records
- U S WEST bill verification

Production Readiness Verification adds value to the LSP implementation process by demonstrating a basic level of business readiness prior to the LSP entering a fully operational mode of operation. The results of a successfully executed PRV will help the LSP understand how to write service orders to get the desired results and will substantiate whether the LSP is ready for business. By utilizing the PRV process, the LSP will be well informed and familiar with all U S WEST reports and will know what to expect from the Resale/Interconnect Business.

2. ROLES AND RESPONSIBILITIES

2.1 Implementation & Deployment Project Manager

The I&D Project Manager's responsibility is to work closely with the Account Executive and the LSP, with the intent to provide a sound knowledge of what the LSP can expect from Information Technologies within U S WEST's production environment. The I&D Project Manager may function as a liaison between the Account Executive, the LSP, and any necessary U S WEST staff involvement regarding Information Technology issues. After the PRV is complete, the Account Executive and the LSP will be able to make a well-informed decision on whether any additional readiness verification or preparation would be beneficial prior to entering their full operational mode.

2.2 Account Executive

The Account Executive's responsibility is to work closely with the LSP and the I&D Project Manager during the PRV process. The Account Executive has overall responsibility for full implementation of the LSP's contractual agreement with U S WEST. The Account Executive may

function as a liaison between the LSP and any necessary U S WEST staff involvement outside of Information Technologies. After the PRV is complete, the Account Executive and the LSP will be able to make a well-informed decision on whether any additional readiness verification or preparation would be beneficial prior to entering their full operation mode.

2.3 Local Service Provider

The Local Service Provider has the leading role in the in the Production Readiness Verification. The LSP must be prepared to work closely with Account Executive and the I&D Project Manager in all aspects so that the PRV can be successful. The LSP has the responsibility to provide test accounts, data verification, system connections, and staff availability to ensure that all the production processes are being monitored and authenticated. After the PRV is complete, the LSP will be able to make a well-informed decision on whether any additional readiness verification or preparation would be beneficial prior to entering their full operational mode.

3. PRODUCTION READINESS VERIFICATION ENTRY CRITERIA

Prior to beginning the Production Readiness Verification process, the I&D Project Manager must verify internal U S WEST information (refer to Section 3.1), the Account Executive must verify LSP account-specific information (refer to Section 3.2), and the LSP must provide information to the Account Executive and the I&D Project Manager (refer to Section 3.3).

3.1 I&D Project Manager Production Readiness Verification Checklist

The I&D Project Manager verifies that specific criteria have been met before initiating the PRV. These criteria include:

- The LSP should have a copy of the *Interconnect and Resale Resource Guide (IRGG)*. If the LSP does not have the *IRRG* at their disposal, they need to acquire and read this documentation. The *IRRG* can be found at the following WEB site:

http://www.uswest.com/com/customers/carrier

- Verify that all U S WEST Legacy system table work is complete to allow the LSP to submit Local Service Requests (LSRs).
- Verify that the LSP has been notified of their Reseller ID (RSID).
- Verify that the Summary Billing Account(s) have been established in U S WEST's Legacy Systems.
- Verify that the LSP has been notified of their Summary Billing Account Numbers.
- Verify that the Usage records, CRIS Bill, and Loss and Completion Reports have been established. This includes NDM connectivity and initial receipt of output.
- If the LSP is using the Interconnect Mediated Access (IMA) product for service order entry, the LSP should have IMA documentation, SecurID access to the IMA product via the U S WEST firewall, as well as IMA training provided by U S WEST. The I&D Project Manager should verify that this information is in place and training has taken place.
- If the LSP is using an electronic data interchange (EDI) methodology for service order entry, the I&D Project Manager should verify that the LSP has obtained the *EDI Implementation Guide* and the *EDI Disclosure Document*, both available from U S WEST. In addition, all EDI connectivity and preliminary testing must be complete with U S WEST prior to beginning a PRV.
- If the LSP is not using IMA or EDI, the LSP must have the appropriate order billing forum (OBF) ordering forms, which can be procured from ATIS (formerly Bellcore). Please see Appendix H for additional information. The I&D Project Manager should verify that this information is in place.
- Ascertain LSP interest in PRV.
- Work with LSP to establish dates, timeframes, and telephone numbers for PRV.

3.2 Account Executive Production Readiness Verification Checklist

The Account Executive verifies that the following specific criteria have been met before initiating the PRV. The Account Executive may need to directly contact specific U S WEST staff to ensure that the entrance criteria have been met. The specific criteria include:

- U S WEST Communication New Customer Questionnaire must be submitted to the Account Executive and all information necessary for implementation of inputs and outputs must be complete.
- Obtain LSP agreement and commitment for PRV.

3.3 Local Service Provider Production Readiness Verification Checklist

The Local Service Provider is the primary participant in the PRV. In order for the PRV to run smoothly and all necessary parties to be notified, the LSP is responsible for completing the following:

- LSP must complete a *U S WEST COMMUNICATIONS NEW CUSTOMER QUESTIONNAIRE* and submit it to their Account Executive.
- LSP should identify PRV accounts. These may be telephone lines at an office owned by the LSP, employees' accounts, or any account which the LSP can monitor. The LSP should use telephone numbers that can be easily verified for all output, including completion and loss reports, usage, and the U S WEST monthly bill. Some LSPs have chosen to put new lines into their offices especially for PRV purposes. (Once the Production Readiness Verification is complete, the accounts must be resold back to U S WEST as LSPs are not allowed to use resold accounts for their own administrative purposes.) Remember - the LSP must have permission to resell this account.
-
- LSP must be eligible to do business in the state where it wants to conduct the PRV. If the LSP is using the Interconnect Mediated Access (IMA) product for service order entry, the LSP should have:
  - ⇒ reviewed the IMA Disclosure Document
  - ⇒ reviewed the IMA documentation
  - ⇒ obtained SecurID access to the IMA product via the U S WEST firewall or established direct T1 connectivity
  - ⇒ attended IMA training provided by U S WEST

If any of these components are missing, please contact your I&D Project Manager for additional information.

- If the LSP is using an electronic data interchange (EDI) methodology for service order entry, the LSP should have received the *EDI Implementation Guide* and the *EDI Disclosure Document*, both available from U S WEST. The LSP must also be working with the EDI Interoperability Testing Manager at U S WEST to insure the exchange of each other's data. Additional information on the EDI process is available from the I&D Project Manager.
- If the LSP is not using IMA or EDI, they should have obtained the appropriate order billing forum (OBF) ordering forms, which can be procured from ATIS (formerly Bellcore). Additional information on the OBF forms can be found at the following WEB site:

http://www.atis.org/atis/clc/obj/obf.docs.html

- LSP should inform their Account Executive and I&D Project Manager that they plan to submit its first service orders. The Production Readiness Verification Agreement form in Appendix J should be used to detail this information.
- The LSP should have connectivity and have tested (see Appendix K for LSP Connectivity Responsibility).

4. FLOW OF I&D PRODUCTION READINESS VERIFICATION

Production Readiness Verification will consist of the following components.

4.1 Dissemination of the PRV information

The I&D Project Manager will ensure that the LSP representative and the Account Executive are given a copy of this document early in the LSP Implementation process. This will allow the LSP and the Account Executive to review the PRV, including the gains that the PRV will provide and the commitment necessary to properly staff the PRV.

4.2 Confirm LSP interest in PRV

The Account Executive and the I&D Project Manager will work with the LSP to answer questions about the PRV and in the decision-making process behind executing a PRV. This is a strongly recommended process that should occur in most every implementation.

4.3 Certify LSP entrance checklist for PRV

The I&D Project Manager, the Account Executive, and the LSP must work together to make sure that all of the entrance criteria for the PRV have been met. If any of the criterion are missing, the PRV may be delayed or postponed.

4.4 Obtain LSP agreement and commitment for PRV

The I&D project Manager, the Account Executive, and the LSP must work together to make sure that the agreement information has been completed by the LSP and submitted to U S WEST.

4.5 Establish tentative dates, timeframes, and telephone numbers for PRV

The I&D Project Manager, the Account Executive, and the LSP must work together to establish the tentative dates and timeframes for the PRV. The LSP is responsible for providing their own telephone numbers for the PRV.

4.6 Notify appropriate U S WEST personnel of the upcoming PRV

The I&D Project Manager will notify the following U S WEST responsibility centers of the upcoming PRV. The Production Verification Agreement document, found in Appendix J and completed by the LSP, will be shared with all involved parties. The interested parties include but are not limited to:

- Interconnect Service Center
- LSP SYSTEMS Help Desk
- Appropriate CRIS billing system staff, based on region
- Loss and Completion Report support staff

4.7 LSP Initiates PRV

When the agreed upon timeframe for the PRV is at hand, the LSP should begin to submit orders on the PRV accounts. The following steps should be taken:

- The LSP submits a plan for the PRV orders, scenarios, telephone numbers, and timeframes.
- The LSP submits their LSR(s) to the Interconnect Services Center (ISC) via FAX, Interconnect Mediated Access (IMA), or IMA Electronic Data Interchange (EDI). As an example, the order could resell existing account(s) to the LSP or create new accounts for the LSP.
- The LSP notifies Account Executive and the LSP I&D Project Manager that a service order has been submitted. The LSP should provide the telephone number and name on the service order, as well as any purchase order number, service order number, or Local Service Request (LSR) number from IMA.
- The Interconnect Service Center (ISC) sends the Local Service Request Confirmation (LSRC), also referred to as a Firm Order Commitment (FOC) to the LSP. This form will confirm that the order has been submitted into U S WEST's Legacy Systems.

- The LSP confirms receipt of LSRC/FOC with the I&D Project Manager.
- The LSP confirms receipt of Completion Report with the I&D Project Manager. The LSP should realize that the completion report indicates that an order has been provisioned but does *not* indicate that an order has posted to billing. See Appendix C for a sample of the Completion Report.
- The LSP confirms that order has posted to the U S WEST billing system. The LSP can confirm this in two ways: 1) The LSP can check the Customer Service Record (CSR) in IMA and make sure that the RSID is posted to the account or 2) call the ISC and ask if the account has an RSID in BOSS/CARS. In order to ensure that the Usage records are received in a timely manner, this should be done before any test calls are made to generate usage.
- Once the order has posted to billing, the LSP will make test calls which generate usage to verify connectivity and content of the Usage File. See appendix D for examples of call activity that will generate usage records at the switch. The LSP should keep a record of the date and type of usage created, and notify the I&D Project Manager that usage has been created for the PRV account. ?? Do we want to include estimated timeframes??
- LSP verifies the receipt of the usage records and should notify the I&D Project Manager that usage records have been received and that the output data has been verified against the LSP's records from the service order submitted.
- The LSP verifies receipt and content of CRIS summary bill and should notify the I&D Project Manager that the CRIS summary bill has been received and the information verified.
- To test the loss report, an account belonging to the LSP should be resold, either back to U S WEST or to another Local Service Provider.
- The LSP verifies the receipt and content of the loss report with the I&D Project Manager. See Appendix C for a sample of the Loss Report.

4.8 Follow up on any identified questions or issues

Any questions that come up during the PRV will be addressed by the I&D Project Manager and the Account Executive. The I&D Project Manager is responsible for issues pertaining to the inputs and outputs necessary to operate the resale business (access to IMA or EDI, usage records, loss and completion reports). The Account Executive is responsible for all other questions. The I&D Project Manager or Account Executive may utilize additional resources within U S WEST, or when appropriate, refer the LSP to the appropriate person for help.

5. CONFIRM LSP EXIT CHECKLIST FROM PRV

Once the PRV is nearing completion, the I&D Project Manager, Account Executive, and LSP representative will review the PRV and make sure that all necessary steps have been completed. These checkpoints include:

- Input for service orders (including IMA, EDI, or OBF fax forms) - All are functional, correct, and the LSP has verified the data.
- FOC/LSRC are correct and LSP has verified the data.
- Completion Reports are correct and LSP has verified the data.
- Loss Reports are correct and LSP has verified the data.
- Usage records are correct and LSP has verified the data.
- All projected PRV scenarios are completed.
- Any remaining open issues are identified with plan of action and the LSPP Systems Help Desk will be notified of any outstanding issues via a PCRM ticket.

6. ASSUMPTIONS AND DEPENDENCIES

The following assumptions and dependencies are presupposed when planning or executing a PRV and could negatively impact the success as well as the value added to the project by the Production Readiness Verification effort:

Assumption/Dependency	Risk if Assumption/Dependency is Incorrect	Mitigation Approach

Assumption/Dependency	Risk if Assumption/Dependency is Incorrect	Mitigation Approach
The number and type of service orders submitted during the PRV may vary. The LSP is responsible for determining which business processes they would like to employ.	Too few orders will not create a true scenario of the LSP's ability to process orders in a production arena. Too many orders may extend the length of the PRV to an unacceptable timeframe.	I&D will provide a list of suggested scenarios to the LSP during the implementation process, prior to beginning the PRV
Data verification during the PRV is incumbent on the LSP.	If data is not verified, the PRV may be invalid due to erroneous data.	I&D will provide a list of output deliverables from U S WEST that the LSP should expect, including layouts and report samples for the loss and completion reports. In addition, the LSP will be informed of their responsibility for data readiness. Samples and lists are all included within the PRV document.
If using IMA, the LSP will have and be able to utilize the current version of the accompanying documentation.	If IMA documentation is not utilized, the process for pre-ordering and ordering may be delayed.	The I&D Project Manager will verify that the LSP has access to the appropriate documentation.
All necessary U S WEST resources will be made available during the LSP Production Readiness Verification; this effort will be coordinated by I&D.	If resources are not available when a problem arises, the PRV may be delayed.	The I&D Project Manager will notify the appropriate U S WEST audience of an upcoming PRV. In certain responsibility centers, staff have been designated to support this effort.
All necessary LSP resources will be made available during the LSP Production Readiness; this effort will be coordinated by the client contact.	If resources are not available to submit orders, verify data, and troubleshoot if problems arise, the PRV may be delayed.	The LSP will commit with the Account Executive and the I&D Project Manager that the appropriate resources are available. Telephone numbers, fax numbers, email addresses, etc. will be shared to expedite this process.
Network connectivity has been established.	LSP will be unable to access U S WEST systems and/or receive output reports.	LSP is responsible to ensure that connectivity at their end is established. PRV cannot continue without appropriate connectivity.

7. APPENDICES

The following appendices are provided as additional information. The information contained in these appendices may be updated and modified as needed, and updated information will be available from the Local Service Provider Implementation and Deployment team. The information contained in these appendices contains the most current information at the time of publication.

Appendix A - CSR Sample

Appendix B - U S WEST Bill Sample

Appendix C - Loss and Completion Reports - layouts and samples

Appendix D - Usage records Information

Appendix E - EMR/EMI Record Information

Appendix F - Service Order Flow

Appendix G - Usage Data Flow

Appendix H - Frequently Asked Questions & Trouble Shooting

Appendix I - Helpful Telephone Numbers and Web Sites

Appendix J - Production Readiness Verification Agreement

Appendix K - LSP Connectivity Responsibility

Appendix A - CSR Sample

The Customer Service Record (CSR) indicates the current service and features on the customer's account. If the account is resold, and the order has been provisioned and has posted to the U S WEST billing system, then the Reseller ID (RSID) will appear in the billing section of the CSR. Trailing USOCs will also appear in the service and equipment section of the CSR. A sample of the CSR may be found in the *Interconnect and Resale Resource Guide* (*IRGG*), which is in the following location:

http://www.uswest.com/com/customers/carrier

Appendix B - U S WEST Bill sample

The U S WEST bill is sent on a monthly basis, and will contain both a summary of the LSP's charges as well as detailed information about each sub-account that belongs to the LSP. The date of the monthly bill varies, depending on region within U S WEST. If this bill is not received, the LSP should contact their Account Executive. If there are specific questions on the bill, the LSP should refer to the telephone number listed on the bill for additional information.

To view a sample of the U S WEST bill (often referred to as the CRIS Summary bill), please Refer to the U S WEST *Interconnect and Resale Resource Guide* which is available on the web at the following location under the 'Summary Bills/Resellers' listing:

http://carrier.uswc.uswest.com/carrier

Appendix C - Loss and Completion Reports - layouts and samples

Appendix C contains samples of the Loss and Completion Reports. Included in these samples are copies of the report layouts as they appear on the electronic fax version as well as the layout configuration of the electronic file used in an NDM transmission.

RESALE COMPLETION REPORT FOR TEST TRIAL INC
DATE OF REPORT: 03/22/97

ACCT NUMBER /PON	CUS CODE	CUS TYPE	ORDER/ COMP-DATE	NAME/ADDRESS
989-A89-9990 PON12345ABC	312	B	N1234X096 03/21/1997	TEST TRIAL INC 200 S PETERS AV, SIOUX CITY
989-B90-9990 PON12345ABC	987	B	C32149996 03/21/1997	TEST TRIAL INC 2233 W JETHRO PLZ, PARK CITY
999-C09-9999 PON12345ABC	231	B	N23410099 03/21/1997	TEST TRIAL INC 3800 N METRO ST, DENVER
999-D09-9999 PON11111ABC	231	B	N23410099 03/21/1997	TEST TRIAL INC 3800 N METRO ST, DENVER

THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL TO THE COMPANY NAMED, TEST TRIAL INC , DISTRIBUTION OF THIS INFORMATION IS RESTRICTED TO PERSONNEL DESIGNATED BY SAID COMPANY.

U S WEST Information Technologies

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RESALE LOSS REPORT FOR TEST TRIAL INC
DATE OF REPORT: 03/22/97

ACCT NUMBER /PON	CUS CODE	CUS TYPE	ORDER/ COMP-DATE	NAME/ADDRESS
989-989-9990	312	N1234X096		TEST TRIAL INC
PONABCD1111			03/21/1997	200 S PETERS AV, SIOUX CITY
	WTN	989-989-9990 TER 0001		
	WTN	989-989-9990 TER 0002		
	WTN	989-989-9998 TER 0001		
	WTN	989-989-9999 TER 0002		
989-990-8888	987	C32149996		TEST TRIAL INC
PONABCD1111			03/21/1997	2233 W JETHRO PLZ, PARK CITY
	WTN	989-989-8888 TER 0001		
	WTN	989-989-7777 TER 0001		
999-909-9999	231	N23410099		TEST TRIAL INC
PONDEFG2222			03/21/1997	3800 N METRO ST, DENVER

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Appendix D - Usage Records Information

Usage records are created when a customer uses a feature or places a call that generates a charge to their account. Some examples are directory assistance, last call return, and intralata toll charges (not applicable in all states). Usage records are transmitted electronically to the LSP, either via magnetic tape or and Network Data Mover (NDM) node. [Network Data Mover requires that Connect:Direct software be available at the client site and that the LSP client has configured their end appropriately.] The format of the usage records is standard Electronic Messaging Record (EMR/EMI) format.

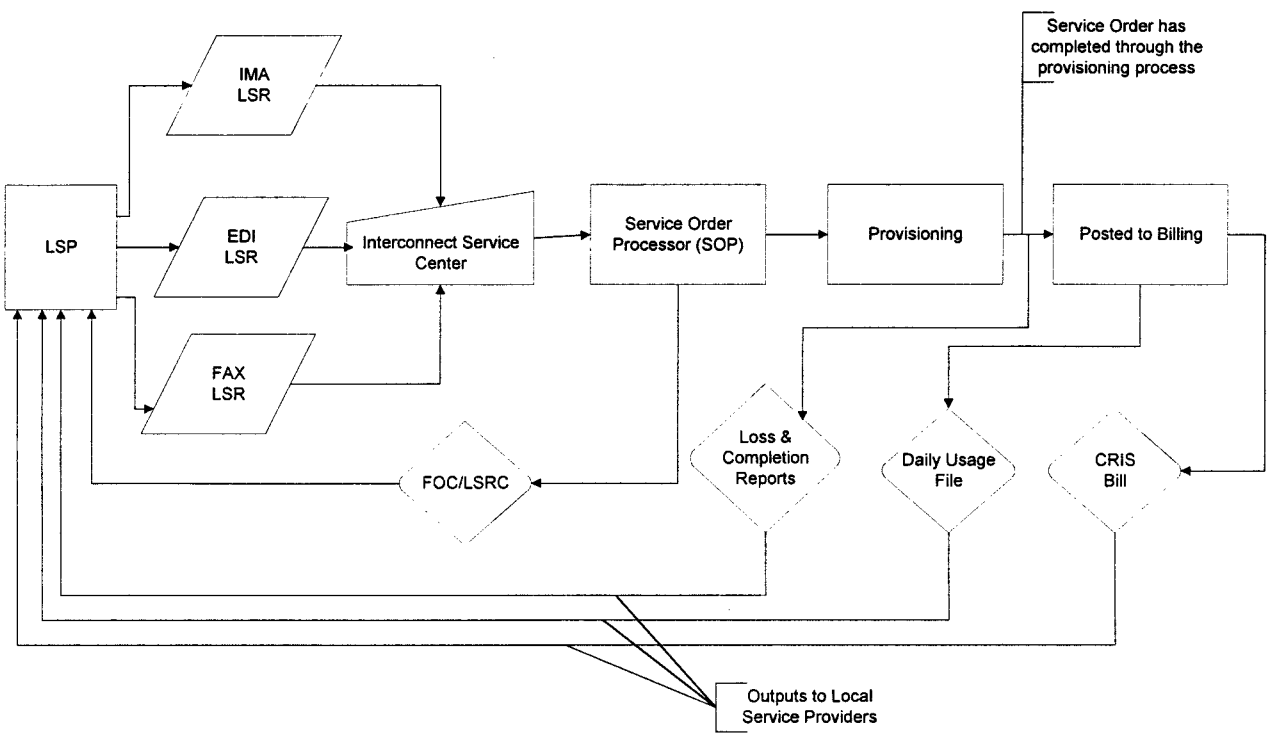
Usage records are created *only* when there is usage. If an LSP has no clients with usage, no usage records will be created.

Appendix E - EMR/EMI Record Information

As of 1/1/98 ATIS has taken over the Electronic Messaging Record (EMR) layout distribution and has changed the name of the records to Exchange Message Interface (EMI) as well. Local Service Providers should call (800) 521-2673 to order their documentation for EMI. The document number is SR-320. There is a cost involved for this documentation, and that cost is available from ATIS. This information is critical to the success of the PRV and the explanation of the records received. Any investigation by U S WEST cannot occur unless the LSP has obtained and reviewed this information.

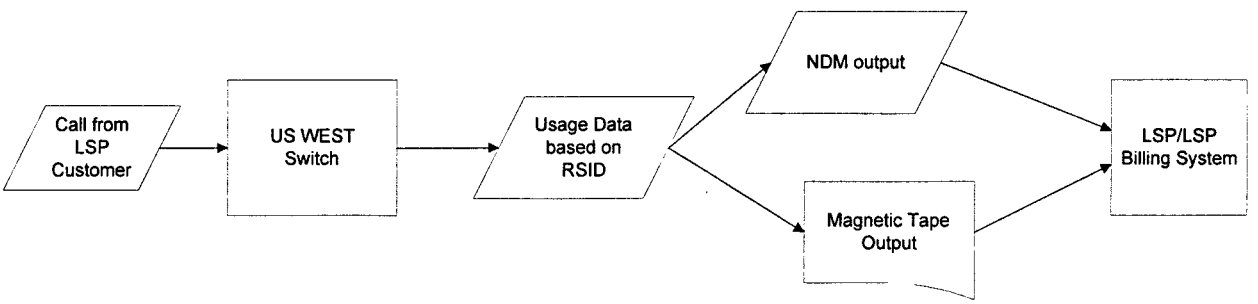
Appendix F - Service Order Flow

Appendix F contains a diagram outlining the movement of the data submitted when and LSP requests a service order from the Interconnect Service Center.



Appendix G - Usage Data Flow

Appendix G contains a diagram outlining the movement of the data to create the usage from the U S WEST switch.



Appendix H - Frequently Asked Questions & Trouble Shooting

Appendix G contains a list of questions regularly asked by Local Service Providers. While this list is not comprehensive, it does address general information important to the implementation and deployment of the LSP in the resale business. Additional questions should be referred to the Account Executive or the I&D Project Manager.

Category	***Question***	***Answer***
Completion Report	What does the Completion Report signify?	An LSP receives a completion report when a service order is completed in the Service Order Processing (SOP) system. This means the order has been provisioned, but has not necessarily posted to the billing system (BOSS/CARS). LSPs should receive completion report by 3:00 p.m. Central time on the day *after* the service order goes into a completed status.
Completion Report	Does receipt of the completion report mean that the RSID should be displayed in the CSR?	A completion report means that the order has been provisioned. The CSR may not indicate an RSID for some time after provisioning, typically between 3 and 21 days. After 21 days if the CSR still does not indicate a resold account, call the Interconnect Service Center and inquire about the status of the order.
CRIS Bill	Under what circumstances would an LSP receive an CRIS bill?	If a provider is reselling a non facility-based service such as 1FRs and 1FBs, the provider will receive a CRIS bill. The frequency of the bill is once per month.
Facility Capacity	How can I check the facility capacities at a particular location? (I want to make sure there is enough capacity for the order I need to process)	Facility capacity is unknown (even to U S WEST) until a technician is physically dispatched to install an order therefore there is no method to check.

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Firewall Access For IMA	How does an LSP using a point-to-point private line apply for access to the IMA firewall?	Fill out the SecurID form, available from the account executive, and indicate in the appropriate field that the form is to apply for access to IMA and not for a SecurID card.
IABS Bill	Under what circumstances would an LSP receive an IABS bill?	If a provider is reselling a facility-based service such as Frame Relay, ATM, Cell Relay, Transport LANs, or ordering Unbundled Transport or LIS/Collocation, the provider would receive an IABS bill. The frequency of the bill is once per month.
Loss Report	When does an LSP receive a loss report?	An LSP receives a loss report when one of its customers decides to buy its local service from another LSP (local service provider) or when a line function/feature is removed from the account.
LSP Production Readiness Verification	When can Production Readiness Verification occur?	Non-tariff State When an LSP has a Commission Approved Contract for the state for which the verification is applicable and the input method and output media set up has been completed. Tariff State When input method and output media setup has been completed. For additional information contact your account executive.
NDM	When does US West require a local node for NDM access?	The LSP must provide their local node in order to receive reports via NDM regardless of whether the LSP is using a dedicated circuit or dial up access.

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NDM - DU	Who sells *Connect Direct* software for NDM-Dial up?	Sterling Commerce at 800-311-9775. Please note that U S WEST supports only the DOS version of the *Connect Direct* software.
OBF forms	What are OBF forms and where can an LSP get them?	OBF forms are also known as Order Billing Forum forms and are the industry standard forms developed with industry input by ATIS (formerly Bellcore). An LSP must contact ATIS directly to order the forms and the documentation which accompanies them. ATIS can be contacted at (202) 628-6380 or accessing the web page http://www.atis.org/atis/clc/obf/obfdocs.htm.
OBF Forms	What is an LSOG?	The LSOG is the Local Service Order Guide which will help guide you through correctly writing a local service order.
OCN	What is an OCN and where can an LSP get one?	OCN, which stands for Operating Company Number , is the code used to identify that a company is valid in the telecommunications industry. It serves two purposes and is required information: 1) appears in header and trailer of daily usage records to determine who U S WEST is sending the file to 2) used to notify Interexchange Carriers(IXCs) of new local company handling their long distance customer; An LSP needs to call ATIS at (201) 884-8355 or -8249 for more information.

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OCN	How many OCNs are required?	Resale: LSPs should have 1 OCN for resale which will be used for all active states. Facilities Based Interconnect: One per state plus a generic one which can be used as desired.
SecurID@	Who do you call to see if SecurID@ cards have been ordered for your users?	Your Account Executive
Service Provisioning	How do I determine if my order has been provisioned?	Call 1-888-796-9087 the Interconnect Service Center (ISC) If the order has been submitted via IMA, ask the representative "Has LSR number ####cleared the service order processor"? If the order has been faxed in, ask the representative "Has order number ######(order number displayed on the LSRC (FOC) form) cleared the service order processor?"
Summary Bill	What is a summary bill?	A summary bill is a consolidated bill from U S WEST to the Local Service Provider containing LSP end user customer charges. The Interconnect Service Center creates the summary billing accounts, based on information provided in the questionnaire.
Summary Bill	How can I find out if a summary bill has been issued?	Contact the account executive or implementation project manager assigned to your company.

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T1 lines/ Dedicated Circuit	Can the same T1 line be used for both IMA and NDM processes?	Yes, with these conditions – 1) the originating point for NDM file transfers must be the same; 2) the volume of IMA and NDM line usage cannot exceed T1 capacity.
Usage	Which categories are rated and which categories are unrated?	The answer is region specific. **Western Region:** **RATED**: CMDS input, originating independent company messages billing to a resold account in U S WEST, term prefix 976 (010116) messages and category 42. **UNRATED:** All others **Eastern Region:** **RATED:** Aircraft/Marine, Vendor Surcharge, Telegrams, 010116, 41, 42, CMDS non BOC originated, and not Originated/Terminated and billed in the same state. **UNRATED:** All Others **Central Region:** **RATED:** 976 messages, 010116, CMDS messages, and not Originated/Terminated and billed in the same state. **UNRATED:** All Others
Usage	How often will we receive usage feeds from U S WEST?	Frequency of usage feeds is dependent on when usage is generated on an account. If usage is generated on accounts daily, U S WEST will provide daily usage feeds that contain data for 1 day.

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Category	*Question*	*Answer*
Usage	How can I determine if my end users are generating charges that I should be billing them for?	If order was processed by fax: 1. Call 1-888-796-9087 the Interconnect Service Center (ISC) and ask them if "order number ###### (order number displayed on the LSRC(FOC) form) has posted to CRIS?" 2. Once order has posted to CRIS, usage charges generated by the end customer will be sent in the usage records. Consult the *Interconnect and Resale Resource Guide (IRRG)* for a list of call activity that generating usage charges. If order was processed by IMA: 1. Access IMA, consult the customer's CSR, look for your RSID in the billing section and the services and equipment section, OR call 1-888-796-9087 the Interconnect Service Center (ISC) and ask them if "LSR #### has posted to CRIS?" 2. Once order has posted to CRIS, usage charges generated by the end customer will be sent in the usage records. Consult the *Interconnect and Resale Resource Guide (IRRG)* for a list of call activity that generating usage charges. There are no other methods for checking on the existence of usage records.

U S WEST Information Technologies

Usage records	What kind of usage is reported on the usage records?	Usage records keeps track of calls that generate charges such as 411 calls or *69 charges. For list of records that generate usage refer to the *Interconnect and Resale Resource Guide*. For record layouts refer to the ATIS EMI/EMR record layouts.
Usage records	What is EMR(EMI)?	EMR stands for Electronic Message Record, and is a file format language. EMR is an industry Bell Core Standard. EMR documentation can be obtained be calling ATIS at (202) 628-6380 or accessing the web page http://www.atis.org/atis/clc/obf/obfdocs.htm. (EMI Electronic Message Interface is the same as EMR)
Usage Test tapes	What is on the test tapes?	Test tapes include samples of usage records generated on accounts. This is not an all inclusive sample of each record that could possibly be generated on an account.

Appendix I - Helpful Telephone Numbers and Web Sites

Appendix H contains a list of helpful telephone numbers and Web sites available via the Internet. While this list is not comprehensive, it does address general information important to the implementation and deployment of the LSP in the resale business. Additional questions should be referred to your Account Executive or your I&D Project Manager.

Helpful Telephone Numbers:

ATIS (formerly Bellcore) Customer Service	1-800-521-2673
Interconnect Service Center	1-888-796-9087
	1-888-796-9089 (fax)
	1-303-298-2432 (escalation)
LSP Systems Help Desk	1-888-796-9102

Helpful Web Sites:

U S WEST IMA LSP WEBSITE - http://imadocs/ - contains information on the Interconnect Mediated Access product provided to the LSPs by U S WEST.

Carrier Internet Site - http://www.uswest.com/com/atwork/carrier/ - provides information about the resale and interconnect business; includes the *Interconnect Resale Resource Guide* provided by U S WEST.

EDI Disclosure Document - http://www.uswest.com/com/disclosures/netdisclosure409.html - provides the technical information necessary for the LSP to implement an electronic data interchange with U S WEST for the ordering process.

http://www.atis.org - this is the web site for Atis, which contains industry-wide information such as Order Billing Forum (OBF)

http://carrier.uswc.uswest.com/carrier - goes directly to the Interconnect Resale Resource Guide, including U S WEST bill examples

Appendix J - Production Readiness Verification Agreement

Local Service Provider
Production Readiness Verification Agreement

Contact Information

LSP Name:_____

LSP Primary Contact for PRV:_____

Telephone Number:_____ E-mail address:_____

Mailing Address:_____

_____

_____

Account Executive:_____

Telephone Number:_____ E-mail address:_____

Mailing Address:_____

_____

_____

LSP Implementation & Deployment Project Manager:_____

Telephone Number:_____ E-mail address:_____

Mailing Address:_____

_____

U S WEST Information Technologies

PRV Telephone Number:_____ State:_____

Address of TN:_____

_____

PRV Scenario - for example: 1FB account currently owned by U S WEST will be resold 'as is' to LSP:

_____

Date Service Order will be submitted to U S WEST: _____

PRV Telephone Number:_____ State:_____

Address of TN:_____

_____

PRV Scenario - for example: 1FB account currently owned by U S WEST will be resold 'as is' to LSP:

_____

Date Service Order will be submitted to U S WEST:_____

PRV Telephone Number:_____ State:_____

Address of TN:_____

_____

PRV Scenario - for example: 1FB account currently owned by U S WEST will be resold 'as is' to LSP:

_____

_____

Date Service Order will be submitted to U S WEST:_____

PRV Telephone Number:_____ State:_____

Address of TN:_____

U S WEST Information Technologies

_____

PRV Scenario - for example: 1FB account currently owned by U S WEST will be resold 'as is' to LSP:

Date Service Order will be submitted to U S WEST:_____

PRV Telephone Number:_____ State:_____

Address of TN:_____

_____

PRV Scenario - for example: 1FB account currently owned by U S WEST will be resold 'as is' to LSP:

_____

_____

Date Service Order will be submitted to U S WEST:_____

The LSP understands and acknowledges that Production Readiness Verification is conducted as a trial of business capability in a production mode and that different conditions and issues may be encountered in a live production environment.

LSP by:_____Title:_____

Date: _____

Appendix K - LSP Connectivity

This section specifies the requirements that need to be set up and provided by the LSP to complete Network Connectivity for electronic receipt and delivery of bills, reports/files, and order/repair input.

Equipment or Set up	Available Options	Recommendations or Specifications	LSP Required Action
Type of Host	• Mainframe • Midrange • PC		Specify one
Type of Operating System	• MSP, MVS, VM, VSE, etc • OS/400, Tandem, Unix, VMS,VOS, etc. • MS-DOS, Netware, OS/2, Remoteware, Windows, NT, etc.		Specify one in each category
Type of Direct Connect	• FTP • NDM		Specify one
Type of Network Protocol	• TCP/IP • SNA (only support LUO)	U S WEST supports: • TCP/IP Point to Point Circuit (requires Ethernet connection) • SNA Point to Point circuit • SNA Dial-up modem	Specify one
Network Layer	• IP		
Type of circuit	• Private	U S WEST provides CSU/DSU and communication link • T1 facility requires a GDC552 Version 1.1 rack mount with a 530 interface • 56K requires a GDC510 rack mount with a 530 interface • Router vendor & model is	LSP must provide: • Circuit Carrier • Type of circuit • CSU/DSU equipment, manuals, specification if LSP elects to provide different type of equipment • Carrier Originating Location, Installation

Equipment or Set up	Available Options	Recommendations or Specifications	LSP Required Action
		CISCO 7507	contact, and post-installation trouble contact • IP addresses and port mappings
	• Dial up	• PC with Connect Direct for MS-DOS with SNA LUO protocol via ASYNC modem	Must provide Local Node Name
Application Layer	• HTTP for IMA • NDM • others	•	May have both if using circuit for both IMA access and NDM/FTP connection for data files
Other	• Host Access • U S WEST Terminating Location	• IP addresses will be provided during installation and set up phase • ZUNI Data Center 5325 Zuni ST, 4th Flr (demarc point) Denver, CO 80221	Must connect to the Zuni location

NOTE: This information may be modified as additional capabilities are implemented or equipment models change.

LSP Information Website

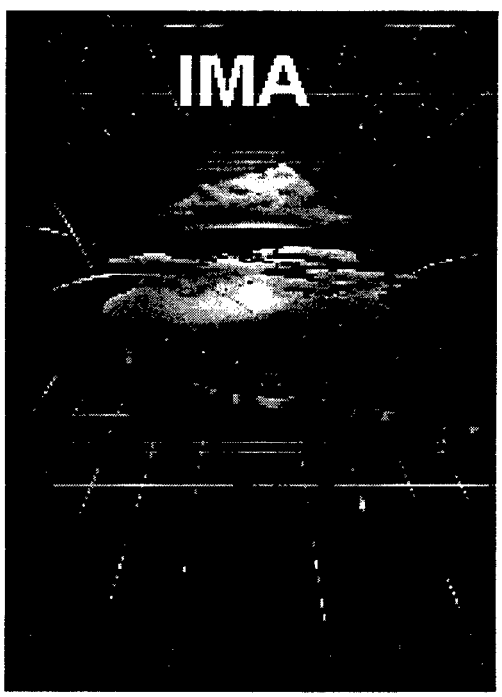
Main screen:

Netscape - [U S WEST IMA CO-PROVIDER WEBSITE]

File Edit View Go Bookmarks Options Directory Window Help

USWEST
life's better here

Interconnect Mediated Access



WELCOME

This web site is designed to keep you informed and to answer your questions about Interconnect Mediated Access (IMA). Your feedback about this site is appreciated. Send your comments via e-mail to: IMAGRP@uswest.com.

ion of Java Plug-in available.

Java Plug-in NEW!

This link contains information on the installation of the Java Plug-in which is a requirement of IMA Release 4.0.

documents

This section contains the latest versions of IMA user documentation.

EDI NEW!

Information for EDI

events

This section contains a link to the IMA training class schedule and registration form.

FAQs

This section contains answers to questions most often asked by the user.

news

This section is designed to provide you with the latest information on what is happening with IMA.

release notes

This section contains information about each IMA software release.

Customer Forum | Documents | Events | FAQs | News | Release Notes | Contact Us

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Document: Done

Documents screen:

Netscape - [VIEW IMA GUIDES]

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Interconnect Mediated Access

View and Download IMA User Documentation

This page contains the latest versions of IMA user documentation. Using Adobe Acrobat Reader, you can either view the documents online, print the documents, or download a PDF version of any of the documents to your hard drive. Also available on this page are instructions for accessing and downloading Street Address Guide Area and Feature Availability Matrix data.

IMA User's Guide
This guide provides information about the task the Co-Provider perform when using the IMA system to order services for customers.

IMA System Administration Guide
This guide provides information about the task System Administrator's perform. Examples of these tasks include maintaining user and Billing Account Number (BAN) lists.

IMA Repair Guide
This guide provides information about how to report trouble on a line of repairs.

FAM Download Instructions
This document provides instructions for downloading U S WEST FAM data. The downloadable files are in both PC zip and UNIX tar formats.

SAGA Download Instructions
This document provides instructions for downloading U S WEST SAGA data.

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Document: Done

EDI Screen:

Netscape - [VIEW IMA GUIDES]

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Interconnect Mediated Access

View and Download EDI Information.

This page contains information pertaining to EDI.

IMA EDI Contact List

EDI Frequently Asked Questions
This section contains answers to questions most often asked by the user.

IMA EDI Implementation Guide
This guide discusses why Co-Provider might choose to use EDI instead of the IMA Graphical User Interface (GUI).

IMA EDI Disclosure Document version 3.3
This document describes the interface requirements for the exchange of IMA transactions using Electronic Data Interchange.

Appendix A - EDI Data Dictionaries for EDI Disclosure version 3.3
The attached document is the appendix to the Disclosure Document

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Events Screen:

Netscape - [Events]

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Interconnect Mediated Access

Events

This section contains a link to the IMA training class schedule and registration form located on the Interconnect Resale and Resource Guide web site. As other events relative to IMA are scheduled, this information will be announced in the NEWS and will also be made available on this page. For training questions regarding this section, please contact Cory Hamilton at (303) 896-2744.

Interconnect Mediated Access Training

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Document: Done

Choosing the **Interconnect Mediated Access Training link** on the **Events screen** presents the current **IMA Training Schedule** on **the Interconnect Resale Resource Guide (IRRG)** world wide website. This screen allows electronic registration for upcoming classes.

Netscape - [Interconnect & Resale Resource Guide]

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USWEST Interconnect & Resale Resource Guide

1. Business Procedures
2. Pre-Ordering Information
3. Product Information - Resale
4. Product Information - Interconnect
5. Manual Ordering Process/Forms

Interconnect Mediated Access Training
January 1999 - March 1999
(Revised 2/4/99)

Business Training | Interconnect Mediated Access Training

COURSE	DATE	LOCATIONS
Interconnect Mediated Access Training	3/12/99	Denver
Interconnect Mediated Access Training	3/19/99	Denver

REGISTRATION INFORMATION

Name:
Full Name (for badge):
Title/Department:
Role:
Company:
Address:
City:
State:
Zip:
Phone: ext.
FAX:

COMPANY PROFILE
(Please check applicable information)
☐ Reseller
☐ Facility-based CLEC or LOCAL SERVICE PROVIDER and Reseller
What is your primary service area?
Who's your U S WEST Account Manager?
Class You Are Registering For:
Class Date:
Class Location:
submit clear form

You should receive a confirmation once your registration has been accepted. If you have questions or problems please contact:

Dawn Snyman
1005 17th Street, Room 1690
Denver CO 80202
or
Fax: 303-965-1908
Phone: 303-896-1950
e-mail: dsnyman@uswest.com

This Page Last Updated: February 4, 1999

USWEST Carrier Division

Document: Done

FAQs screen:

Netscape - [FAQ]

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Interconnect Mediated Access

Frequently Asked Questions Regarding IMA

This section contains answers to questions frequently asked by IMA users. Questions and answers will be sorted by subject and posted. We will add a search engine to this site in a future enhancement.

Problems viewing or downloading files

Q. What Internet Browser version should I use?
A. Netscape 3.01 version is supported. You may download this free version from the Netscape home page.

Q. Is any documentation available online?
A. Yes. After you have accessed the IMA system, you may access the IMA web site located at main menu. There you will find system guides, as well as release notes, and frequently asked questions.

Q. When placing a New Connect order, I get an error message that reads:
TNR Error: ret_code=106 ret_suffix=0 What does this mean?
A. The most common cause of this error is that a telephone number has already been reserved against this account. Contact the IMA help desk 1-888-796-9102 for assistance.

Q. On the Order Type drop-down list, I only have four choices: conversion as is, conversion with changes, residence new connect, and business new connect. I own the account. Shouldn't I have options to change, disconnect, suspend or restore?
A. You must wait for your RSID (reseller ID) to post to the CSR (customer service record). If you recently converted this customer to your company (for example, within the past day or so) wait a few more days to allow for processing through the U S WEST systems.

Q. In Design Services, the Pick BAN (billing account number) does not pull up a BAN list. Instead, I get an error message that reads, "Request failed. Billing Account list not found."
A. Check with your local site administrator and verify billing account information has been built into the system.

Q. Whom do I call if I have questions about the status of an order?
A. Call the Interconnect Sevice Center (ISC) at 1-888-796-9087 for questions regarding order activity.

Q. Whom do I call if I forget my IMA system password?
A. Contact your local site administrator for assistance with logons and passwords after you have connected to the IMA system.

Q. Whom do I contact if I do not receive my daily usage reports?
A. Contact the IMA help desk 1 888 796-9012. They will forward your call to the appropriate group.

Q. Whom do I call if I need help with my SecureID and access to the IMA system?
A. Call the IMA help desk at 1-888-796-9102. They can help you with questions related to system access as well as direct your application-related questions to the appropriate group.

Q. What is the URL for the IMA system?
A. The URL for the IMA system is: uswima1.ic.uswest.com

FAQs screen (continued):

Problems viewing or downloading files

Q. Why can't I view a document through the View menu?
A. You do not have Acrobat Reader installed or have not configured your browser to work with Acrobat Reader.

Help Desk	**1-888-796-9102**
For questions about the IMA application	
Interconnect Service Center (ISC)	**1-888-796-9087**
When you have a problem determining an order's status through IMA	
U S WEST Carrier Internet Index	
http://www.uswest.com/com/customers/carrier/	
To access the *Interconnect Resale Resource Guide*	

To download and install Acrobat Reader, see Get Acrobat Reader below.

To configure Netscape for Acrobat Reader, install Acrobat Reader and perform the following steps:

1. In Netscape Browsers select and click on **General Preferences** from the **Options** menu to display the **Preferences** box.
2. In the **Preferences** dialog box, click the **Helpers** tab.
3. Scroll through the list and click the file type *application/pdf*.
4. Click **Launch the Application,** and then click **OK**.

NOTE: Installing Acrobat Reader after Netscape Browser automatically configures Netscape for Acrobat Reader.

Q. When I click an entry in download menu, Why can't I save the file to my workstations?
A. You have not configured your browser to download files with the extension zip.

To reconfigure Netscape, perform the following steps:

1. In the Netscape Browser select and click on **General Preferences** from the **Options** menu to display the Preferences dialog box.
2. In the **Preferences** dialog box, click the **Helpers** tab.
3. Scroll through the list and click the file type *application/x-zip-compressed*.
4. Click **Save to Disk,** then click **OK**.

Q. Why am I getting the error message? There is an error opening this document, file does not begin with %PDF when I try to view a document with Acrobat Reader after I download the file for the web site.
A. The file you download is a ZIP file. Before viewing it with Acrobat Reader, you must first unzip the file with an unzip utility such as Winzip or PKUNZIP for Windows. After you have unzipped the file, you can then view it with Acrobat Reader.

FAQs screen (continued):

Q. Where can I get the software I need to access and read the documentation on the Co-Provider Information web site!

A. To access the Co-Provider Information web site you must have Netscape 3.01, or a later version. To view the documents at this site, whether on the web site or from your workstation, you must have Acrobat Reader 3.01 or a later version.

You can download free copies of either software form the software developer's web site, but because of IMA security. **You must first exit IMA before accessing other Internet sites**.

Get Netscape Browser

To download Netscape Browser, visit the Netscape web site at:
http://home.netscape.com/comprod/mirror/client_download.html

Once there, follow the instructions for downloading and installing Netscape Browsers.

Get Acrobat Reader

To download Acrobat Reader, visit the Adobe web site at:
http://www.adobe.com/prodindex/acrobat/readstep.html

Once there, follow the instructions for downloading and installing Acrobat Reader.

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News screen:

Netscape - [News]

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Interconnect Mediated Access

News

This page is being designed to provide you with the latest information on what is happening with IMA, IMA users, and the IMA software. As news is added to this site, the old articles will be archived. Old news can be accessed via an "archive" button on this page.

- **IMA Hours**
- **IMA User Group Forum: October 27-29, 1998**
- **Maintenance & Repair via IMA**
- **Co-Provider Desktop Requirements**

IMA Hours

The standard hours of operation for IMA are:

Monday - Friday	6 am - 8 pm	Mountain Standard Time

To assist you further, the hours for Maintenance and Repair have been extended and are:

Monday - Friday	2:15 am - 11:15 pm*	Mountain Standard Time
Saturday	2:15 am - 10:00 pm*	Mountain Standard Time
Sunday	7:00 am - 11:15 pm	Mountain Standard Time

* Due to legacy system downtime, IMA Maintenance and Repair for Design Services will be unavailable from 3:00 am to 4:00am

Monday - Friday, and from 10:00 pm Saturday to 6:00 am Sunday, in each local time zone (e.g., 3:00 am - 4:00 am Eastern, 3:00 am - 4:00 am Central, 3:00 am - 4:00 am Pacific).

If you have any questions regarding the hours of operations of IMA system, contact Barbara "Pete" Peterson via e-mail at bpeters@uswest.com or via telephone at (303) 896-2705.

IMA USER GROUP FORUM: October 27-29, 1998

The first Interconnect Mediated Access (IMA) User Group Forum, sponsored by U S WEST was held October 27th-29th at the Embassy Suites Hotel in downtown Denver.

The agenda for October 27th provided a full day of activities: The morning began with Keynote speaker John Kelly, President of Wholesale/Carrier. He encouraged Co-Providers to use IMA, emphasizing the advantages of IMA and the continuing commitment of U S WEST to produce quality products and services.

Rob Van Fossen , Executive Director Wholesale Systems, covered an overview of the IMA User Group meeting. He outlined issues regarding the IMA project and welcomed new Co-Providers and an increase in IMA usage emphasizing the enhancements within IMA.

Teresa Jacobs, Director of Development IMA, presented an overview of the 1998 releases as well as specifics about the upcoming 3.3 release. She presented statistics of IMA orders and discussed some of the advantages reported by internal and external customers.

"Features, Enhancements, & Changes", one of the many sessions held during the conference, was facilitated by Jeff Thompson, Director of Wholesale. He explained the IMA Feature Selection Process. As noted in his presentation, the process is as follows:

News screen (continued):

1. Build and prioritize the candidate list
2. Prepare requirements & functional specifications
3. Prepare development estimates
4. Determine scope

Jeff also conducted an interactive session called "Your Ideas". In this session, Co-Providers had the opportunity to ask questions specific to IMA development, express concerns and offer suggestions. This was an excellent cooperative effort providing useful feedback for all involved. Many of the items that came out of this session are being investigated, and some modifications have already been made. For example, IMA now includes the USOC pricing on the Service Availability Query response.

Also based on comments at the User Forum, we looked into concerns surrounding IMA system response time. Some customers had reported that since the release of the 3.2 IMA software in September, the system seemed to move more slowly, particularly when accessing various screens.

With our September release, we published desktop requirements which listed information on configuring PC's to provide optimal performance (see our LSP Information Website for these settings.) We also looked into our own network configurations. Our IMA Response Time Measurement (IRTM) Team looked beyond the software and examined server connections to other hardware. In late November, we made adjustments and since that time customers report that the system does indeed move more quickly.

With our September release, we published desktop requirements which listed information on configuring PC's to provide optimal performance (see our LSP Information Website for these settings.) We also looked into our own network configurations. Our IMA Response Time Measurement (IRTM) Team looked beyond the software and examined server connections to other hardware. In late November, we made adjustments and since that time customers report that the system does indeed move more quickly.

Cory Hamilton, IMA Training & Services demonstrated entering specific orders using IMA. Janet Colberg, Product Training Wholesale Systems, described a CLEC alternative of manual submittal of local service requests including the forms required for POTS Resale Requests, Directory Listing, and Loop Service with Number Portability (LSNP) Service Requests.

An IMA specific Jeopardy game was played after lunch. This served as a rousing and rowdy way for the Co-Providers, teamed with U S WEST participants, to review items presented in the morning sessions AND win prizes! This definitely woke up the crowd after lunch, and we received compliments as well as requests to repeat this in future User Forums.

The Question & Answer session became a continuation of the morning session providing the Co-Providers an opportunity to ask additional questions of the subject matter experts. The panel consisted of: RobVan Fossen, Executive Director Wholesale Systems; Pat Brisnehan, Account Director Information Technologies; Stephanie Burnham, Help Desk Project Manager; Loretta Huff, Director Account Maintenance Support Center; Clarice Bates, Director Wholesale Strategy and Planning ; Leah Be, Process Specialist ; Denise Martinez, Lead Process Specialist.

News screen (continued):

Netscape - [News]

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Global Village | ENN | E-Media | Employee Directory | Employee Services | Search

Jo Netherton, Training & Services, and Loretta Huff, Maintenance Support Center, presented a process overview of the handling of Trouble Tickets through the Maintenance & Repair portion of IMA. They fielded many questions and stressed the many advantages of using the Maintenance & Repair option in IMA.

Mark Lewis, EDI Coordinator, provided an overview of EDI. The presentation was educational and helped to distinguish between the EDI and IMA GUI options for performing pre-order and order transactions.

A cocktail hour was sponsored by U S WEST the evening of October 27th.

On October 28th, the Business/IMA Co-Provider conference was held covering business aspects of working with US WEST. Helpful information about products and resources available to the Co-Provider was provided. Examples of information available to the Co-Provider and described at this conference were the Directory of Methods and Procedures (DMP) and Interconnection and Resale Resource Guide (IRRG) which are both electronically available to the CLECs. On October 29th the conference wrapped up with a full day of IMA GUI training which was well attended by thirty Co-Providers.

The feedback received on the User Forum Evaluation Forms was very positive. Overall, Co-Providers thought it was well organized, informative and worthwhile. They found it invaluable to be able to share their ideas and experiences with other resellers and the people at U S WEST. All of the attendees agreed there should be future sessions and recommended earlier communications about proposed dates and agenda items.

We would like to thank all of the participants for their attendance and input and many for their assistance investigating topics following the forum.

Maintenance & Repair via IMA

We have received a lot of positive feedback from the Co-Providers who use the Repair function in IMA to submit trouble reports for their customers. This function allows for reporting trouble on POTS and Design Services lines. The Co-Provider have said they are pleased with IMA's ease of use, its ability to monitor trouble reports submitted for their company, its ability to query the trouble record status, its ability to review the last three trouble entries reported, and the option it provides to deny or accept closure of a trouble ticket. If you are not currently taking advantage of this useful tool, call Cory Hamilton at (303) 896-2744 to learn more about IMA and the product training opportunities currently available.

Co-Provider Desktop Requirements

Following are the Interconnect Mediated Access (IMA) Co-Provider Desktop Requirements. This is the recommended configuration which will deliver the maximum benefits of the enhanced IMA GUI. This will also be included in the next release of the "IMA User's Guides". As always, if you have any questions about this or any other IMA topic, please call the Training Team (pager 303/473-2017) or the LSP Help Desk (888/796-9102).

Thank you,

Barbara "Pete" Peterson
IMA Deployment & Training Manager
bpeters@uswest.com

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Release Notes screen:

Netscape - [RELEASE NOTES]

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Interconnect Mediated Access

Release Notes

This page contains information about each IMA software release. Documentation for a particular release will be placed on this site three to four weeks before that release is deployed. Release documentation will remain on this site for 12 months, and then will be archived.

IMA 3.3 Release Notes
Initial Publication Date: November 20, 1998

IMA 3.2 Release Notes
Initial Publication Date: September 4, 1998

IMA 3.1 Release Notes
Initial Publication Date: June 5, 1998

IMA 3.0 Release Notes
Initial Publication Date: April 3, 1998

IMA 2.1.1 Release Notes
Initial Publication Date: February 2, 1998

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USWEST IMA System

Competitive Local Exchange Carriers
Release Notes for 1.6
*****Final*****
06/24/97

Functional Changes / Impacts to Competitive Local Exchange Carriers(CLECs)

CSR Processing

- CSR viewing capabilities have been expanded to allow CSRs with a Letter of Authorization to be viewed by all CLECs regardless of ownership.
- The CSR billing section is available for viewing.
- For the Central and Eastern regions, the maximum length of a CSR has been increased from 25 pages to 150 pages. (The 25 page length limitation is still in effect for the Western region due to downstream legacy system limitations; however, the increase to 150 pages is an enhancement planned for a future release.)

Appointment Scheduler

- Appointments from Appointment Scheduler can be scheduled more than 2 weeks in advance of the appointment date.

Maintenance and Repair

- Full redesign of Maintenance and Repair Online Screens and database.
- New Maintenance and Repair system incorporates Design and Non-Design Trouble reporting.
- Support has been added for: CENTREX, private lines, basic rate ISDN, and unbundled loop.
- Trouble Report status and maintenance is enhanced.
- Trouble Report History: The three most recent Trouble Reports for a given Circuit ID can be viewed on-line.
- CLECs will now have the option to Accept or Deny the closing of a Trouble Report if the trouble report is on a design services circuit..
- Email and Fax options are now available online for sending information to the CLECs.

USWEST IMA System

Public Service Providers
Release Notes for 1.6
*****Final*****
06/24/97

Functional Changes / Impacts to Public Service Providers(PSPs)

CSR Processing

- For the Central and Eastern regions, the maximum length of a CSR has been increased from 25 pages to 150 pages. (The 25 page length limitation is still in effect for the Western region due to downstream legacy system limitations; however, the increase to 150 pages is an enhancement planned for a future release.)
- The CSR billing section is available for viewing.

Appointment Scheduler

- Appointments from Appointment Scheduler can be scheduled more than 2 weeks in advance of the appointment date.
- PSP (Coin) users can schedule appointments using Business Work Group in Appointment Scheduler.

Maintenance and Repair

- Full redesign of Maintenance and Repair Online Screens and database.
- New Maintenance and Repair system incorporates Design and Non-Design Trouble reporting.
- Support has been added for: CENTREX, private lines, basic rate ISDN, and unbundled loop.
- Trouble Report status and maintenance is enhanced.
- Trouble Report History: The three most recent Trouble Reports for a given Circuit ID can be viewed on-line.
- PSPs will now have the option to Accept or Deny the closing of a Trouble Report if the trouble report is on a design services circuit.
- Email and Fax options are now available online for sending information to the PSPs.

To: IMA Site Administrators

From: Diane Vogel

Date: August 21, 1997

Re: IMA Release 1.7

On August 22 the 1.7 release of IMA will be installed. Following is information on new administrative functions available with this release.

1. This release has new and enhanced IMA Administration functions. Attached is a draft copy of the IMA Administrator's Guide which is currently undergoing pre-publication reviews. This IMA Administration Guide provides documentation that will assist you with the new and enhanced IMA Administrator tasks.

Specifically, IMA Site Administrators will now maintain a list of Summary Billing Account Numbers (BANs). This data will format a pick list for specifying a Summary Billing Account during the order data entry process. The OBF billing account information will be completed using the enhanced BAN profile information. For more information on the new BAN maintenance functions please review chapter 7 of the IMA Administrator's Guide.

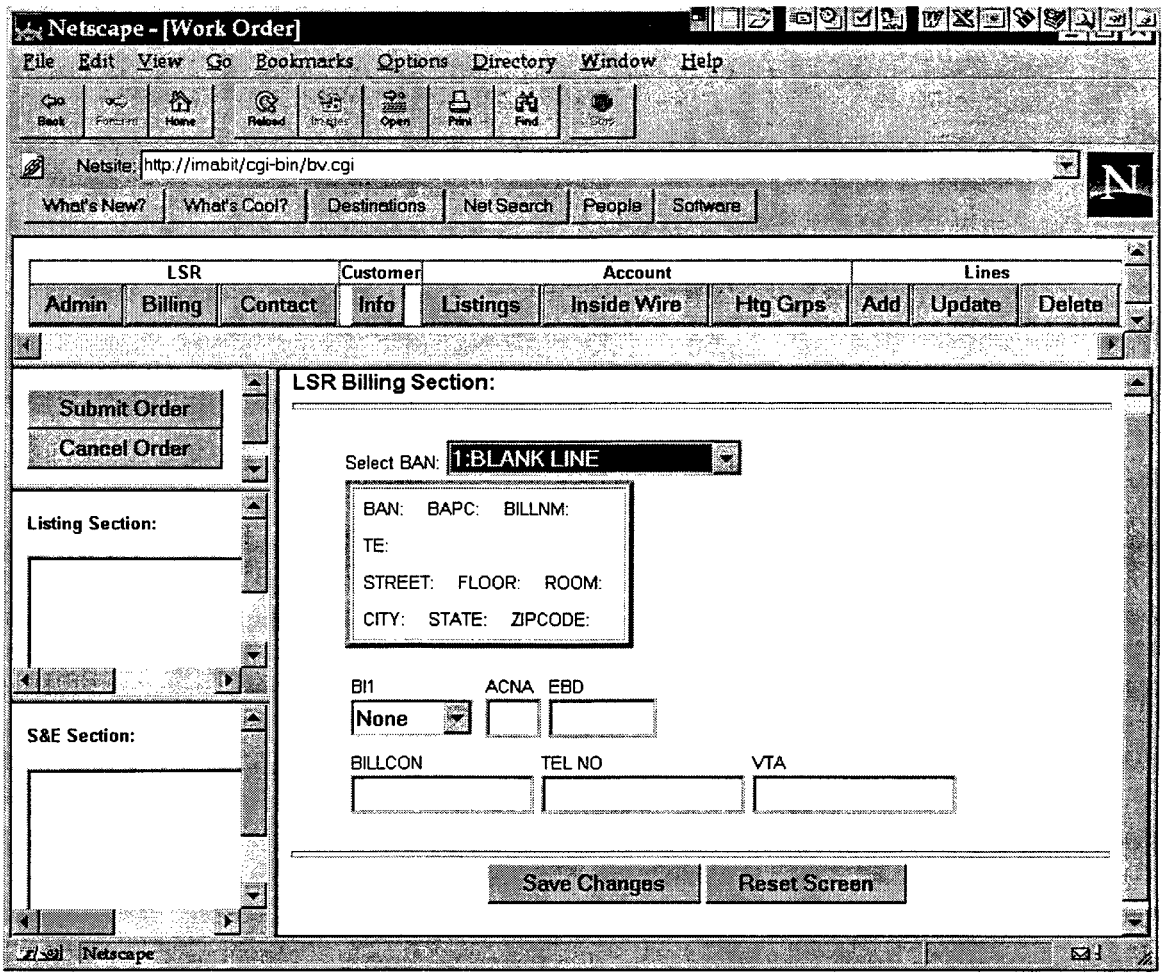
Your current IMA BAN information will be converted by the U S WEST System Administrators as a part of the IMA 1.7 production installation. Please plan to review the accuracy of your BAN list and BAN profile information Monday, August 25.

New BANs will continue to be established in the U S WEST Legacy systems by the Interconnect Service Center. Weekly updates will be provided to you and your Account Executive when new Summary Billing Account Numbers are available for use. As the IMA Site Administrator you will then add the BAN profile information to IMA.

Hint: The IMA Site Administrator creates and maintains the BAN description on the BAN Profile screen. This description is displayed along with the BAN on a pick list during order processing. Consider using meaningful identifiers such as "CO Simple", "CO Complex", "MN Bill Cycle 5", or "WA Res".

2. When entering orders via IMA, Users will now need to select the proper Summary Billing Account from a BAN pick list. At the top of the main Order screen, choose the Billing button for the LSR. This brings up the LSR Billing Section. The Select BAN field has a pick list to specify the correct Summary Billing Account Number Profile for completing the OBF form.

Some entities do not yet have BANs in IMA. This is okay. Orders submitted via IMA for a Corporate ID without BANs will have a blank LSR Billing Section.



3. Two fields on the Add/Modify BAN Profile screen are maintained by U S WEST - Corporate User Id and Tax Exemption. An Interconnect Service Center representative updates this information based on the current questionnaires and tax exemption certificates. Please keep your Account Executive apprised of informational changes from the current questionnaire.

4. A few words about U S WEST Regions, the Summary Billing Account Numbers, and Tax Exemption information:

In Eastern, the Summary Billing Account Numbers are directly related to the billing cycle of the end user telephone numbers. Each state has at least ten billing cycles, some have twenty. Business and Residential markets are combined on one summary bill for each billing cycle in a state. Unbundled orders require a separate group of Summary Billing Account Numbers. The U S WEST Legacy systems use information provided on the sub accounts (end user billing account numbers) for tax exemption processing.

NOTICE:
The information contained herein is confidential, proprietary, and should not be disclosed to unauthorized persons.
It is meant for use by authorized representatives of U S WEST Communications.

In Central, the Summary Billing Account Numbers are currently assigned by business market. Business and Residential markets are combined on one summary bill for each state. Unbundled orders require a separate Summary Billing Account Number which can be for one or more states. The U S WEST Legacy systems use information from both the summary account and the sub account (end user billing account numbers) for tax exemption processing.

In Western, the Summary Billing Account Numbers are currently assigned only by business market. A separate summary bill is created for each market (Business, Residence) for each state. The U S WEST Legacy systems use only information from the summary billing account for tax exemption processing.

For more information refer to the Interconnect and Resale Resource Guide, or contact your Account Executive.

5. With release 1.7 IMA Administrators and Users will be able to view the IMA Corporate Account profile information. This details the valid state certifications which IMA uses to permit order submission. See chapter 6 in the IMA Administrator's Guide for more information.

6. This IMA release has new and improved functionality in the Order Manager for the Interconnect Service Center. See chapter 1, section 6 in the IMA Administrator's Guide for a process overview. The newly automated Local Service Request Confirmation (LSRC, also referred to as Firm Order Confirmation or FOC) can be returned by fax and/or email. A sample e-mail is attached as the final page of this document.

7. The main Interconnect Functions menu has a new option, Status. This option allows IMA Users to request the current processing status of an order submitted via IMA. See chapter 1, section 6 in the IMA Administrator's Guide for an overview. Refer to the IMA 1.7 Release Notes sent earlier for more information on the various order statuses:

Submitted: U S WEST Carrier Center has received the order, but not reviewed it.

In Review: U S WEST Carrier Center representative is reviewing, researching, evaluating, or entering the order.

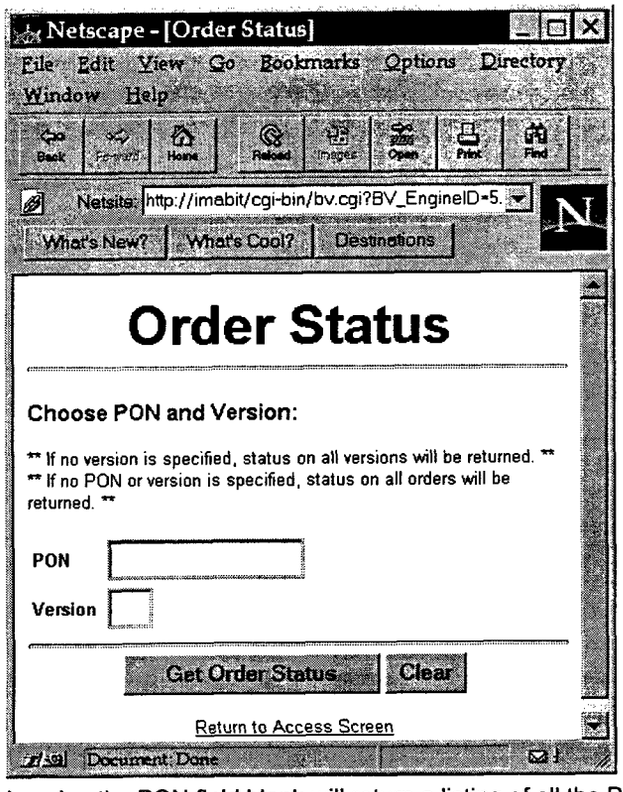
Issued: U S WEST Carrier Center representative has entered the order to the legacy systems for processing and received a U S WEST Service Order number.

Rejected: Order can not be processed as submitted.

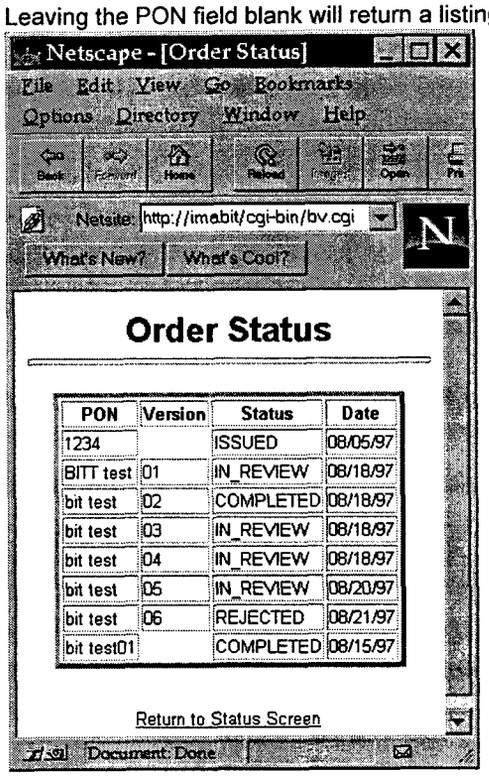
Errored: Order has encountered processing or facility difficulties in the legacy systems.

Completed: Order has successfully passed through the legacy systems and the end user account can now accrue usage charges.

To inquire about the current status of an order, choose the Status option on the main Interconnection Functions menu to display the following screen. Enter the Purchase Order Number (PON) and/or PON Version to inquire about a specific order.



Leaving the PON field blank will return a listing of all the PONs and their current order processing status.



PON	Version	Status	Date
1234		ISSUED	08/05/97
BITT test	01	IN_REVIEW	08/18/97
bit test	02	COMPLETED	08/18/97
bit test	03	IN_REVIEW	08/18/97
bit test	04	IN_REVIEW	08/18/97
bit test	05	IN_REVIEW	08/20/97
bit test	06	REJECTED	08/21/97
bit test01		COMPLETED	08/15/97

NOTICE:
The information contained herein is confidential, proprietary, and should not be disclosed to unauthorized persons.
It is meant for use by authorized representatives of U S WEST Communications.

Should you encounter IMA related problems in utilizing the new features please contact your Account Executive or the IMA Help Desk, 1-888-796-9102.

Sample e-mail of an LSRC viewed with a fixed type font.

```
Subject:        LSRC Summary
   Date:        Thu, 21 Aug 1997 13:06:14 -0600
   From:        Interconnect@uswest.com


LsrcPresentation:

CCNA  PON               VER  LSR NO              ORD
T88   smith 01          07                       N12345678
INIT             CD/TSENT           REP              REP TN
Jane Smith       08/21/1997         306              3037773754
SDI  IBT  CN TYP  CHC  FDT     DD          EBD
          C                    12/13/1997  12/13/1998
BI1  BAN1           BI2  BAN2           EC_VER
     303 R11-0001
DSGCON           LSP-DSGCON       LSP-TELNO     LOCBAN         ORD TYPE
                                                3036460000     null

LsrcLinePresentation:

REFNUM  RNEX  ECCKT                                TN
1    0                                             303 646-0000
MATN  CKR                                   ISPID
                                             null
CFA
null
LORD                   INPORD                 PORTED#

RTI      DISC #      TER   DISC ORD

SYSTEM ID  CABLE ID  SHELF  SLOT  RELAY RACK  CHAN/PAIR  UNIT  PGI  DEMARC  OOR

NID

REMARKS
 null
```

Competitive Local Exchange Carrier & Public Service Provider Release Notes for 1.7

USWEST IMA System

Competitive Local Exchange Carrier
&
Public Service Provider

Release Notes for 1.7
Release Date: 8/23/97

Summary of 1.6 Patch installed 7/16/97

Impacts to CLECs and PSPs

- Maintenance and Repair allows the option to select "Neither" in addition to the fax and email options.
- Maintenance and Repair has new functionality that allows the user to select a particular CSR when multiple CSRs are retrieved during circuit validation. Multiple CSRs occur when there are multiple CSRs for a specific TN, or multiple TN's at one physical address.
- Modified system architecture alleviates session manager failures.

Summary of Release 1.7

Impacts to CLEC and PSP IMA Site Administrators - Administration

- New administrative screens provide the IMA Site Administrator with the ability to create and maintain a list of 1 to 1500 separate summary Billing Account Numbers (BANs). This includes a descriptive label, billing name and address, and optional billing cycle information.
- The U S WEST Business Office will maintain tax exemption information.
- A Method and Procedure for conversion of Summary Billing Account information maintenance will follow for CLEC IMA Site Administrators.

Impacts to CLEC and PSP IMA Users of Pre-Order and Order

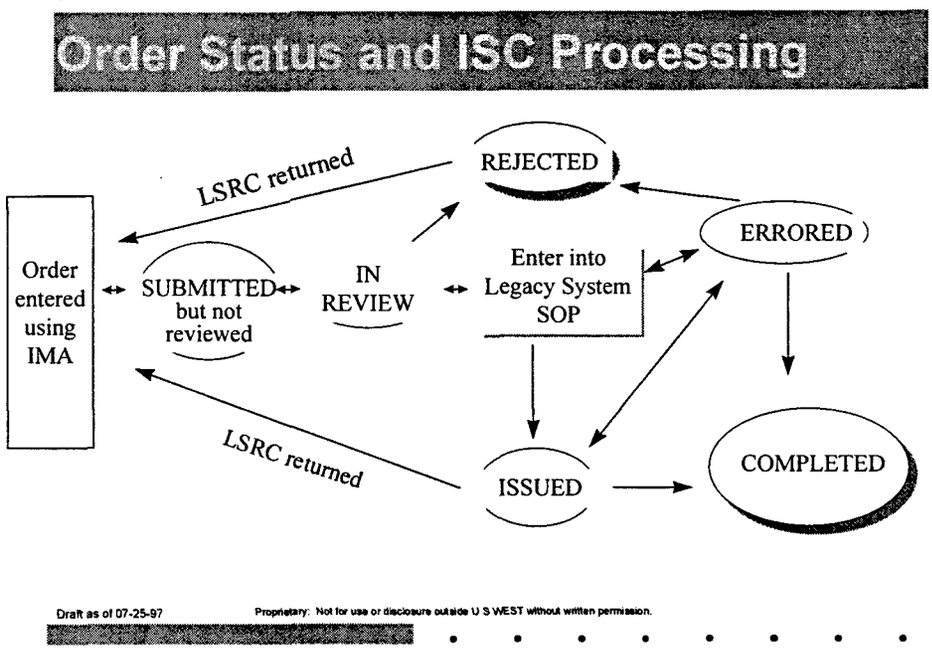
- CLECs can convert customers owned by other CLECs.
- Address validation requires only the TN and ZIP fields.
- IMA Users can query on the status of an order: (1) all versions of an order, or (2) a specific order and version combination. The displayed list details PON, PON Version, current order status, and the order submit date.

Competitive Local Exchange Carrier & Public Service Provider Release Notes for 1.7

- All IMA Users can view the List of BANs.
- All IMA Users can view the information for each BAN.

Impacts to CLEC and PSP IMA Users - New Order Manager

- Firm Order Manager has been replaced by the all new Order Manager. All new screens and functionality accompany this change.
- CLECs and PSPs will automatically receive a Local Service Request Confirmation (LSRC), also known as a Firm Order Confirmation (FOC), via e-mail, fax, or both. Data entered into an IMA Local Service Request (LSR) will be returned on the LSRC form including the PON and PON version numbers to the e-mail address or fax number on the LSR.



- The six order statuses are:
  - Submitted: U S WEST Carrier Center has received order but has not reviewed it
  - In Review: U S WEST Carrier Center representative is reviewing, researching, evaluating, or entering the order
  - Issued: U S WEST Carrier Center representative has entered the order to the legacy systems for processing and received a U S WEST Service Order number
  - Rejected: Order can not be processed as submitted

Competitive Local Exchange Carrier & Public Service Provider Release Notes for 1.7

- Errored: Order has encountered processing or facility difficulties in the legacy systems.
- Completed: Order has successfully passed through the legacy systems and TN can now accrue usage charges.

U S WEST Interconnect Mediated Access System

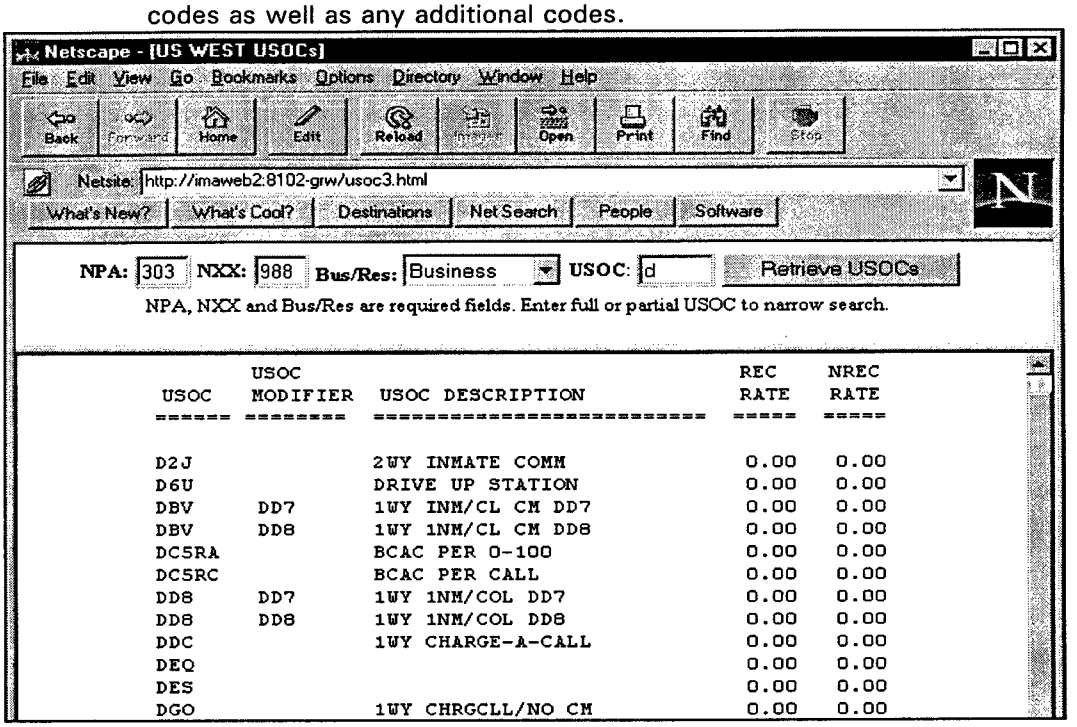
Competitive Local Exchange Carrier
&
Public Service Providers

Release Notes for 1.7A Service Availability Enhancements
Release Date: 09/27/97

Impacts to CLECs and PSPs

The Service Availability screen has been restructured to improve response time, enhance search capability, and include additional Universal Service Order Codes (USOC) and definitions.

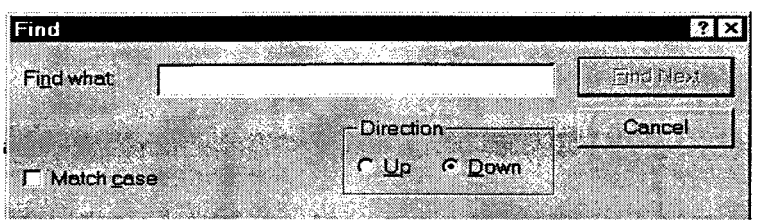
- The USOC table has been updated to include current USOC codes and their descriptions.
- The USOC database will be updated weekly and will include changes to existing codes as well as any additional codes.



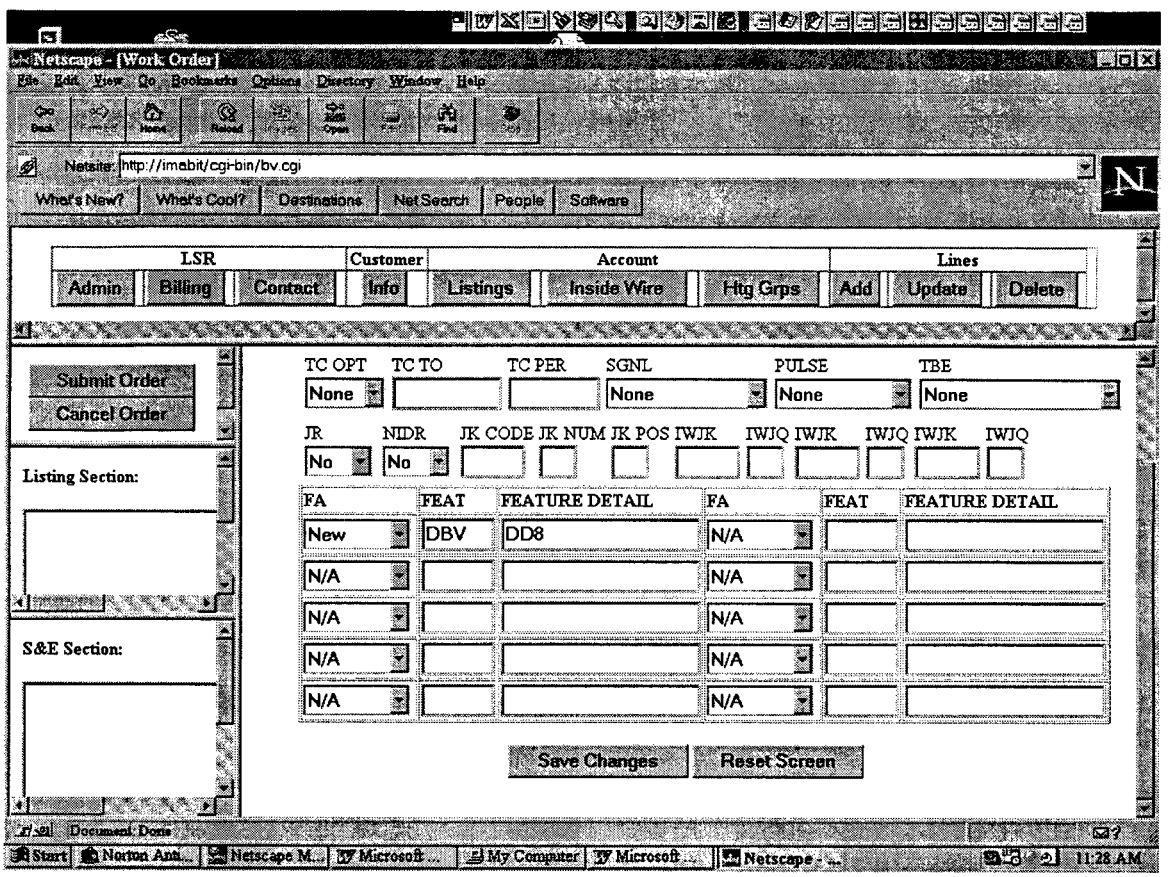
USOC	USOC MODIFIER	USOC DESCRIPTION	REC RATE	NREC RATE
D2J		2WY INMATE COMM	0.00	0.00
D6U		DRIVE UP STATION	0.00	0.00
DBV	DD7	1WY INM/CL CM DD7	0.00	0.00
DBV	DD8	1WY 1NM/CL CM DD8	0.00	0.00
DC5RA		BCAC PER 0-100	0.00	0.00
DC5RC		BCAC PER CALL	0.00	0.00
DD8	DD7	1WY 1NM/COL DD7	0.00	0.00
DD8	DD8	1WY 1NM/COL DD8	0.00	0.00
DDC		1WY CHARGE-A-CALL	0.00	0.00
DEQ			0.00	0.00
DES			0.00	0.00
DGO		1WY CHRGCLL/NO CM	0.00	0.00

- A new, user editable field labeled **USOC:** has been added so that a user may retrieve a subset of the list of USOC codes displayed on the screen. Users can now enter the first or first few characters of a USOC code to limit the displayed information to a specific subset. Limiting the amount of data displayed reduces search time considerably. For example, entering a 'd' in the **USOC:** field will bring up only those USOCs that begin with the letter 'd'. If the **USOC:** field is left blank, the entire USOC list for the specified NPA NXX will be displayed.

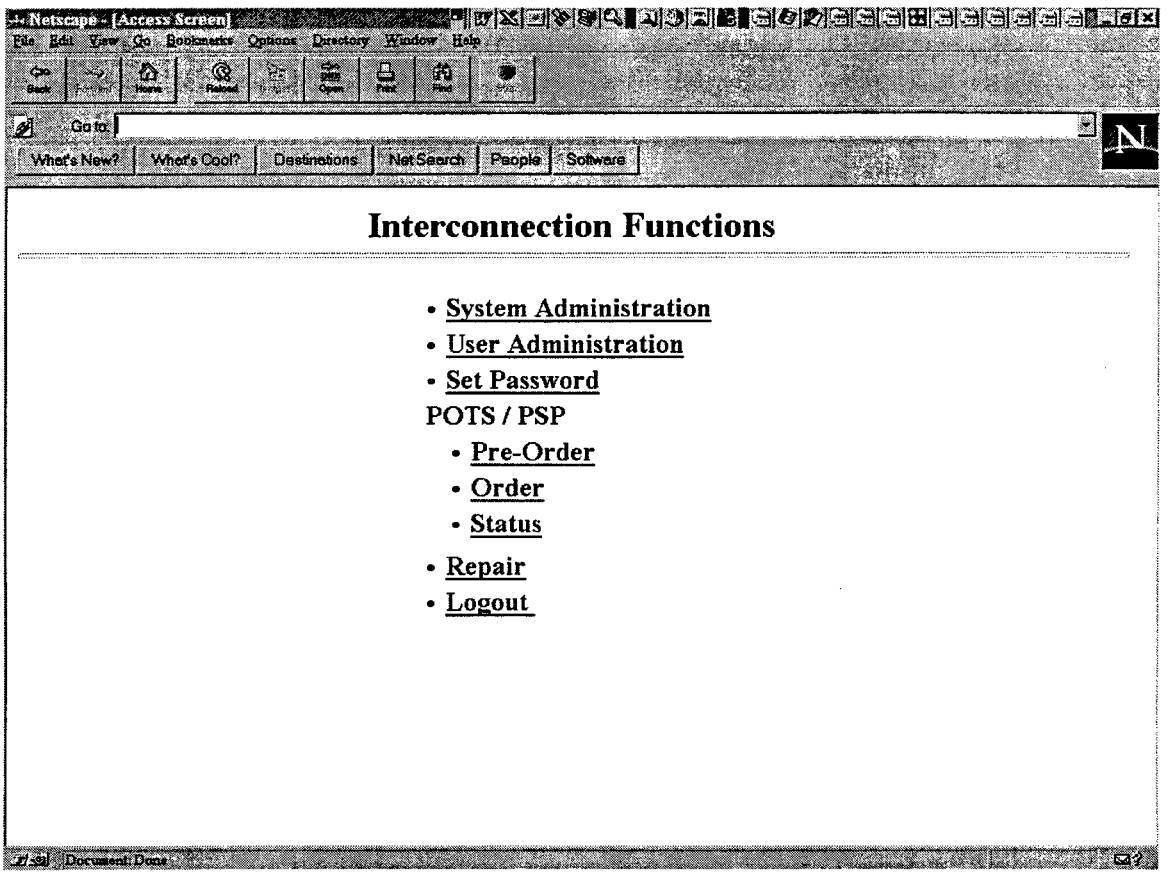
- All selected USOCs for a specified NPA NXX now display on the same screen, allowing the user to scroll up and down through the entire list rather than having to click on each of the separate page numbers. Users can now use Netscape's find function more effectively to locate specific USOCs. The following screen can be accessed by selecting the Find button on the Netscape browser. Then, to generate a search, enter the USOC code or key descriptive words in the **find what** field and select the Find Next button.



- A new column has been added to the Service Availability screen to include the USOC Modifier codes. The modifier helps distinguish which feature is being put on the line. The USOC Modifier code should be entered into the **feature detail** field on the Work Order screen (see the screen print below for an example) next to where theUSOC code itself is entered in the **Feat** field. For example, see the DBV USOC code on the Service Availability screen on page 1. To enter this USOC on an order, access the Work Order screen and put the USOC in the FEAT field and the USOC Modifier in the FEATURE DETAIL field.



- The Interconnect Functions template now provides a listing for POTS/PSP, with Pre-Order, Order, and Status selections appearing under the POTS/PSP heading. This change is cosmetic, and no changes in functionality have been implemented.



October 2, 1997

Dear IMA Administrator,

This is to notify you that as a result of some architectural changes implemented in release in 1.7A on 09/27/97, there will be an emergency release of IMA installed this Saturday, 10/04/97 from 7am - 9am MDT. The IMA system will be unavailable during the release window.

The emergency release addresses an error message issue in the Maintenance and Repair portion of the IMA system. When a user submits a ticket with an error condition, an error message displays on the screen as expected. The error message persists on all subsequent tickets submitted until a new error condition is introduced or the IMA session is terminated. The message indicates that the ticket entry was not successful when, in fact, it was submitted successfully.

The result of this emergency installation is that an error message will display only when an error condition exists.

If you have any questions, please contact Tammy Evans at (303) 896-7601.

Thank you for your support.

U S WEST Interconnect Mediated Access System

Competitive Local Exchange Carriers
&
Public Service Providers

Release Notes for version 2.0
Release Date: 11/15/97

IMA General

PON and Version Number Changes

IMA will now require that the PON and version number combination be unique for every submitted order, including re-submits. If an order with PON 12345 and VER 1 is submitted and it errors, the order will have to be re-submitted with the same PON and a new version.

To avoid complications that could occur due to this change in entry rules, U S WEST is asking that uniqueness be manually enforced beginning immediately.

Documentation

Pre-publication draft versions of IMA Administrators Guide, IMA Users Guide (POTS), IMA Users Guide—Design Services, and IMA Trouble Reporting Guide, will be available mid November.

After the review process is completed, the final publications of these documents will be distributed to the IMA administrator.

Web Browser

The web browser necessary to support Design Services functionality is Netscape Browser **3.01**. Netscape Browser 3.01 is the officially archived version supported by Netscape, has been thoroughly tested with the IMA software and provides a stable environment.

Menu Option Changes

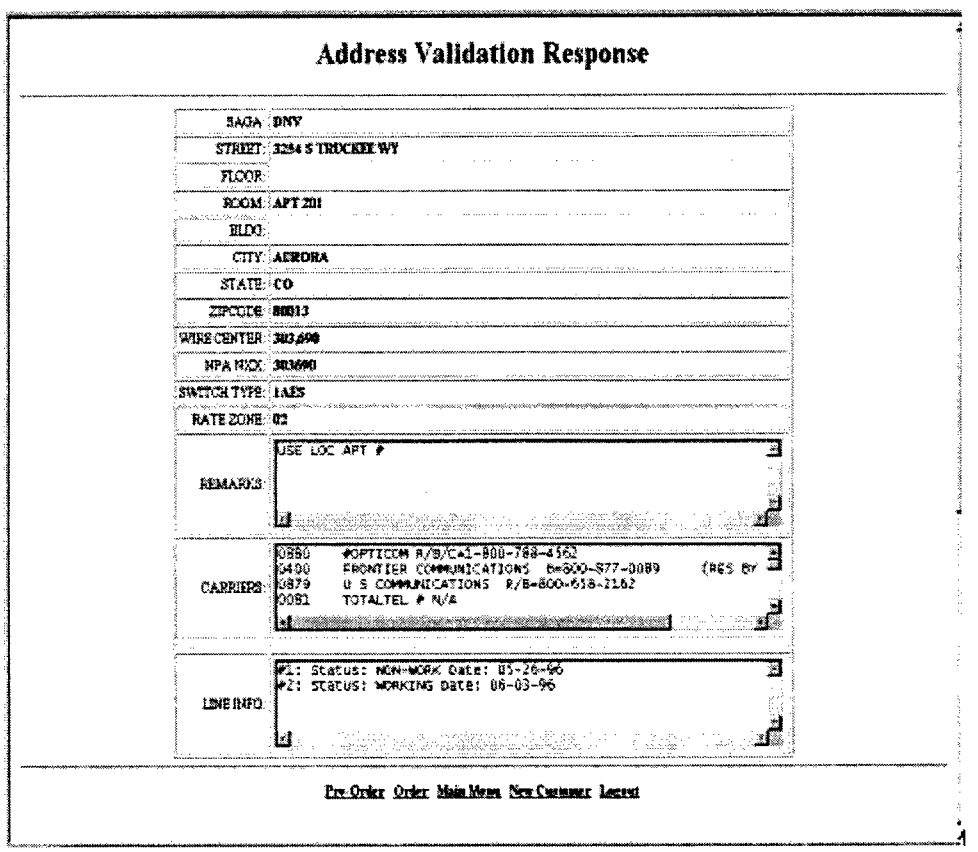
The Access Menu has changed to provide options for processing Design Services Orders.

POTS

Pre-Order

The POTS Pre-Order Address Validation Response screen includes the rate zone information which will assist the user in determining rates for their customers.

POTS Pre-Order Address Validation Response Screen



Address Validation Response

SAGA	DNV
STREET	3294 S TRUCKEE WY
FLOOR	
ROOM	APT 201
BLDG	
CITY	AURORA
STATE	CO
ZIPCODE	80013
WIRE CENTER	303,690
NPA NXX	303690
SWITCH TYPE	1AES
RATE ZONE	02
REMARKS	USE LOC APT #
CARRIERS	0880 #OPTICOM R/B/C=1-800-788-4562 0400 FRONTIER COMMUNICATIONS B=800-877-0089 (RES BY 0879 U S COMMUNICATIONS R/B=800-618-2162 0081 TOTALTEL # N/A
LINE INFO	#1: Status: NON-WORK Date: 03-26-96 #2: Status: WORKING Date: 06-03-96

Pre-Order Order Main Menu New Customer Logout

Design Services

The Design Services interface takes advantage of new development technology that was not available when the POTS interface was implemented; therefore, the Design Services and POTS interfaces look and function differently. Because the Design Services functions and screens are all new, they have been covered them only at a high level in this document. Detailed documentation including screen prints will be available in the User Manual for Design Services.

Design Services functions are accessed from the Main Menu.

Interconnection Functions Screen

Interconnection Functions

- System Administration
- User Administration
- Set Password

POTS / PSP

- Pre-Order
- Order
- Status

DESIGN SERVICES

- Pre-Order / Order
- Status

- Repair
- Logout

Resale orders for some design services can be submitted through IMA. The Design Services which may be submitted using this release are:

- ISDN
- Centrex
- Private Line (Point to point)
- Unbundled Loop

NOTE: Private line and Unbundled loop service requests can be submitted with all the information necessary to complete these orders. However, due to limitations in the standards definition with respect to ISDN and Centrex, only the LSR and EUI forms are

submitted to serve as a request for these types of services, which will then be continued manually.

Pre-Order

Similar to the POTS pre-order activities, pre-order activities for design services include:

- Validate Address
- Get CSR
- Facility Check

  The facility availability query will return information for design services, HI Capacity, ISDN, POTS, and POTS to Unbundled Loop conversions.

Order

The activities supported for design services orders include:

- New Install and/or Account
- Change an Existing Account
- Disconnect
- Inside Move of the Physical Termination within a Building
- Outside Move of End User Location
- Records Activity for Ordering Administrative Changes
- Conversion of Service to New LSP (Conversion with Changes)
- Conversion as-is
- Suspend
- Restore
- Cancel Orders

  Another LSR must be submitted to cancel a previous order. The supplemental LSR must contain the same information, including the same PON, as the original LSR.

  To identify the supplemental LSR as a Cancel request, **1** must be entered in the **SUP** field on the LSR form. To satisfy the requirement for a unique PON and VER combination, change the VER number.

- Order confirmation

  When the user submits an order, an Order Confirmation is returned after the order has been added to the database. This is *not* a confirmation that the ISC has reviewed the order.

General

Print capability is available for the following screens: **Validate Address Response, Get CSR Response, Design Services, Facility Response, POTS**

Facility Response, ISDN Facility Response, LSR Form, EUI Form, Resale Form, Directory Listing Form, Loop Service Form.

E-Mail capability exists for **Validate Address Response** screen, **Get CSR Response,** and the **Order Confirmation**.

User may query the status of a particular order submitted through IMA. The response is limited to confirmation that the order has been submitted to U S WEST.

Maintenance and Repair

In addition to being able to submit and review the status of a submitted trouble report, the enhancements in the Trouble Report allows the user to:

- retrieve the selected trouble report
- edit the retrieved trouble report
- resubmit the modified trouble report
- delete the trouble report

Open Trouble Report Enhancements

- Opening a new trouble report ticket or reviewing history only requires **Circuit ID, State, BTN,** and **Street Address**. **City** and **Zip Code** fields are optional.

Open Non-Design Trouble Report and **Open Design Trouble Report** Screen Modifications

- **Circuit Id** is brought forward from the **Open Trouble Report** screen. The **Circuit Id** displays directly under the Report title.
- **Emergency** field was renamed to **Public Safety Hazard**. Select **Yes** or **No**.

Open Non-Design Trouble Report Functional and Screen Enhancements

- **Called Number** is a new field added to enable the user to identify a specific telephone number associated with a trouble report.
- **Trouble Description** field was expanded to 47 characters.

- **Open Non-Design Trouble Report** Screen

Open Non-Design Trouble Report

Circuit Id: 3037654544

Goto Design Trouble Report

Return Trouble Report Status Via:

☐ Fax ☑ Email ☐ Neither

TROUBLE REPORT INFORMATION

Customer Trouble Report ID:

Trouble Type Code **TSP Priority** **Perceived Severity** Affects Service

TROUBLE DESCRIPTION CODES

Number Changed (#CHG)
At Times Or Intermittent (/T)
Today (2DY)
Three Way Calling (3WC)
Alternate Current (AC)
Access (ACC)
Account (ACCT)
Additional (ADL)

Called Number:

Trouble Description

RECENT U S WEST SERVICE ORDER

Number **Date (mm/dd/yyyy)**

Circuit In Use? ○ Yes ◉ No **Public Safety Hazard?** ○ Yes ◉ No

Requested Commit Date (mm/dd/yyyy):

REPORTING CLEC INFORMATION

Phone
Name
Street Address
City **State** **Zip Code**
Fax
Email

Submit Back

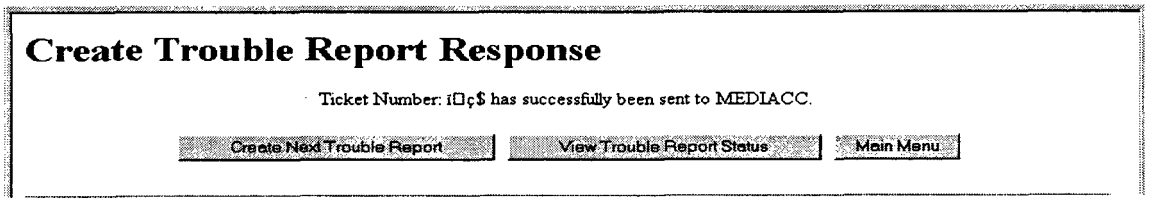
Create Trouble Report Response, a new screen, displays after the user clicks **Submit** in the Open Trouble Report screen. This screen:

- informs users that IMA sent the trouble report ticket successfully.
- provides the user with the US WEST Trouble Report Number
- and allows the user to
    1. create another trouble report
    2. view the status of the trouble report just submitted, or
    3. return to the main menu.

NOTE: The user can speed up data entry by skipping review of the New Trouble Report Response screen.

The detail trouble report information that used to be immediately displayed on the **New Trouble Report** screen, can be accessed by opening the **Maintain Trouble Report** screen and clicking on the **Query** button.

Create Trouble Report Response Screen



Maintain Trouble Report

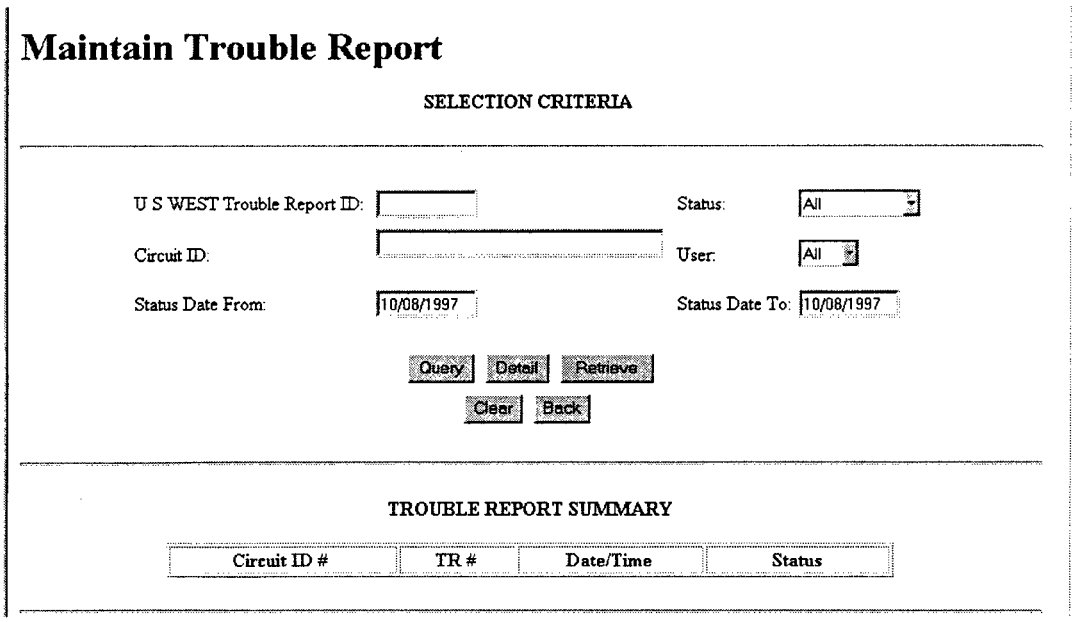
The **Status list** box now contains these new statuses:

Status	Description:
Submitted	Accepted successfully
Failed	Not submittted successfully
Errored	Returned because of an error
Resubmitted	Accepted after a resubmission

- The **Maintain Trouble Report Detail** screen now includes all information the **Create Trouble Report Confirmation** screen had in previous version of IMA. The **Create Trouble Report Confirmation** screen has been replaced by the **Create Trouble Report Response** screen.

- Additional selection criteria fields now allow users to enter **Circuit ID, Userid, Start Date,** and **End Date** to limit the number of trouble ticket summaries that are displayed.
- If the U S WEST Trouble Report ID is entered, the user can display the detailed trouble report, or retrieve the trouble report if the status is errored or failed.

Maintain Trouble Report Screen



Re-submitting a Trouble Report

The new screen processing flow allows users to retrieve, edit and resubmit or delete Trouble Reports where the status was formerly "errored" or "failed".

- In the Maintain Trouble Report screen, click on the Retrieve button after entering the trouble report ticket number. IMA displays the **Resubmit Trouble Report** screen.
- The user may correct the condition causing the error or may choose instead to delete the trouble report thus canceling the repair request. If error has been corrected, the trouble report may be re-submitted by clicking the **Resubmit** button.

Resubmit Design Trouble Report Screen

Resubmit Design Trouble Report

Circuit Id:

Return Trouble Report Status Via:

☐ Fax ☐ Email ☑ Neither

A-LOCATION ADDRESS

Street Address (include Apt#, Rm#, etc.): asdfasdf
Building Name: asdfadsf
City: asdfasdf **State** ID **Zip Code:** 82057

TROUBLE REPORT INFORMATION

Customer Trouble Report ID: 154234

Perceived Severity Service Not Affected

Trouble Type Code 1025 **TSP Priority** 34

Trouble Description

This is a nondesign test.

Public Safety Hazard? ○ Yes ◉ No

	From	To	From	To
Sun				
Mon	12:00	14:05		
Tue				
Wed				
Thu			4:00	9:09
Fri				
Sat				

A-LOCATION ACCESS PERSON

Phone 3034521265
Name
Street Address 12215 Bellaire
City Thornton **State** SD **Zip Code** 80141

REPORTING CLEC INFORMATION

Phone 3038968718
Name Roy Mazzola
Street Address 471 Magnolia
City Denver **State** WY **Zip Code** 80220
Fax 3038968888
Email master.com

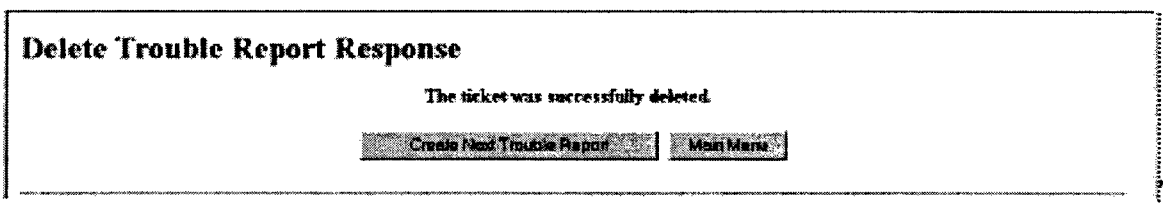
Resubmit | Delete | Back

Deleting Errored/Failed Trouble Reports

The user may decide not to resubmit an errored or failed trouble report. To delete the trouble report, click **Delete** button after retrieving the failed or errored trouble report ticket.

NOTE: Remember to record the failed or errored trouble report ticket number from the Errored/Failed report dialog box. It will be needed to retrieve the trouble report.

Delete Trouble Report Response Screen



USWEST IMA DEPLOYMENT TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWest

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages:** 1
Phone:	**Date:** December 9,1997

Re: IMA Projects - Hardware and Software Upgrade

A hardware upgrade will occur Saturday, December 13, 1997, at 12 noon (MST). During the upgrade, the IMA system will not be accessible. Our goal is to have the upgrade partially complete by 2:00 PM to allow a window of availability until 7:00 PM that evening. If you would like to be contacted with the hardware upgrade status on Saturday, December 13, please page Barbara Peterson at (303) 852-7520.

We will also be implementing a software upgrade Friday, December 19, 1997, at 8:00 PM (MST). Our goal is to have the upgrade completed on Saturday, December 20, 1997, by 10:00 AM (MST). If you would like to be contacted with the software upgrade status on Saturday, December 20, please page Jo Netherton at (303) 240-3469.

Thank you for your cooperation and patience throughout these system changes.

As always, for system questions, concerns or difficulties, please contact our help desk at (888) 796-9102.

Thank you,

Barbara "Pete" Peterson

IMA Deployment Manager
(303) 896-2705

USWEST IMA DEPLOYMENT TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST IMA DEPLOYMENT TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

US West

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages:** 1
Phone:	**Date:** December 22,1997

Re: IMA Projects - Hardware and Software Upgrade

A preliminary installation upgrade was postponed from 19 December, 1997, to 26 December,1997. The installation will begin at 8:00PM (MST) on Friday, December 26th, 1997. The goal is to have the it completed by 10:00 AM on Saturday, December 27th.

Changes that will be included in the upgrade are: In SYSTEM ADMINISTRATION ® ADD/MODIFY BILLING ACCOUNT ® BILLING ACCOUNT NUMBER PROFILE, the pull down option for STATE will now include all 50 states.

The TAX EXEMPTION default will change from LETTER ON FILE to "F & S & C & M" (Federal, State, County, and Municipal). The City field length will now be 15 characters.

Thank you for your cooperation and patience throughout these system changes.

As always, for system questions, concerns or difficulties, please contact our help desk at (888) 796-9102.

Thank you,

Barbara "Pete" Peterson

IMA Deployment Manager
(303) 896-2705

USWEST IMA DEPLOYMENT TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

IMA Interconnect Mediated Access Software Release Notes

Version 2.1.1

Contents

The Interconnect Mediated Access (IMA) Software Release Notes for Version 2.1.1, implementation date February 20, 1998, includes the following items:

- This cover page
- IMA Software Release Notes, Version 2.1.1, issued February 2,1998
- Replacement pages for Interconnect Mediated Access User's Guide

Important

This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.

This document was produced on behalf of the regulated interests of U S WEST Communications (USWC). Any use of this document by unregulated entities of U S WEST must be in accordance with the U S WEST Fair Compensation Policy. For information on the Fair Compensation Policy, contact your compliance manager.

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IMA Documentation Project Manager
U S WEST Communications, Inc.
U S WEST Information Technologies
1005 17th Street Suite 1690
Denver, CO 80202
303-896-1529

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Interconnect Mediated Access (IMA)

Software Release Notes

Version 2.1.1 February 2, 1998

General Overview

Summary

The thrust of the most recent software release is to implement modifications to internal code. Therefore, a majority of the latest enhancements appear transparent to users. Enhancements that affect users have been outlined below, and should be noted by all Local Service Providers (LSPs) and related U S West employees such as help desk personnel and system administrators.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, version 2.1.1, to be implemented at 8:00 PM on Friday, February 20, 1998.

Audience

This information is to be disseminated to all users of IMA, including LSPs and all related U S West employees such as help desk personnel and system administrators.

Dissemination

Currently, the IMA Deployment Team headed by Manager Barbara Peterson is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at number 303-896-2705 or email address bpeters@uswest.com.

Enhancements

POTS/PSP Field Enhancements

Enhancements have been made to expand the number of characters permitted in certain fields. These enhancements affect the following windows.

- Pre-Order Home Page
- Order Authorization
- Work Order

 Proprietary: Not for use or disclosure outside U S WEST without written permission.

Pre-Order Home Page

In the Pre-Order Home Page window, the number of characters permitted in five fields has been expanded. The appearance of this window has changed in no way. Simply, the change affects field capacity in the Customer Location and Access section, and includes the following.

- The **STREET** field has been expanded to permit 64 characters, up from 25.
- The **FLOOR** field has been expanded to permit 20 characters, up from 3.
- The **ROOM** field has been expanded to permit 20 characters, up from 14.
- The **BLDG** field has been expanded to permit 20 characters, up from 9.
- The **AUTHNM** field has been expanded to permit 30 characters, up from 15.

Order Authorization

In the Order Authorization window, the number of characters permitted in two fields has been expanded. The appearance of this window has changed in no way. Simply, the change affects field capacity in the Order Authorization section, and includes the following.

- The **DFDT** field has been expanded to permit 6 characters, up from 5.
- The **REMARKS** field has been expanded to permit 255 characters, up from 160.

Work Order

From the Work Order window, the number of characters permitted in five fields has been expanded. The appearance of the Work Order window and its secondary windows have changed in no way. Simply, the change affects field capacity in the LSR Admin window (accessible from the Work Order window by selecting the Admin button in the LSR group) and field capacity in the Lines Add window (accessible from the Work Order window by selecting the Add button in the Lines group.) The field capacity changes include the following.

LSR Admin

- The **NCI** field has been expanded to permit 12 characters, up from 5.
- The **SECNCI** field has been expanded to permit 12 characters, up from 5.
- The **RORD** field has been expanded to permit 20 characters, up from 12.
- The **SPEC** field has been expanded to permit 7 characters, up from 5.

Lines Add

- The **TC PER** field has been expanded to permit 10 characters, up from 8.

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages:** 3
Phone:	**Date:** February 16, 1998

Re: Reminder Notification: IMA Release 2.1.1

The Interconnect Mediated Access group will be implementing an upgrade of the IMA software on Friday, February 20, 1998 at 8:00 PM (MST). Our Goal is to have the upgrade completed on Saturday, February 21, 1998 by 10:30 AM (MST).

If you would like to be updated regarding the status of the upgrade on Saturday, February 21, please page Jo Netherton at (888) 710-1423. Thank you for your cooperation and patience throughout these system enhancements.

As always, for system questions, please contact our help desk at (888) 796-9102. For questions on how to use IMA, contact our training team on pager number (303) 473-2017.

Thank you

Barbara "Pete" Peterson

IMA Training and Deployment Manager

(303) 896-2705

Note: IMA 2.1.1 Release notes were sent on January 30, 1998.

IMA NEWS FLASH!
3/10/98
Interconnect Mediated Access Web Site

For easier accessibility, the url for the above has been changed to the following:

http://uswima1/lspdoc.html

This is available after you have accessed the IMA system. You can also access this from any screen when you're using IMA.

At this web site click on "What's New" and you will find:

- Release notes
- System Guides (e.g., "IMA Repair Guide")
- SAGA (Street Address Guide Area) &
  FAM (Feature Availability Matrix) data for downloading

Future enhancements will include:

- Newsletter
- Frequently asked questions (FAQ)
- Customer forum
- Menu option for this site

Helpful hint: Use the "back" button to return to the IMA screens; do not use "home" which would return you to your "homebase" & not the IMA system.

If you have any questions about this, please call our Training Team pager # (303) 473-2017.

Thank you,

(303) 473-2017.
IMA Training & Deployment

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** April 1,1998
Re: IMA Release Notes – Version 3.0	**From:** IMA Deployment Team

The Interconnect Mediated Access group will be implementing an upgrade of the IMA software on Friday, April 24, 1998, at 6:00 PM (MST). Our Goal is to have the upgrade completed on Saturday, April 25, 1998, by 10:00 AM (MST). The IMA system will not be available during the implementation.

The release notes for IMA version 3.0 will be available Friday, April 3, 1998, on the IMA Information Website. To get to the website, log into IMA and then enter the URL http:/uswima1/lspdoc.html. Please note that you must have the DNS tab under the network preferences configured exactly as seen in the IMA setup. Please refer to the IMA User Guide or call the help desk if you experience difficulties.

If you would like to be updated on Saturday, April 25, regarding the status of the upgrade, please page Norm Klingbile at (303) 240-3994. Thank you for your cooperation and patience throughout these system enhancements.

As always, for system questions, please contact our help desk at (888) 796-9102.

Thank you

Barbara "Pete" Peterson

IMA Training and Deployment Manager

(303) 896-2705

USWEST IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** April 1,1998
Re: IMA Release Notes – Version 3.0	**From:** IMA Deployment Team

The Interconnect Mediated Access group will be implementing an upgrade of the IMA software on Friday, April 24, 1998, at 6:00 PM (MST). Our Goal is to have the upgrade completed on Saturday, April 25, 1998, by 10:00 AM (MST). The IMA system will not be available during the implementation.

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Thank you

Barbara "Pete" Peterson

IMA Training and Deployment Manager

(303) 896-2705

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IMA Interconnect Mediated Access

Software Release Notes Version 3.0

Contents

The Interconnect Mediated Access (IMA) Software Release Notes for Version 3.0, implementation date April 24, 1998, includes the following items:

- This cover page
- IMA Software Release Notes Version 3.0
- Screen Shots of the new graphical user interface (GUI)

Important

This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.

This document was produced on behalf of the regulated interests of U S WEST Communications (USWC). Any use of this document by unregulated entities of U S WEST must be in accordance with the U S WEST Fair Compensation Policy. For information on the Fair Compensation Policy, contact your compliance manager.

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All other trademarks mention herein are the property of their respective holders.

Ownership

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U S WEST Information Technologies

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Interconnect Mediated Access (IMA)

Software Release Notes

Version 3.0 April 3, 1998

General Overview

Summary

The thrust of the most recent software release is to provide a maintainable system with maximized flexibility and user functionality. Therefore, enhancements provided by Software Release 3.0 facilitate improved productivity through expansion of Electronic Data Interchange (EDI), Pre-Order, and Maintenance and Repair capabilities. Enhancements that directly affect users are outlined below.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.0, to be implemented at 1900 MDT on Friday, April 24, 1998.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and all related U S WEST employees such as help desk personnel and system administrators.

Dissemination

Currently, the IMA Deployment Team headed by Manager Barbara Peterson is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at number 303-896-2705, or email address bpeters@uswest.com.

Enhancements

LSP Information Website

A new option has been added to the Interconnection Functions main menu. With Software Release 3.0, users are now able to select the *LSP Information Website* hyperlink to go directly to that web site. There, users can access the latest IMA documentation and retrieve information on late breaking IMA news. (Users may refer to ***Figure 1: LSP Information Website*** for more details.)

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New Welcome Window

Enhancements have been made to the appearance of the Welcome to U S West! window. The Welcome to U S West! window contains a new graphic which replaces the old. The function of the welcome window has not changed. (Users may refer to ***Figure 2: Welcome to U S WEST!*** to view the new graphic.)

Order Processing in POTS

A Change Date button has been added to the Order Processing window. This enhancement ensures users have the added functionality of being able to change dates available for appointment selection. In addition, an auto-return function has been built into order processing. This enhancement ensures that telephone numbers and appointments not used within a designated time period are automatically returned for future use. (Users may refer to ***Figure 3: Change Date Button*** to view the new Change Date button as it appears in the Select Appointment window.)

Design Services

When users enter Design Services, a new background window appears. (Users may refer to ***Figure 4: New Background*** to view the new background window.) In Design Services, users may now tab through all fields, windows are resizable, and windows for Order Form are now color coded to alert users when work within a given window is complete, adding greater user functionality and user friendliness.

Design Services Graphical User Interface

Enhancements have been made to improve the overall look and feel of the IMA graphical user interface (GUI) in Design Services. GUI enhancements in Design Services include the following:

- Contact telephone number fields for IMPCON TELEPHONE, ALTIMPCON TELEPHONE, AND DSGCON TELEPHONE have been expanded to 17 characters, with the dash character inserted automatically in the fourth and eighth positions.
- Windows utilize standard sizing and positioning for fields and buttons.
- Dialog boxes appear centered over the windows that create them.
- Windows calculate their size according to the font and the font style.
- Buttons conform to the size of the text.
- Buttons automatically disable and re-enable as appropriate.
- Windows provide uniformity of button placement, naming, and functions for the standard buttons, such as *OK, Email, Print, Cancel, Reset, Close.*
- The Desired Due Date (DDD) and the Desired Due Date Out (DDDO) text boxes have changed to display the four digit year *first*, the two digit month next, and the two digit day separated by the dash character. (Users may refer to ***Figure 5: Local Service Request DDD and DDDO Changes*** to view the new date order.)

Some GUI enhancements include new windows and new dialog boxes. These new windows and dialog boxes can be viewed in the ***Screen Shots of New GUIs*** section below.

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Maintenance and Repair

Enhancements have been made to modify Maintenance and Repair screens. Maintenance and Repair screens now display times and accept time entries in Mountain Standard Time (MST) instead of Greenwich Mean Time (GMT). The time zone label, MST, has been added to all time stamp fields. Additional enhancements made to Maintenance and Repair screens include disposition and cause codes that have been consolidated to display as trouble description codes, and an expanded error message functionality has been created.

EDI

Basic POTS order functions of EDI were implemented in Release 2.1. Now, with Release 3.0, additional transaction types have been added. The new transaction types supported by EDI are the Pre-Order TN Availability process and the Pre-Order Appointment Availability process.

EDI Pre-Order TN Process

The EDI Pre-Order TN Process allows users to execute the following transactions:

- Check for an available TN
- Select a TN
- Cancel/Return a TN

EDI Pre-Order Appointment Process

The EDI Pre-Order Appointment Process allows users to execute the following transactions:

- Check for an available Appointment
- Select an Appointment
- Cancel/Return an Appointment

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Screen Shots of New GUIs

This section contains screen shots of the new windows created with Software Release 3.0 enhancements. Users may refer to these screen shots to view the new windows, and to view the new look and feel of improved windows.

Figure 1: LSP Information Website

Users may select the hyperlink *LSP Information Website* from the Interconnect Functions main menu to go to the new LSP Information Website. The LSP Information Website home page appears below.

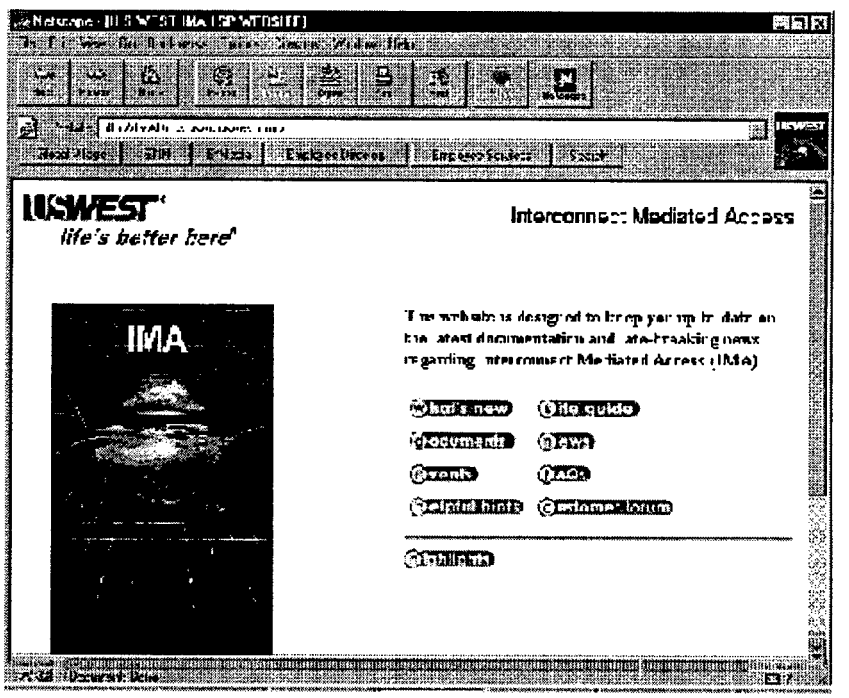

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Figure 2: Welcome to U S WEST!

The graphic in the Welcome to U S WEST! window has changed. When users go to Interconnect Meditated Access to start their session, the following window appears.

Welcome to US WEST!

Start Session

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Figure 3: Change Date Button

In POTS, a Change Date button has been added to the Select Appointment window in Order Processing. The Change Date button allows users to change the Desired Due Date (DDD) for an order.

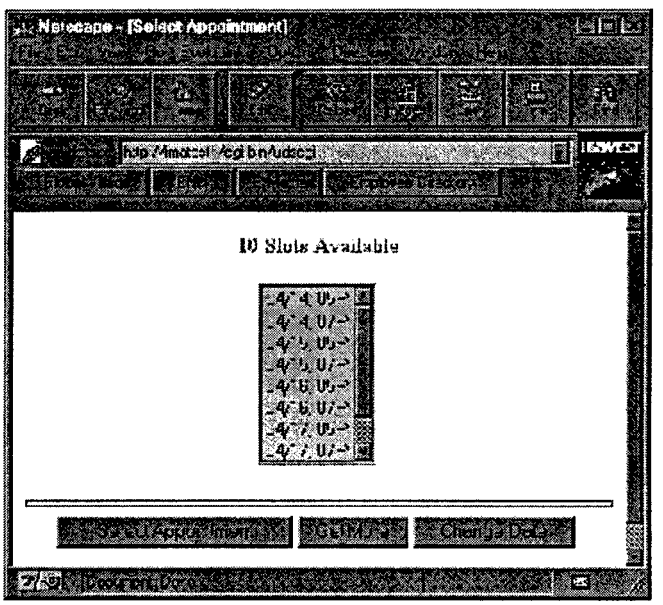

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Figure 4: New Background

When users log onto Design Services, the following new background appears.

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Figure 5: Local Service Request DDD and DDDO Changes

In Design Services, the Desired Due Date (DDD) and the Desired Due Date Out (DDDO) text boxes have changed to display the four digit year *first*, the two digit month next, and the two digit day separated by the dash character. The change in the way dates are displayed in these two text boxes is shown below.

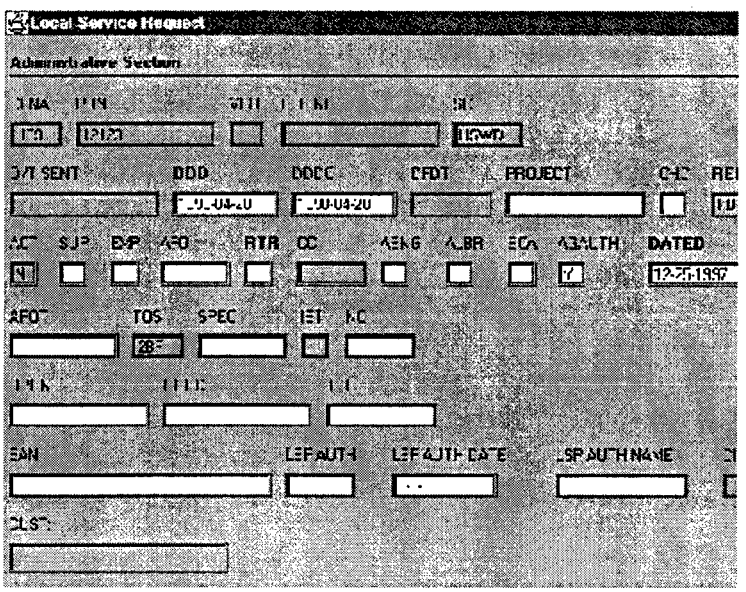

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Figure 6: Change Button

In POTS, the Change Date button allows users to change the Desired Due Date (DDD) for an order.

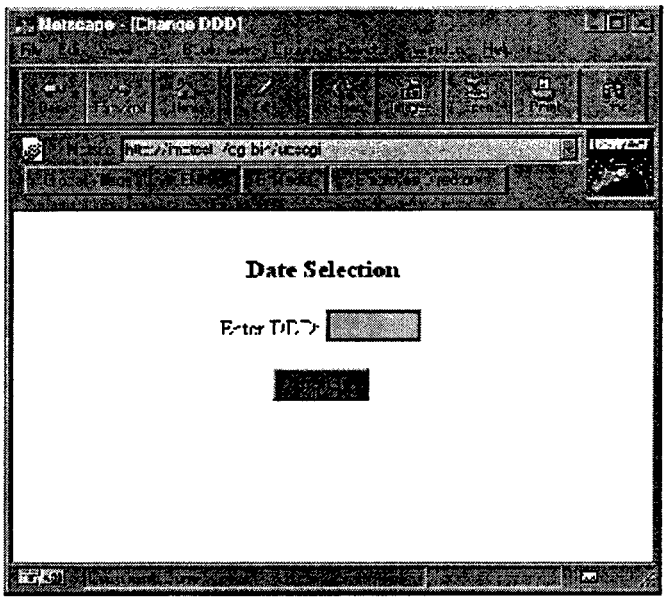

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Figure 7: Address Validation Response Screen

In Design Services, the following text boxes were added to the Address Validation Response Screen: **Rate Zone**, **Site ID**, and **TTA**.

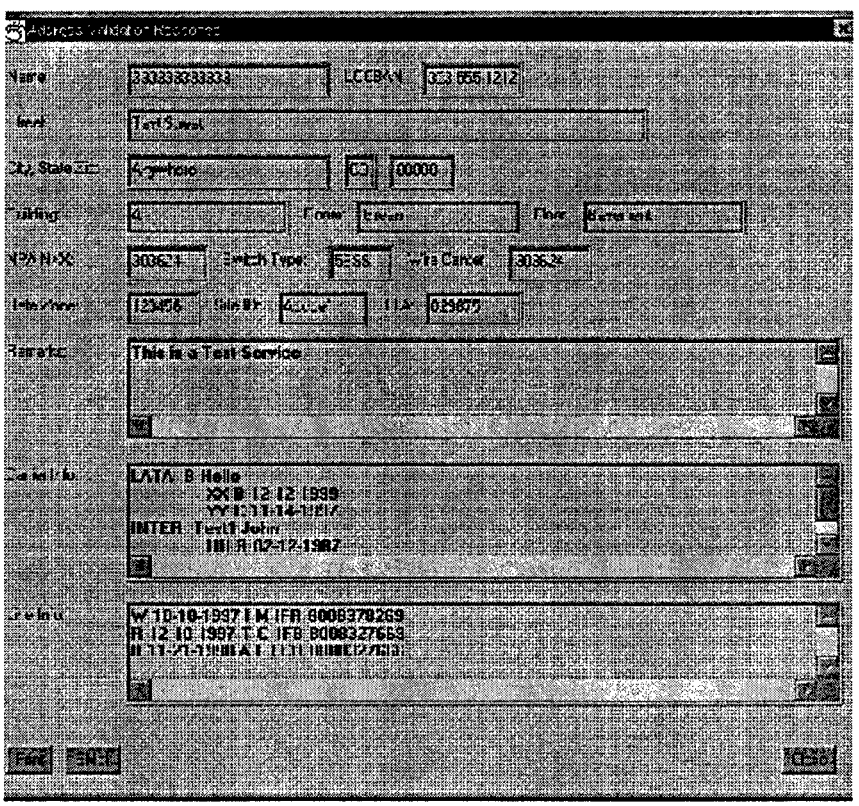

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Figure 8: CSR Multiple Match Window

In Design Services, the Multiple Match window has been added to resolve multiple matches on CSRs.

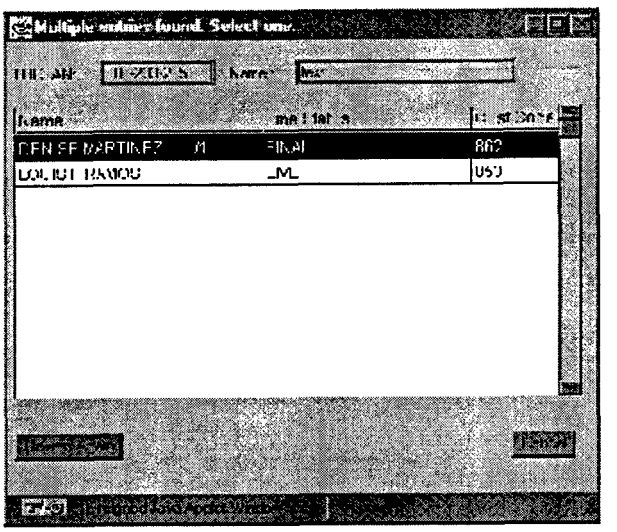

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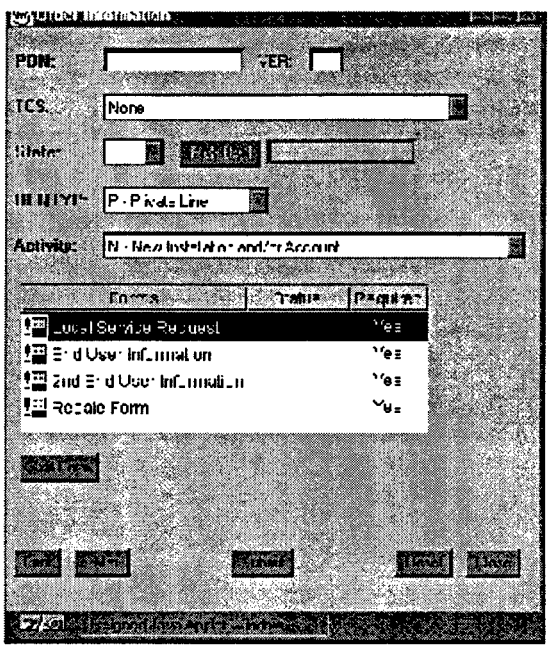
Figure 9: Order Information

In Design Services, the Forms column in the Order Information window has been changed to include more visual indicators. The exclamation point next to the form name indicates a mandatory activity. Also, the Status and Required columns are new, and the color of the columns changes from red to green when a form is complete. If no text appears in the Status column, the form is incomplete. "Completed!" displays in the Status column when the form is complete. The Email button allows users to email forms.



A new feature has also been added to this window. If a user selects the Submit button before completing all required forms, an error dialog window will display. The error dialog window details all the requirements the user must fulfill before submitting the order. The error dialog box appears below.

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Figure 10: Error Dialog Window

In Design Services, the following window is an example of the error dialog window that displays if a user attempts to submit an order without completing all required forms. The error dialog window details all the requirements the user must fulfill before submitting the order.

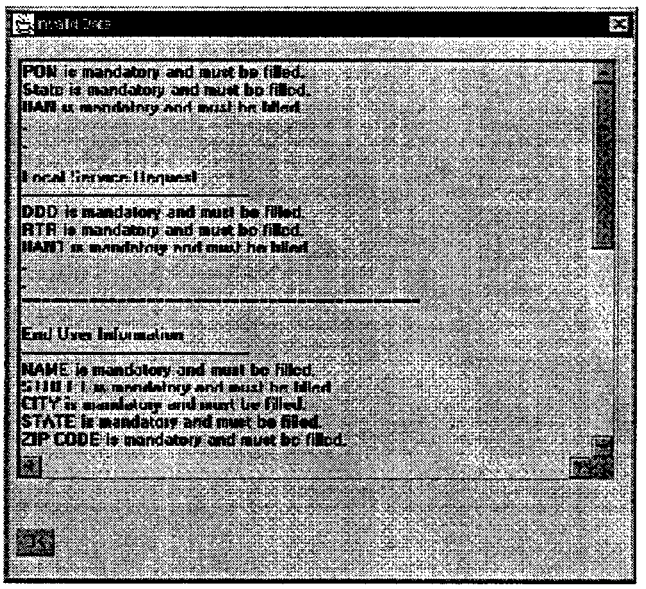

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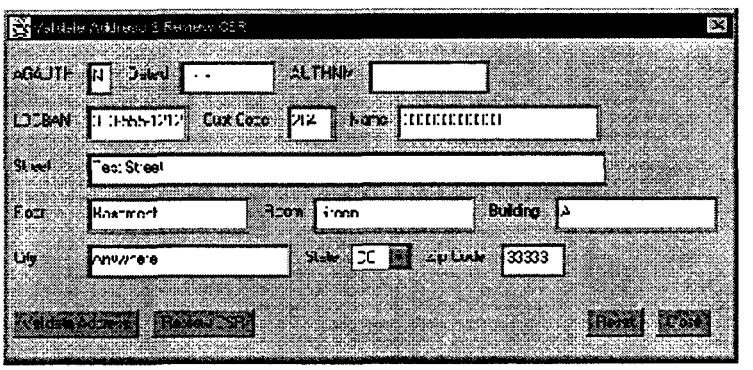
Figure 11: Pre-Order

In Design Services, a customer code (**Cust Code**) text box has been added to the Validate Address & Review CSR window to facilitate the Multiple Match effort. Users should note that the Tab Order, however, was preserved.



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U S WEST IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

U S WEST

Fax

To:		**Company:**	USWest
Fax:		**Pages:**	1
Phone:		**Date:**	April 17, 1998
Re:	**IMA Release 3.0 Reminder Notification**	**From:**	IMA Deployment Team

As we informed you on April 1st via fax, the implementation of IMA Release 3.0 will begin on Friday, April 24th at 7:00 p.m. (MDT)* and will be complete by Monday, April 27th at 6:00 a.m. (MDT) (*originally was 8:00 p.m.). The system will be unavailable during this time period. On Saturday, April 25th, if you require a status on this implementation, you can page our Deployment Team Lead for 3.0, Norm Klingbile (pager number 303-240-3994).

Also, please note the additional enhancements to this release (these are all noted in the RELEASE NOTES on the IMA Information Website located at URL http://uswima1/lspdoc.html. Again, you must be logged in to IMA before entering this URL.

- A new login screen greets you with **WELCOME TO U S WEST**.
- Contact telephone number fields within Design Services have been extended to 17 characters.
- "Directory Listing" buttons within Design Services Order screen have been removed. A Directory Listing form will populate as an option when applicable to order activity being performed.
- After a form has been completed within Design Services Order, the field will change color from red to green and denote "COMPLETED".
- The Desired Due Date (DDD) and Desired Due Date Out (DDDO) fields on the Local Service Request (LSR) within Design Services need to be populated as "year/month/day". The format is YYYY/MM/DD.

NOTE:
As a reminder, please use the **back browser** button when returning to IMA Interconnect Function Menu from the new LSP Information Website.

If you have questions, please contact our help desk at 888-796-9102

Thank you,

Barbara "Pete" Peterson
IMA Training and Deployment Manager
303-896-2705 bpeters@uswest.com

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages:** 3
Phone:	**Date:** June 4,1998
Re: IMA Release Notes – Version 3.1	**CC:**

The Interconnect Mediated Access group will be implementing an upgrade of the IMA software on Friday, June 26, 1998, at 8:00 PM (MST). Our Goal is to have the upgrade completed on Saturday, June 27, 1998, by 12:00 PM (MST). The IMA system will not be available during the implementation. If you would like to be updated on Saturday, June 27th regarding the status of the upgrade, please page Cory Hamilton at (800) Sky-Page (759-7243), PIN 321-2412 .

The release notes for IMA version 3.1 will be available end of day Friday, June 5, 1998, on the IMA LSP Information Website. The LSP Information Website is an IMA menu option.

VIDEO CLASS REGISTRATION:
Because Release 3.1 will contain significant changes in appearance and functionality, we are scheduling video training sessions to familiarize users prior to implementation. These sessions will be approximately 2 hours long. An online demonstration will be provided, followed by a question and answer period. The attached schedule lists the sessions available to the Co-Providers. (We are inviting U S WEST employees to attend the June 16th session, and Account Executives/Managers are welcome to attend any session).

Please reply by June 11th by faxing a completed registration form (located on the last page of this fax). A confirmation of the date and location will be sent to you by June 15, 1998. **Please bring a copy of the release notes with you when attending the video training sessions.** If you have any questions, please contact Mary Ann Sena at (303) 896-3097 or MXSENA@uswest.com.

Additional note: Due to upgrades to other dependent systems, IMA will not be available on Saturday, June 6.

As always, for system questions, please contact our help desk at (888) 796-9102, and thank you for your cooperation and patience throughout these system enhancements.

Barbara "Pete" Peterson
IMA Training and Deployment Manager (303/896-2705)

JUNE 16, 1998 (U S WEST	**Employees Only)**	2:00-4:30 p.m. (MDT)
CITY	ADDRESS	ROOM
Albuquerque, NM	400 Tijeras NW	220K
Boise, ID	999 Main Street	Plaza
Des Moines, IA	900 Keosqua	1st Floor
Denver, CO	1801 California	320-1
Minneapolis, MN	200 South 5th Street	Hennepin
Omaha, NE	1314 Douglas On the Mall	Cornhusker
Phoenix, AZ	5090 N. 40th Street	102
Plymouth, MN	9700 Schmidt Lake Rd.	350G
Portland, OR	421 S. W. Oak	109B
Salt Lake City, UT	250 Bell Plaza	142D
Seattle, WA	1915 Terry Ave.	114B
Denver (host site), CO	1005 17th Street	1870K

JUNE 18, 1998	**1:00-3:30 p.m. (MDT)**	
CITY	ADDRESS	ROOM
Bellevue, WA	450 110th Ave. NE	516A
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	4201 Kingman Blvd.	Training Rm.
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th flr. Minnesota Rm.
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	12th floor
Omaha, NE	1314 Douglas On the Mall	Cornhusker
Phoenix, AZ	5090 N. 40th Street	102
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	1809
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870K

JUNE 22, 1998	**9:30 a.m. - Noon (MDT)**	
CITY	ADDRESS	ROOM
Bellevue, WA	450 110th Ave.NE	710
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	925 High Street.	9N of 10
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th Flr., Minnesota Rm
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	530
Omaha, NE	1314 Douglas On the Mall	Heartland
Phoenix, AZ	5090 N. 40th Street	108
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	410
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870 K

JUNE 23, 1998 **1:00 - 3:30 p.m. (MDT)**

CITY	ADDRESS	ROOM
Bellevue, WA	450 110th NE	710
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	925 High Street.	9N of 10
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th Flr., Minnesota Rm.
Helena, MT	701 N. Main	
Minneapolis, MN	200 S. 5th Street	Hennepin
Omaha, NE	1314 Douglas On the Mall	Heartland
Phoenix, AZ	5090 N. 40th Street	102
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	1813B
Sioux Falls, SD	125 S. Dakota	1st Floor
Spokane,	534 E. Trent	100
Denver (host site), CO	1005 17th Street	1870K

CLASS REGISTRATION

SEND TO: MARY ANN SENA, Fax = 303/965-1908

NAME: _____

COMPANY: _____

CLASS DATE: _____ LOCATION: _____

TIME: _____

SEND CONFIRMATION TO: (list fax # or email address):

_____

USWEST IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** Barbara "Pete" Peterson IMA Deployment & Training Manager
Fax:	**Pages:** 1
Phone:	**Date:** May 15, 1998

IMA News

Now there's a *toll-free* number for IMA dial-up access:

1-888-334-8417

Effective Monday, May 18, 1998

We recommend changing your PC configuration in just 2 steps:
1. Go to TCP/IP Properties
2. In addition to 192.104.175.2, add the following address to the DNS Server Search Order field:
192.104.176.2

Questions?
Call our Help Desk at 888-796-9102.

Comments or suggestions:

Barbara "Pete" Peterson
bpeters@uswest.com
303-896-2705

The Training Team
303-929-8299
303-473-2017 (Pager)

USWEST IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

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Fax:	**Pages:** 3
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Re: IMA Release Notes – Version 3.1	**CC:**

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Barbara "Pete" Peterson
IMA Training and Deployment Manager (303/896-2705)

JUNE 16, 1998 (U S WEST Employees Only) 2:00-4:30 p.m. (MDT)

CITY	ADDRESS	ROOM
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Minneapolis, MN	200 South 5th Street	Hennepin
Omaha, NE	1314 Douglas On the Mall	Cornhusker
Phoenix, AZ	5090 N. 40th Street	102
Plymouth, MN	9700 Schmidt Lake Rd.	350G
Portland, OR	421 S. W. Oak	109B
Salt Lake City, UT	250 Bell Plaza	142D
Seattle, WA	1915 Terry Ave.	114B
Denver (host site), CO	1005 17th Street	1870K

JUNE 18, 1998 **1:00-3:30 p.m. (MDT)**

CITY	ADDRESS	ROOM
Bellevue, WA	450 110th Ave. NE	516A
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	4201 Kingman Blvd.	Training Rm.
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th flr. Minnesota Rm.
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	12th floor
Omaha, NE	1314 Douglas On the Mall	Cornhusker
Phoenix, AZ	5090 N. 40th Street	102
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	1809
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870K

JUNE 22, 1998 **9:30 a.m. - Noon (MDT)**

CITY	ADDRESS	ROOM
Bellevue, WA	450 110th Ave.NE	710
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	925 High Street.	9N of 10
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th Flr., Minnesota Rm
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	530
Omaha, NE	1314 Douglas On the Mall	Heartland
Phoenix, AZ	5090 N. 40th Street	108
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	410
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870 K

JUNE 23, 1998 **1:00 - 3:30 p.m. (MDT)**

CITY	ADDRESS	ROOM
Bellevue, WA	450 110th NE	710
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines	925 High Street.	9N of 10
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th Flr., Minnesota Rm.
Helena, MT	701 N. Main	
Minneapolis, MN	200 S. 5th Street	Hennepin
Omaha, NE	1314 Douglas On the Mall	Heartland
Phoenix, AZ	5090 N. 40th Street	102
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	1813B
Sioux Falls, SD	125 S. Dakota	1st Floor
Spokane,	534 E. Trent	100
Denver (host site), CO	1005 17th Street	1870K

CLASS REGISTRATION

SEND TO: MARY ANN SENA, Fax = 303/965-1908

NAME: _____

COMPANY: _____

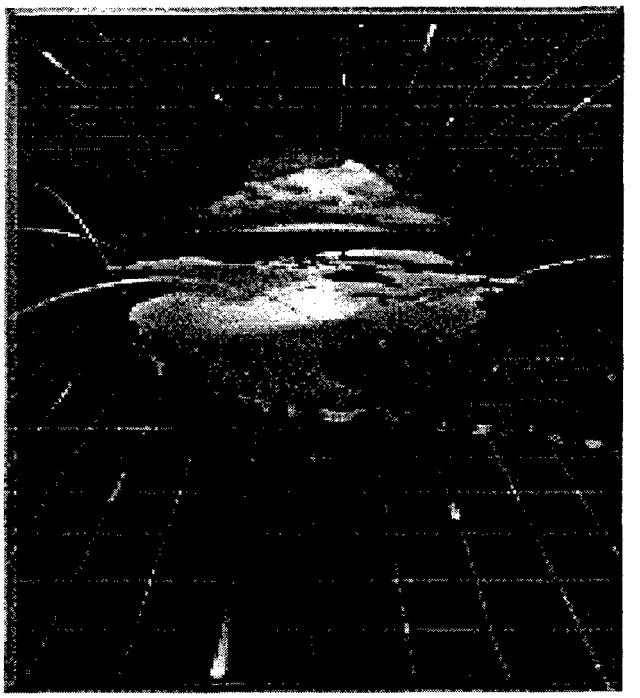
CLASS DATE: _____ LOCATION: _____

TIME: _____

SEND CONFIRMATION TO: (list fax # or email address):

_____

Interconnect Mediated Access



Software Release Notes

Modification Date: June 26, 1998

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Version Notice

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Release	Date	Software Release
Release 1	6/5/98	3.1

Purpose of Document Release 1

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, version 3.1, to be implemented on Friday, June 26, 1998.

Document Ownership

Obtain additional copies of this document from the following organization:

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Important: *This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.*

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General Overview

Summary

The thrust of Software Release 3.1 is to migrate the POTS Pre-Order and Order GUI into the Design Services GUI. This GUI will maintain the Design Services appearance from software release 3.0 with the newly added POTS functionality to the menu options. This migration standardizes order entry into IMA. You will now be able to enter any order whether POTS or Design Services using one GUI. Many of the POTS functions are not new but are new to the Design Services GUI, and, therefore are being treated as an enhancement. **The user must use Netscape 3.01 for Software Release 3.1.** Enhancements that directly affect users are outlined below.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.1, to be implemented at 20:00 hours MDT on Friday, June 26, 1998.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and all related U S WEST employees such as help desk personnel and system administrators.

Dissemination

Currently, the IMA Deployment Team headed by Manager Barbara Peterson is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at number 303-896-2705, or email address bpeters@uswest.com.

Interconnection Functions Screen

The Interconnection Functions screen will change from **POTS/PSP** and **Design Services** as headings, with Order, Pre-Order and Status as sub-headings, to **Pre-Order**, **Order** and **Status** as their own headings, integrating POTS into the Design Services GUI.

Standardized Address Fields

All windows that use a validated address have been standardized. The enhancements are a pulldown list that has up to the last 10 verified addresses to select from and the consistent layout of the address fields. The address fields are:

- Validated Addresses has a pulldown list.
- Street # is a new field.
- Street # Suffix is a new field.
- Street Name.
- AHN is a new field.
- Route is a new field.
- Box is a new field.
- Floor.
- Room has a pulldown list.
- Building has a pulldown list.

Clear Button

The addition of the Clear button is standard on windows requiring input.

Pre-Order Enhancements

The following Pre-Order menu items on the IMA Window, used for both POTS and Design Services, are either new or have been modified.

- Address Validation and Review CSR.
- Schedule Appointment.
- Reserve Telephone Numbers.
- Service Availability.
- Check Facility Availability.

Address Validation and Review CSR

The Address Validation window has a new look and new fields. Address Validation and Review CSR is a menu item under Pre-Order. The function of Address Validation and Review CSR has not changed. There is no change to the process. The new fields and enhancements are the standardized address fields previously listed.

The Address Validation response windows have enhancements. The new fields and enhancements on the Address Validation Response window are:

- AN (formerly LOCBAN) is a new field label.
- Validated Addresses lists up to the last 10 validated addresses from which to choose.
- Street # and Street # Suffix fields have been separated from Street.
- Room Type and Building Type fields have pulldown lists.
- Remarks field has two sections identified by tabs.

The new fields and enhancements on the Address Near Match response window are:

- Street # and Street # Suffix fields have been separated from Street.
- House Num Range column has been added.

Review CSR Process

The appearance to the Review CSR window will have a new look and feel. There are no changes to the functionality. There is no change to the process. The Review CSR Response window has additional fields and enhancements:

- Summary Billing Number, Class of Service, Original Service Established and Reseller ID.
- The message, "Complete Customer Record Displayed" will always show when a complete CSR has been retrieved.
- Listing, Billing and Service and Equipment are listed by tabs.

On the Review CSR Response for an exact match window the new fields are:

- Summary Billing Number, Class of Service, Original Service Established, Reseller ID and (Partial/complete CSR message box).

Schedule Appointment Process

The Schedule Appointment menu item under Pre-Order is new. This process is used to reserve an appointment date and time for when a technician needs to be dispatched to the premises. A reserved appointment time has 24 business hours for the appointment to be included on a request for service. Appointments cannot be canceled via the GUI. This function is also available under Order. For Software Release 3.1, only reservations for POTS services is available.

Reserve Telephone Numbers Process

The Telephone Number menu item under Pre-Order is new. This process is used to retrieve a list of available telephone numbers and to select telephone numbers for reservation. Telephone number reservation is necessary when requesting a new service, a new line on existing service, change of telephone number, or moving to an area outside of the current local service office. The predetermined amount of time in which a selection may be made from the list of available telephone numbers is 30 minutes. This function is also available under Order. This function is not available for Design Services.

Service Availability

The Service Availability menu item under Pre-Order is new. This process is used to confirm that services being requested are available at the serving wire center. The response also shows the universal service order codes (USOCs) that are available at the central office and can be included on the request for service when ordering particular products or services.This function is not available for Design Services.

Check Facility Availability

The functionality and process of Check Facility Availability has not changed.The Check Facility Availability process is used to confirm that the capacity of a facility can handle the type and volume of lines being requested.The enhancements are described below.

The POTS Facility Response window supports only POTS-specific responses. The enhancements to this window are:

- Number of New Lines field being requested is returned.
- Line Status, Dispatch Indicator, and Remarks fields are repeated for each line requested.

The Design Services Facilities Request and the ISDN Facilities Request enhancements are:

- Standardized address layout.
- Validated Addresses lists up to the last 10 validated addresses.

Hi Cap Facilities Request

The enhancement to the Hi Cap Facilities Request window is the new standardized address layout.

Order Enhancements

The Order process, with the integration of POTS to the Design Services GUI, provides Co-Providers with the ability to create and submit requests for POTS. The enhancements will be listed according to the screens within the Order process.

Order Information

The process and functionality of the Order process has not changed. The integration of POTS into the Order process is done with added fields on windows and pulldown lists to select POTS specific information. The enhancements will be listed according to the Order process and the screens within that process that have changes.The enhancements on the Order Information window are:

- During Pre-Order if TN Selection or Appointment processes were performed - PON will automatically be pre-populated. If the PON and VER are incorrect those fields may be retyped.
- Within REQTYPE pulldown list, E -ISDN has been changed to E - (RESALE POTS and ISDN).
- Pick BAN has a pulldown list.
- State field has been removed.
- Z-Conversion as specified, no Directory Listing has been added to the Activity pulldown list.

Local Services Request Form

The addition and deletion of fields comprise the enhancements to the Local Services Request window. Following is a list of enhanced fields.

- APPTIME is a new field.
- SCA has a pulldown list.
- AGAUTH has a pulldown list.
- TSP has been moved to the resale form.
- SAN has been moved to the resale form.

End User Information Form

The addition and deletion of fields comprise the enhancements to the End User Information window. Following is a list of enhanced fields.

- LSO has been moved to the LSR.
- LST has been moved to the LSR.
- NCI has been moved to the LSR.
- SEC NCI has been moved to the LSR.
- APTCON is a new field.
- EUMI has a pulldown list.
- IWO has a pulldown list.
- AN replaces LOCBAN.
- EAN is a new field.
- FBI has a pulldown list.

Resale Form

The addition and deletion of fields comprise the enhancements to the Resale Form window. Following is a list of enhanced fields.

- REFNUM in the hunting section is a new field.
- HA has a pulldown list.
- HNTYP has a pulldown list.
- HID is a new field
- TLI is a new field.
- HUNT SEQ can hold 512 characters
- Add, Delete and Clear buttons have been added to the bottom of Hunting Section.
- Hunting Section is repeatable.
- LNA has a pulldown list.
- Select TN button is new. Used to select from previously reserved TNs for this PON.
- TER is a new field.
- TSP is a new field.
- SAN is a new field.
- PTKTYP is a new field.

- PTKCON is a new field.
- PTLI is a new field.
- TC OPT has a pulldown list.
- NIDR has a pulldown list.
- SGNL has a pulldown list.
- PULSE has a pulldown list.
- TBE has a pulldown list.
- FA has a pulldown list.
- Facility Check, Appointment Scheduling, and Assign TN buttons have been added to the bottom of the window.

Directory Listing

The addition and deletion of fields comprise the enhancements to the Directory Listing window. Following is a list of enhanced fields.

- LACT has a pulldown list.
- RTY has a pulldown list.
- LTY has a pulldown list.
- TOA has a pulldown list.
- DOI has a pulldown list.
- OMTN has a pulldown list.
- LNPL has a pulldown list.
- LTEXT replaces LOI.
- LTXTY has a pulldown list.
- ADI has a pulldown list.
- DIRNAME is a new field.
- DML has a pulldown list.
- NOSL has a pulldown list.
- OMSD is a new field.
- TMKT has a pulldown list.
- BRO has a pulldown list.

Order Submit Confirmation

The message, "This is a Service Inquiry request that will not result in the generation of a firm order. You may return to the Order Information screen at this time if a Firm Order is required. Otherwise, press "Commit." displays when the second character of the order's REQTYP is A (Service Inquiry).

Order Confirmation

When the second character of the order's REQTYP is A the message, "Service Inquiry request has been successfully submitted" will display. When the second character of the order's REQTYP is B the message, "Firm Order request has been successfully submitted" will display.

Loop Service Form

The addition and deletion of fields comprise the enhancements to the Loop Service window. Following is a list of enhanced fields.

- ECCKT is a bolded field.
- CFA is a new field.
- JR has a pulldown list.
- NIDR has a pulldown list.
- TC OPT has a pulldown list.

EDI

Additional transaction types were added in Release 3.0. Now, with Release 3.1 more transaction types have been added. Following is a list of the transaction types with their descriptions.

- CSR - a CSR may be requested during the order fulfillment process to verify listing, billing and services related information.
- Facility availability - a query on the availability of facilities may be performed based on the telephone number or end-user address, which are in turn to be obtained through a prior Address Validation operation.
- Directory Listing - provides the ISC with the ability to retrieve, view and process LSRs with complex listings.
- PBX for POTS - adds the ability to order PBX services.
- Loop - takes a packaged flat rate or business rate service and breaks the Loop component out to the package to provide a Co-Provider the ability to serve an address which otherwise could not be done in a timely and cost efficient manner by building their own facility.
- Loop with Number Portability - transfers a telephone number to a LSP so that the end customer does not incur a telephone number change (number portability). The local loop component of the packaged flat rate or business rate is available to serve an address that the LSP could not otherwise do in a timely and cost efficient manner by building their own facility.
- Number Portability - transfers a telephone number to a LSP so that the end customer does not have to incur a telephone number change. U S West will disconnect the existing telephone service provided to the customer.
- Service Availability Query - process will provide the Co-Provider the ability to confirm that services being requested are available at the serving wire center.
- Service Order Inquiries - provides the Co-Provider the ability to inquire on the status of a LSR.

Screen Shots of New GUI

This section contains screen shots of the new windows created for Software Release 3.1 enhancements. The screen shots are placed in order as they have been mentioned within the Software Release Notes.

New Interconnection Functions menu as shown in Figure 1.

Interconnection Functions

- System Administration
- User Administration
- Set Password
- Pre-Order / Order
- Status
- Repair
- LSP Information Website
- Logout

Figure 1 Interconnections Functions menu

Interconnect Mediated Access window as shown in Figure 2 shows the new menu items under Pre-Order.

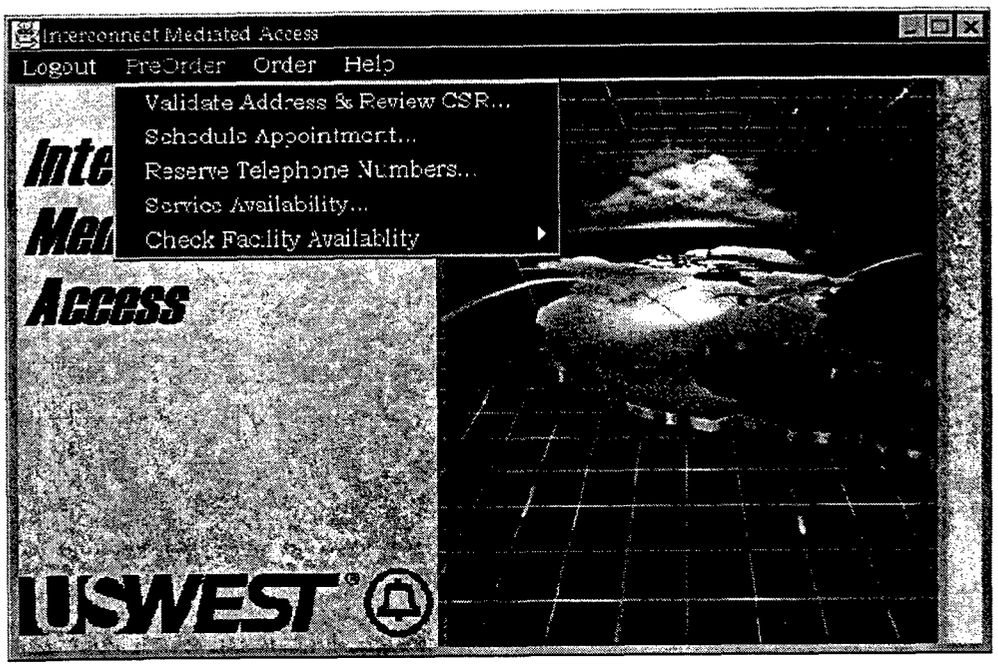


Figure 2 Interconnect Mediated Access window

The Validate Address and Review CSR screen shown in Figure 3 shows the new fields and buttons.

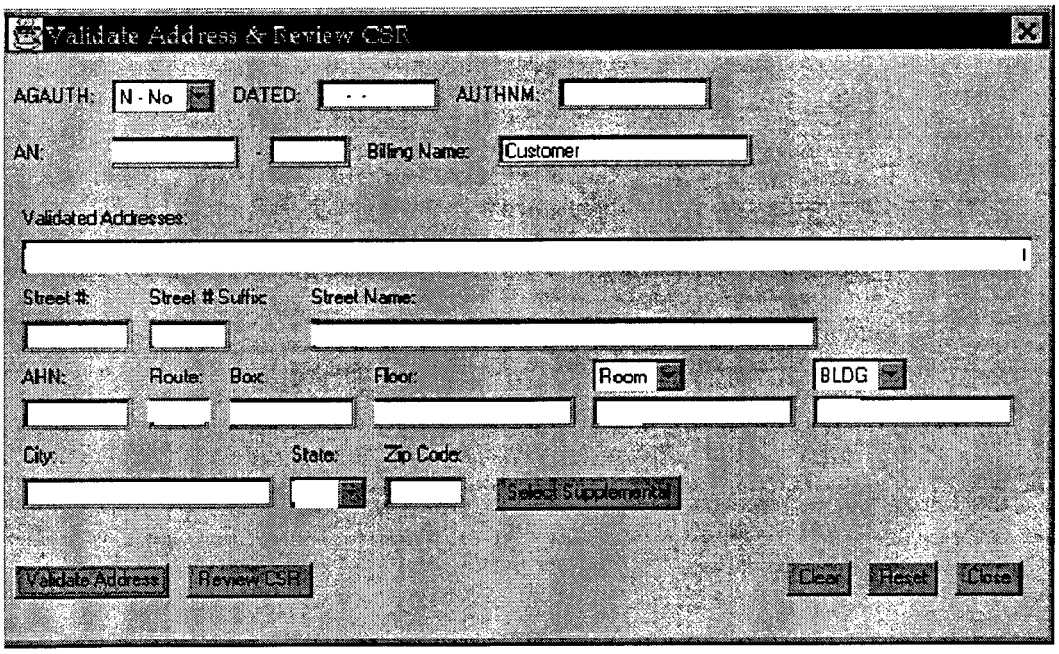


Figure 3 Validate Address and Review CSR window

The Address Validation Response window as shown in Figure 4 shows new fields.

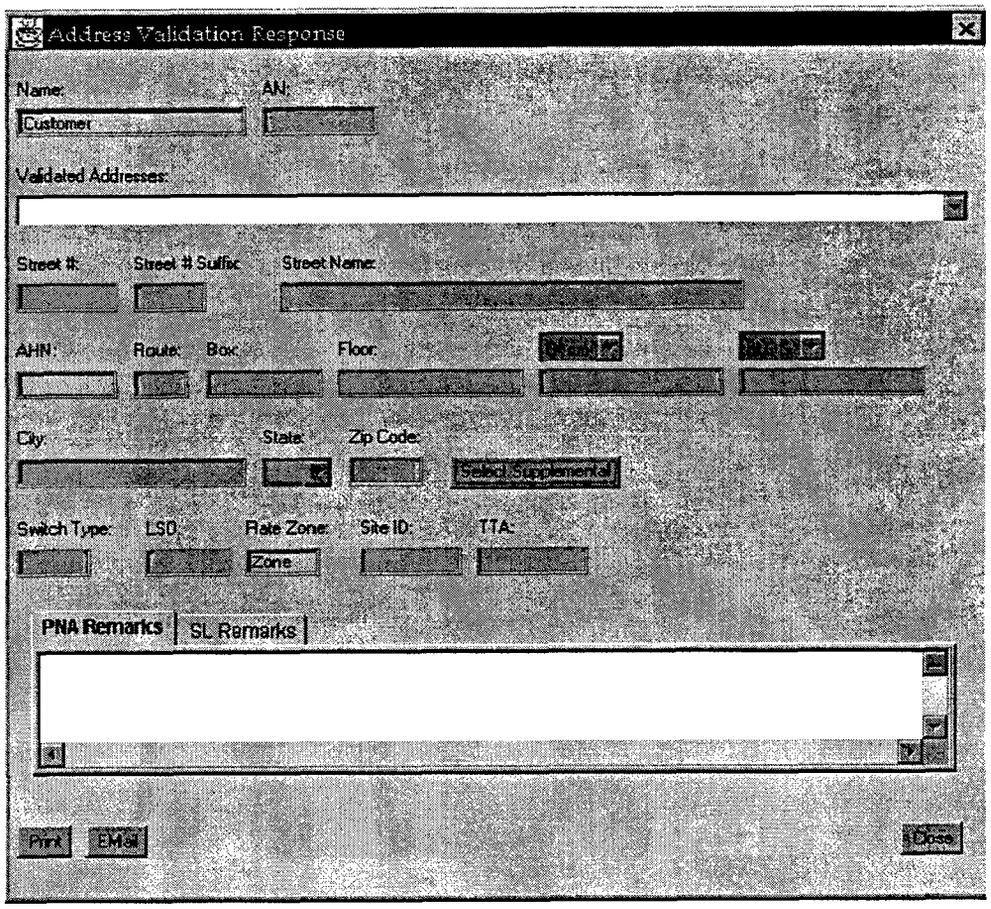


Figure 4 Address Validation Response window

Address Validation response for multiple matches as shown in Figure 5.

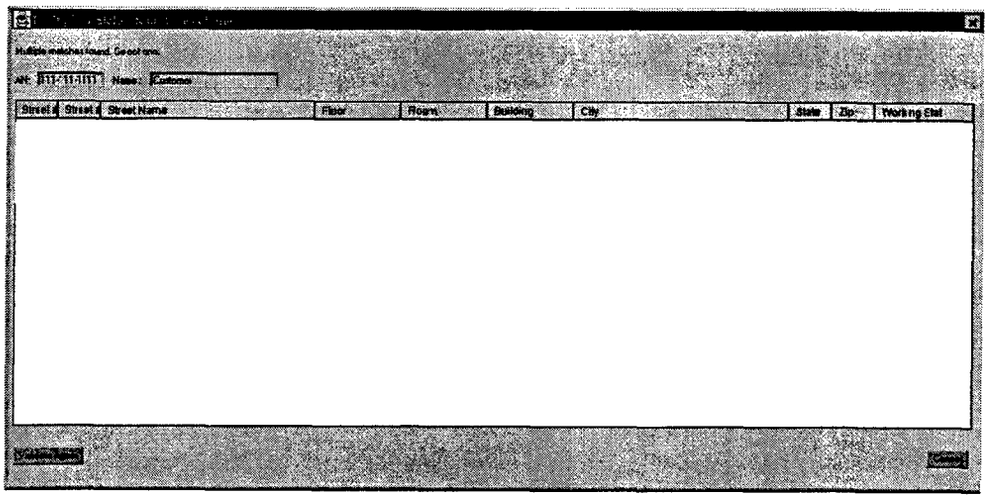


Figure 5 Near Multiple Response window

Figure 6 shows the Address Validation Near Match response window

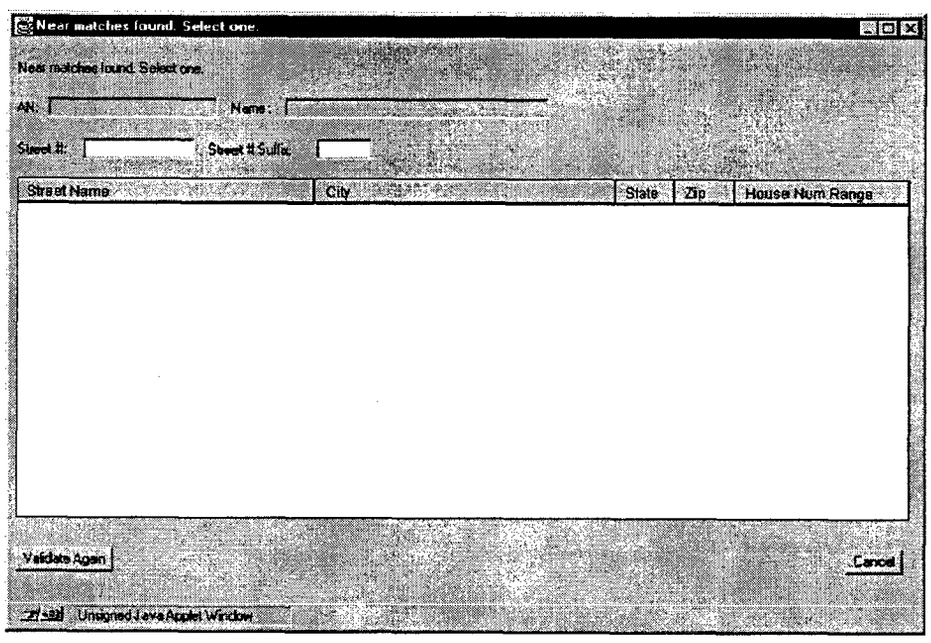


Figure 6 Near Match response window

Review CSR Response window has new fields as shown in Figure 7.

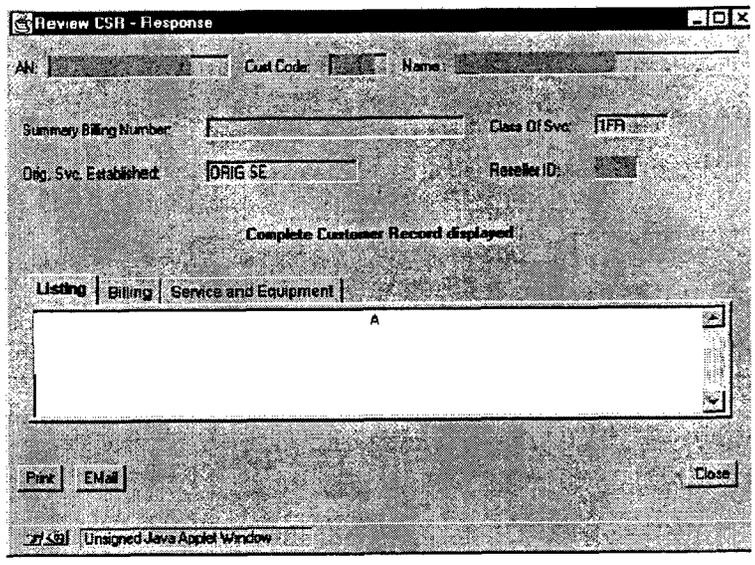


Figure 7 Review CSR Response window

Appointment Scheduling window as shown in Figure 8.

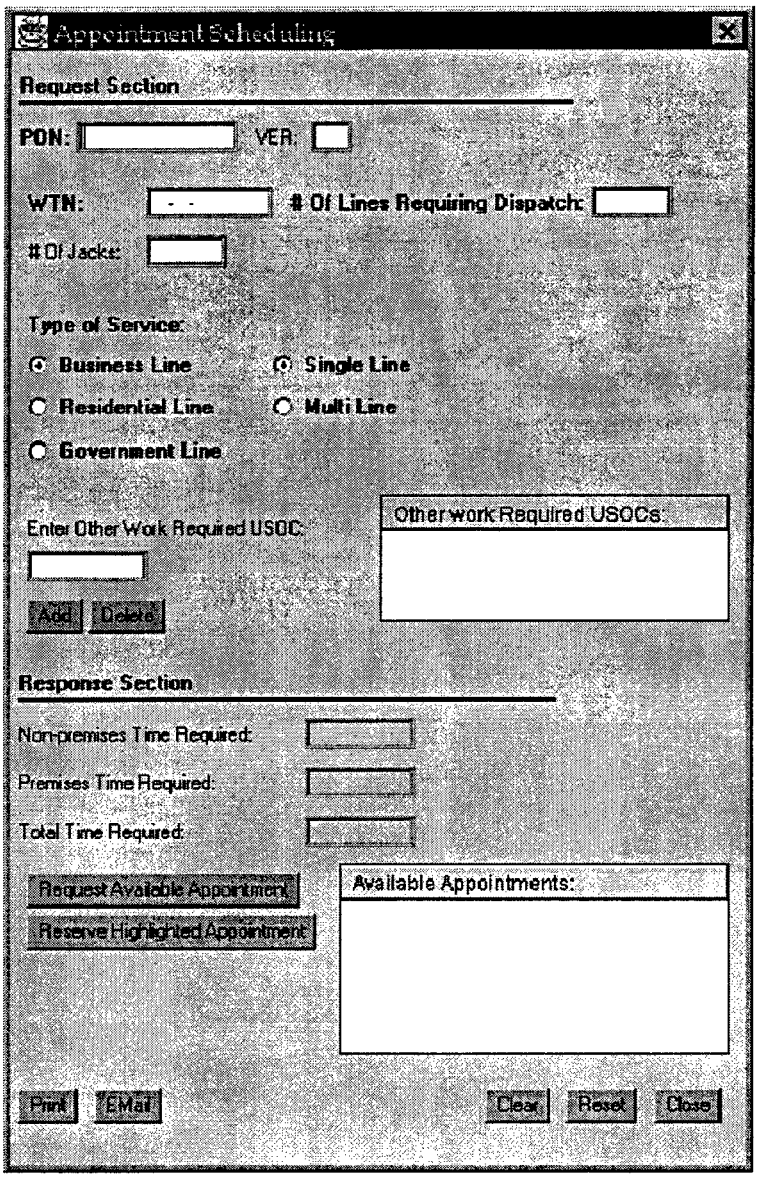


Figure 8 Appointment Scheduling window

Appointment Confirmation window as shown in Figure 9.

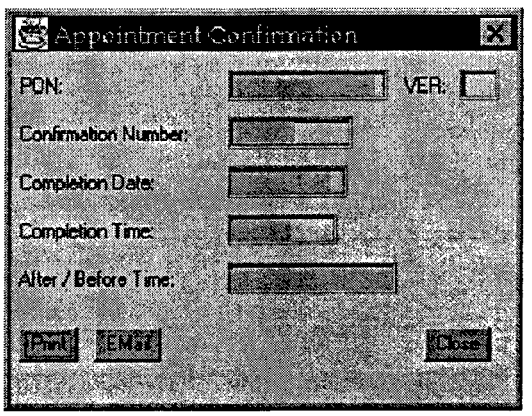


Figure 9 Appointment Confirmation window

Reserve Telephone Numbers, as selected opens Telephone Number Availability request window as displayed in Figure 10.

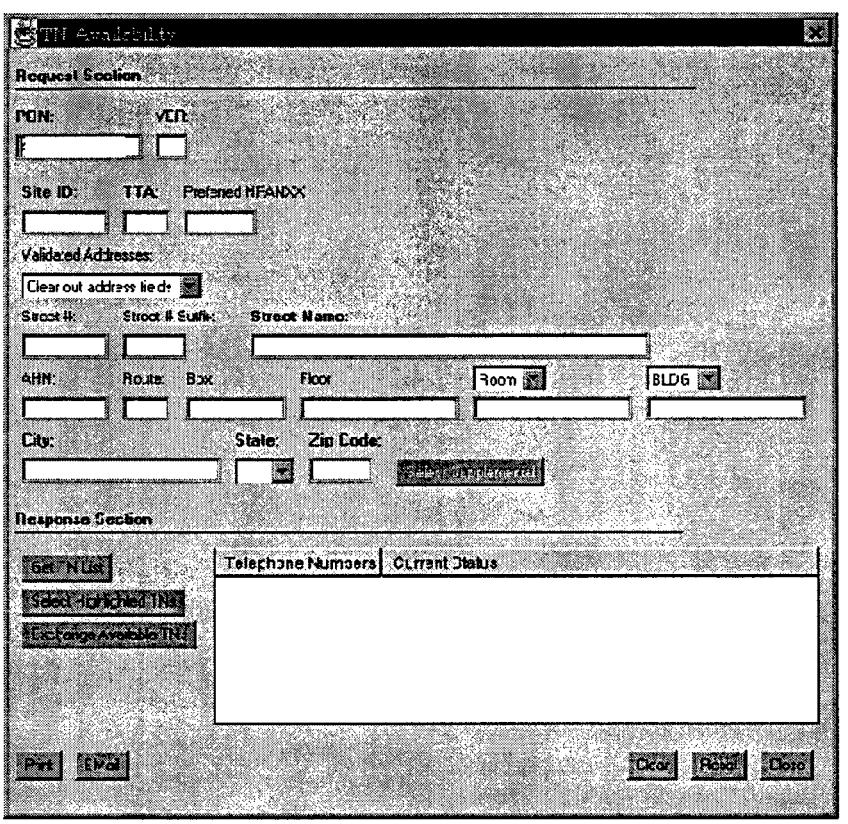


Figure 10 TN Availability request window

Service Availability Query window as shown in Figure 11.

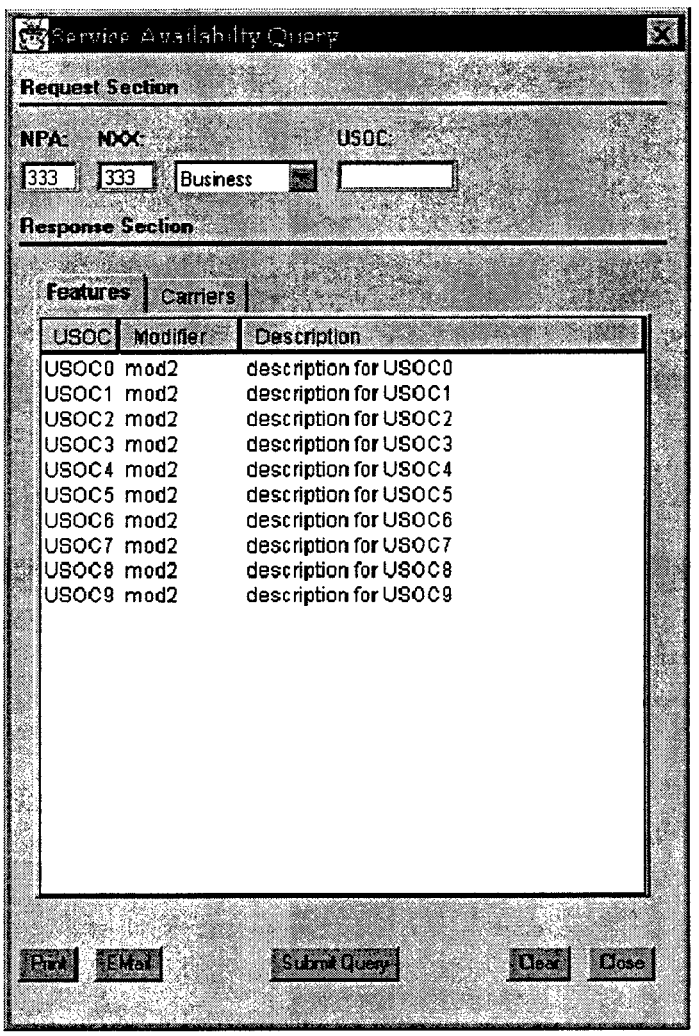


Figure 11 Service Availability window

POTS Facility Request path as shown in Figure 12.

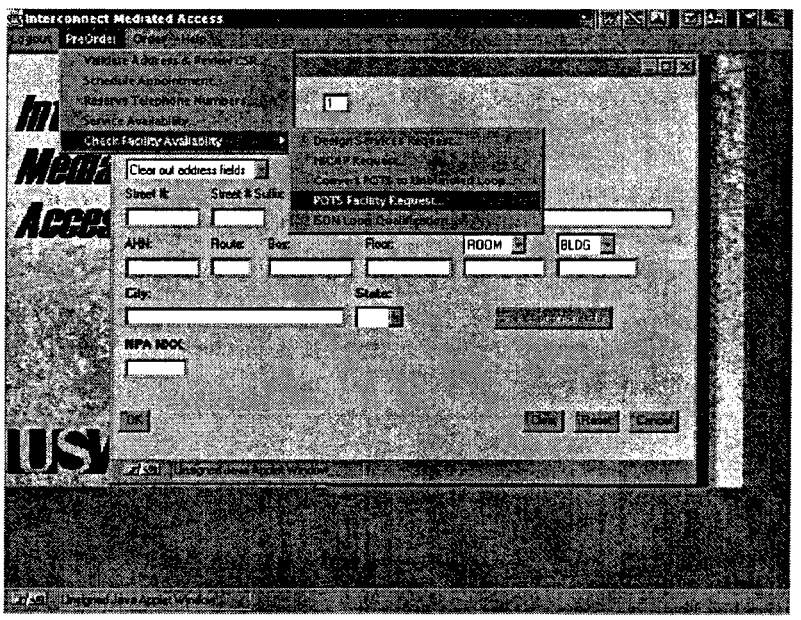


Figure 12 POTS Facility Request path

Figure 13 shows the new POTS Facility Request window.

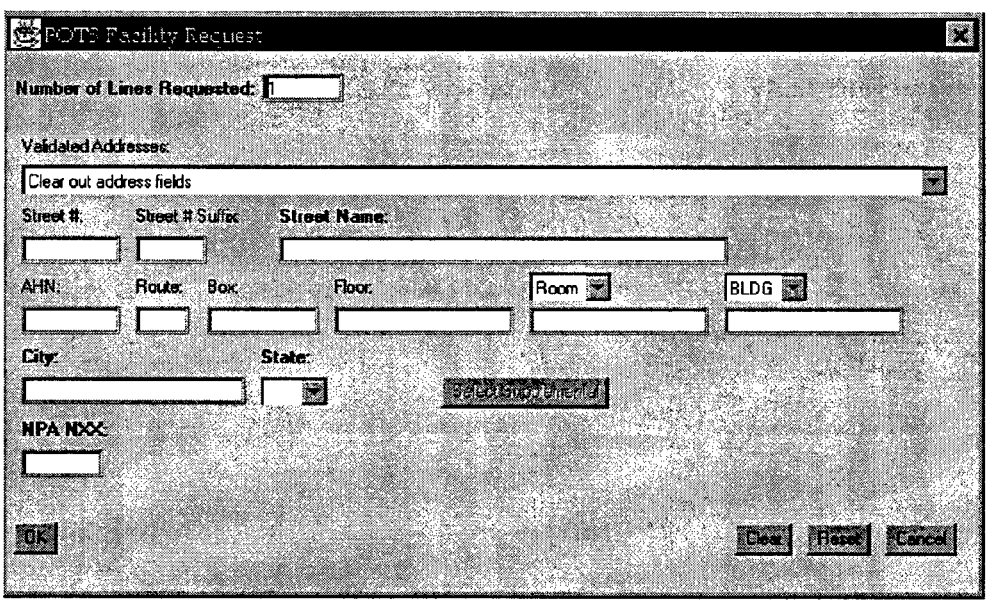


Figure 13 POTS Facility Request window

POTS Facility Response window as shown in Figure 14.

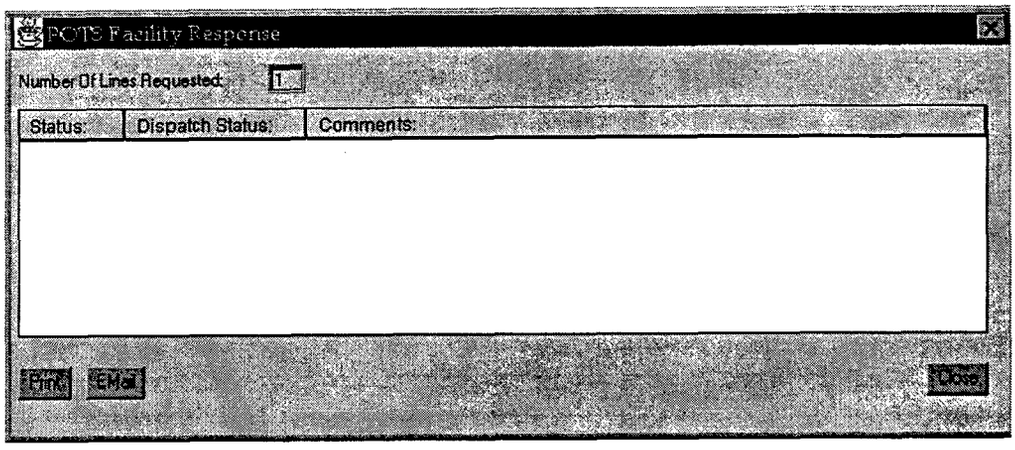


Figure 14 POTS Facility Response window

Figure 15 shows the Design Service Facility Request window with enhancements.

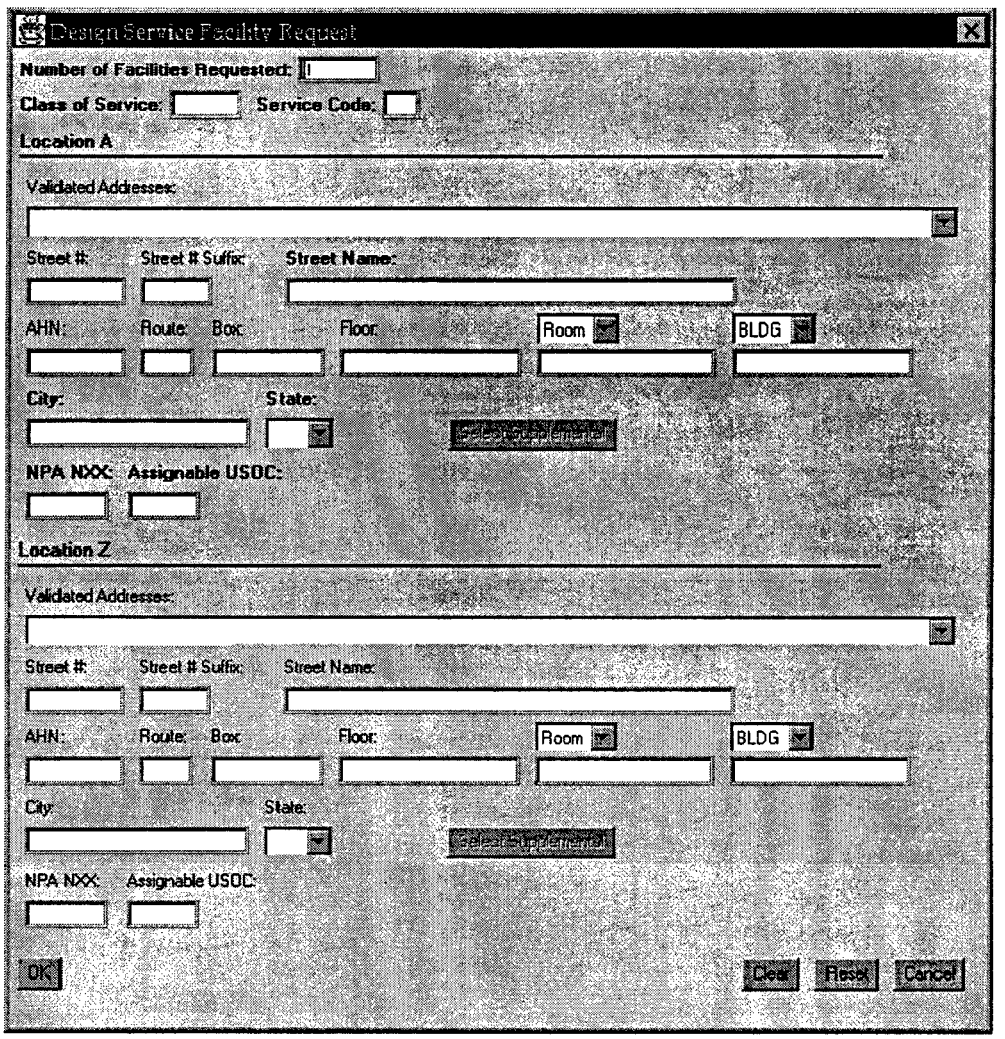


Figure 15 Design Services Facility Request window

Figure 16 shows the ISDN Facility Request window with enhancements.

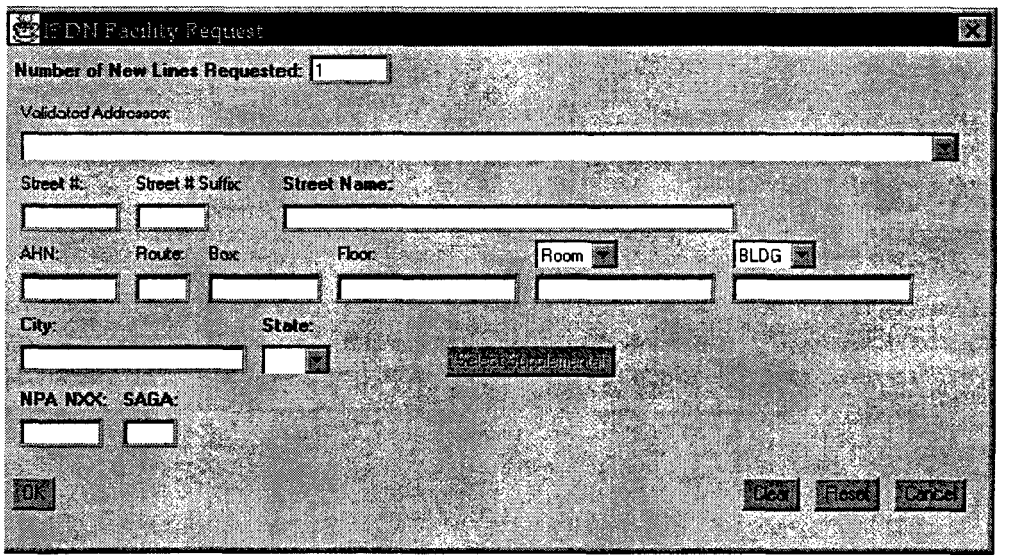


Figure 16 ISDN Facility Request window

Hi Capacity Facility Request window as shown in Figure 17.

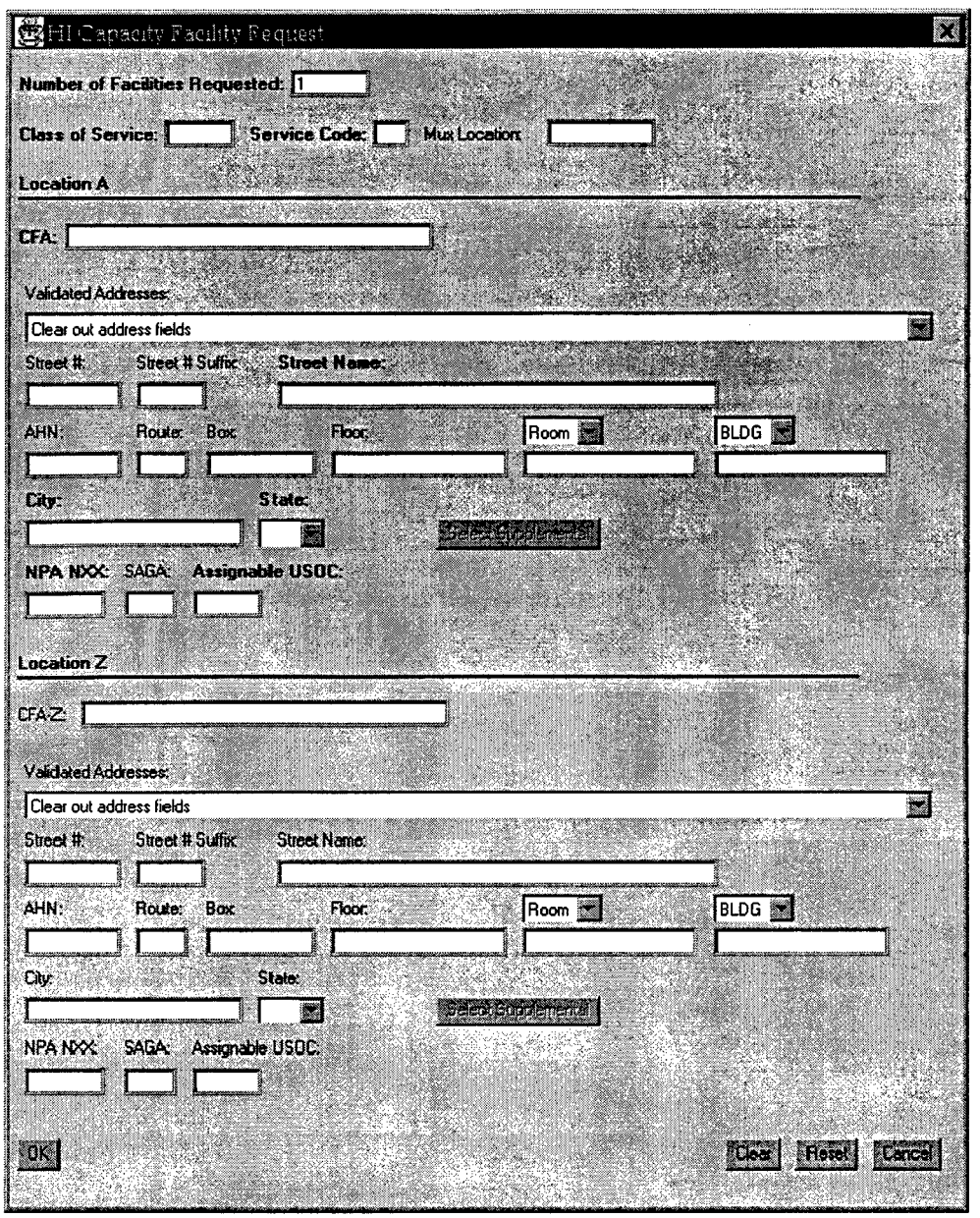


Figure 17 Hi Capacity Facility Request window

Order Information window in Figure 18 shows enhanced fields.

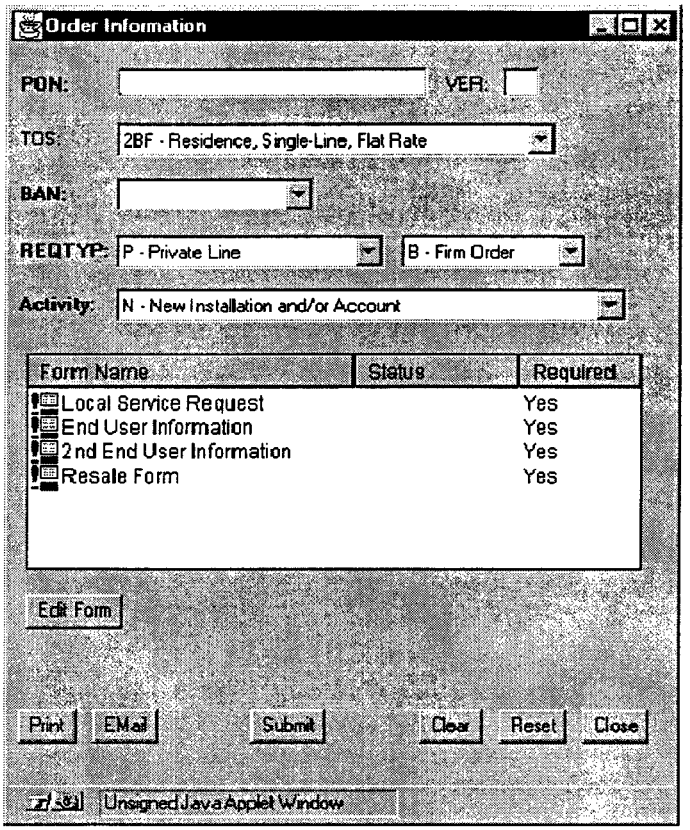


Figure 18 Order Information window

Local Services Request Form, page 1, is shown in Figure 19.

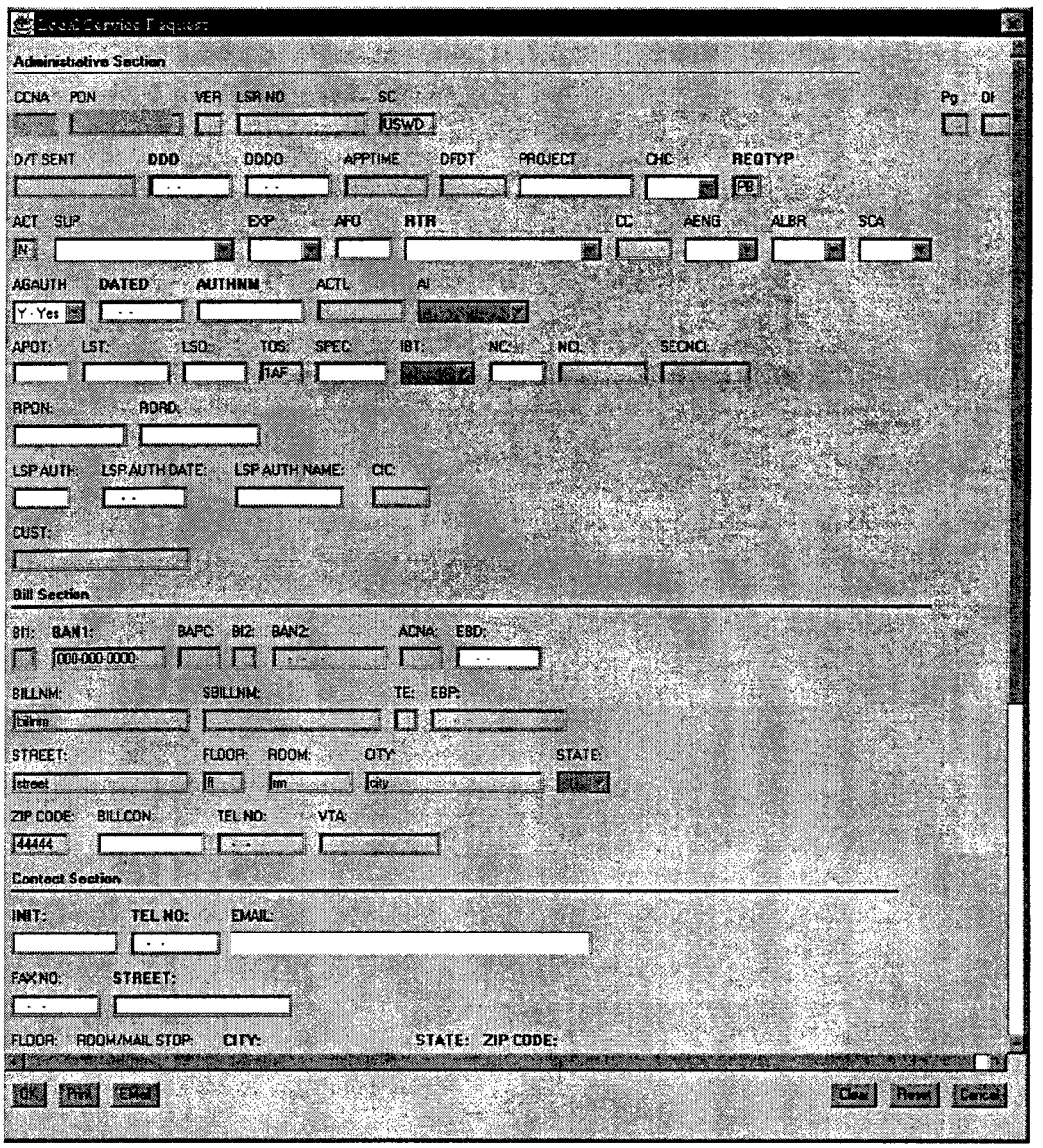


Figure 19 Local Services Request Form (page 1)

Local Services Request Form, page 2, is shown in Figure 20.

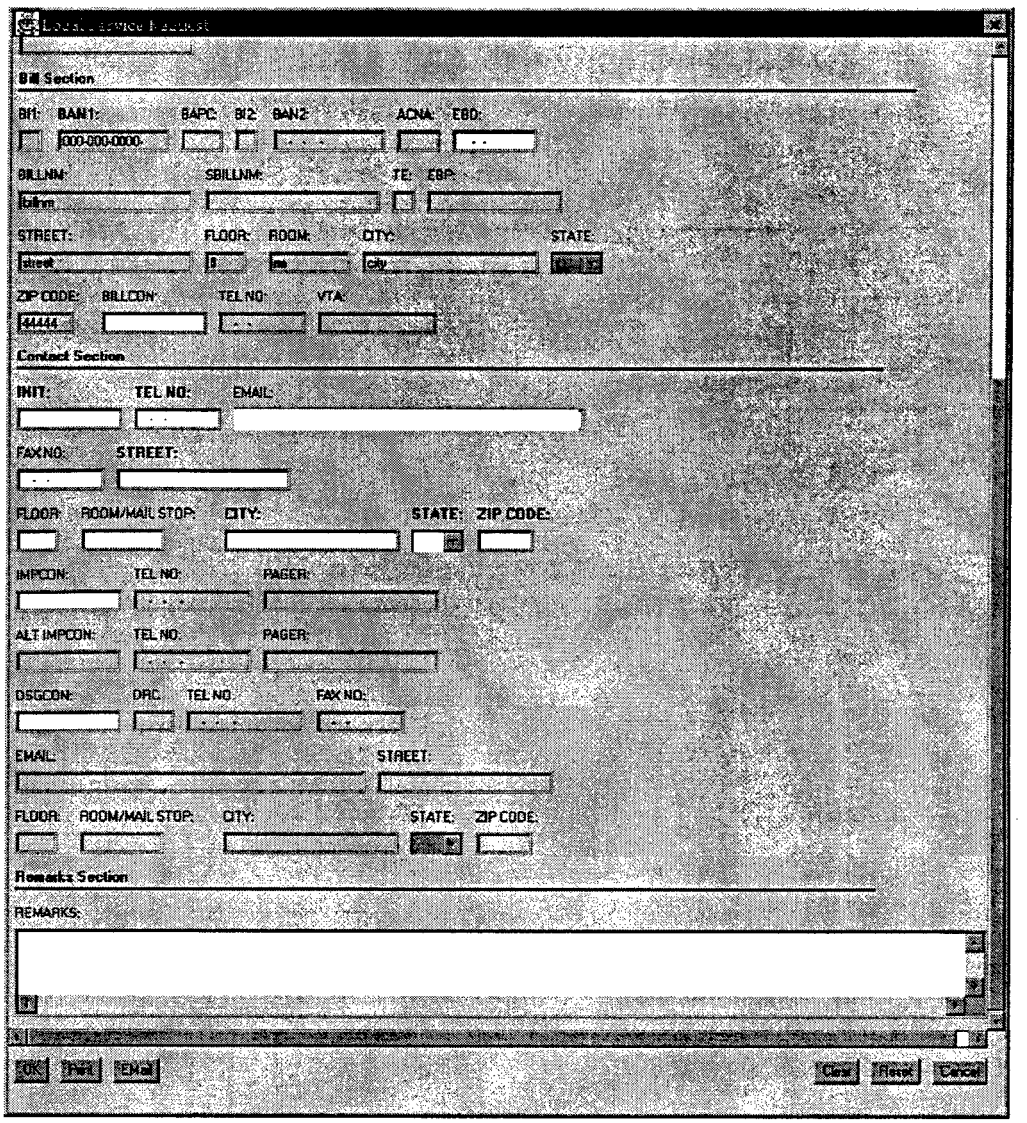


Figure 20 Local Services Request Form (page 2)

End User Information form (page 1) in Figure 21 shows enhanced fields.

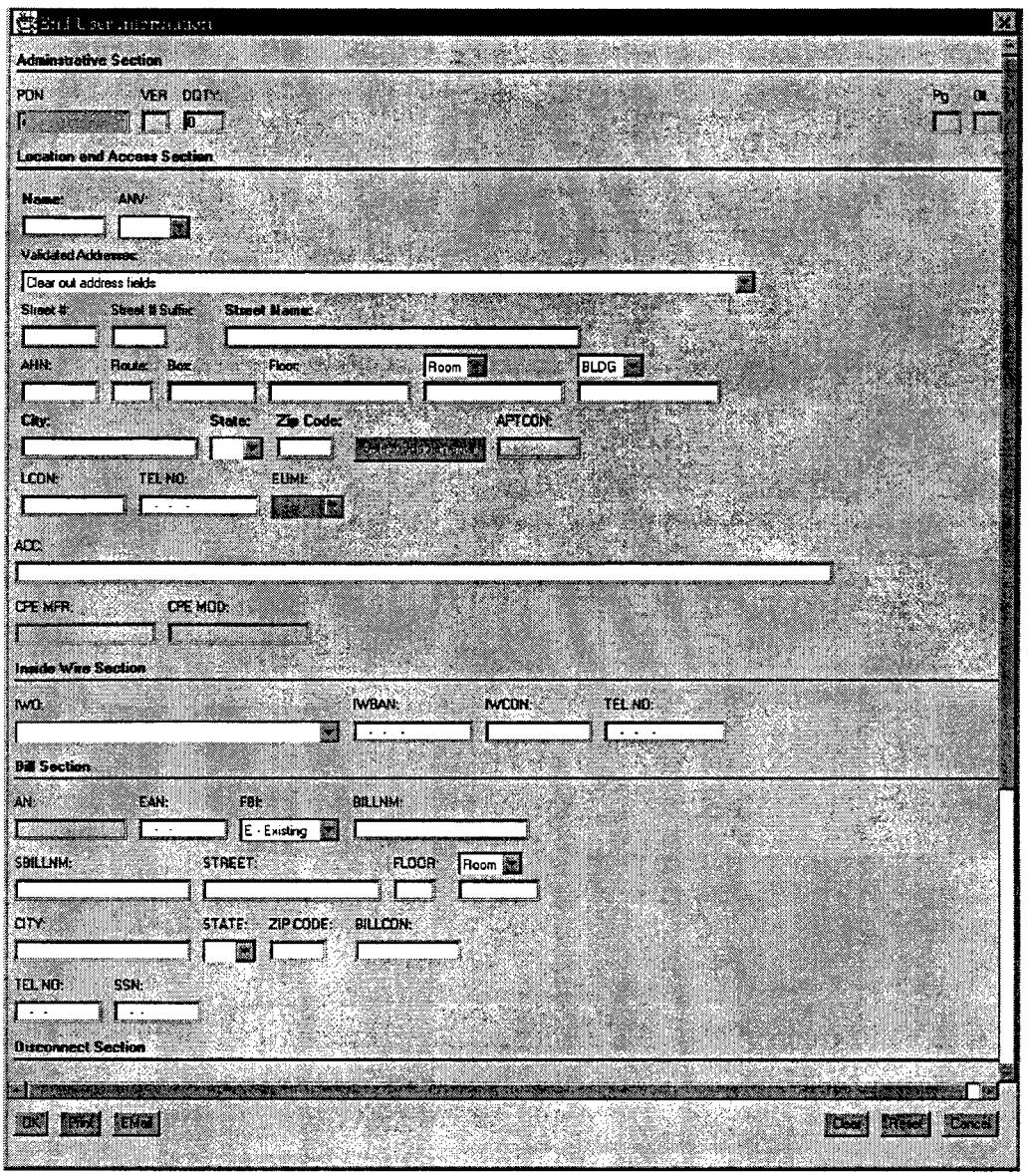


Figure 21 End User Information form (page 1)

End User Information form (page 2) in Figure 22 shows enhanced fields.

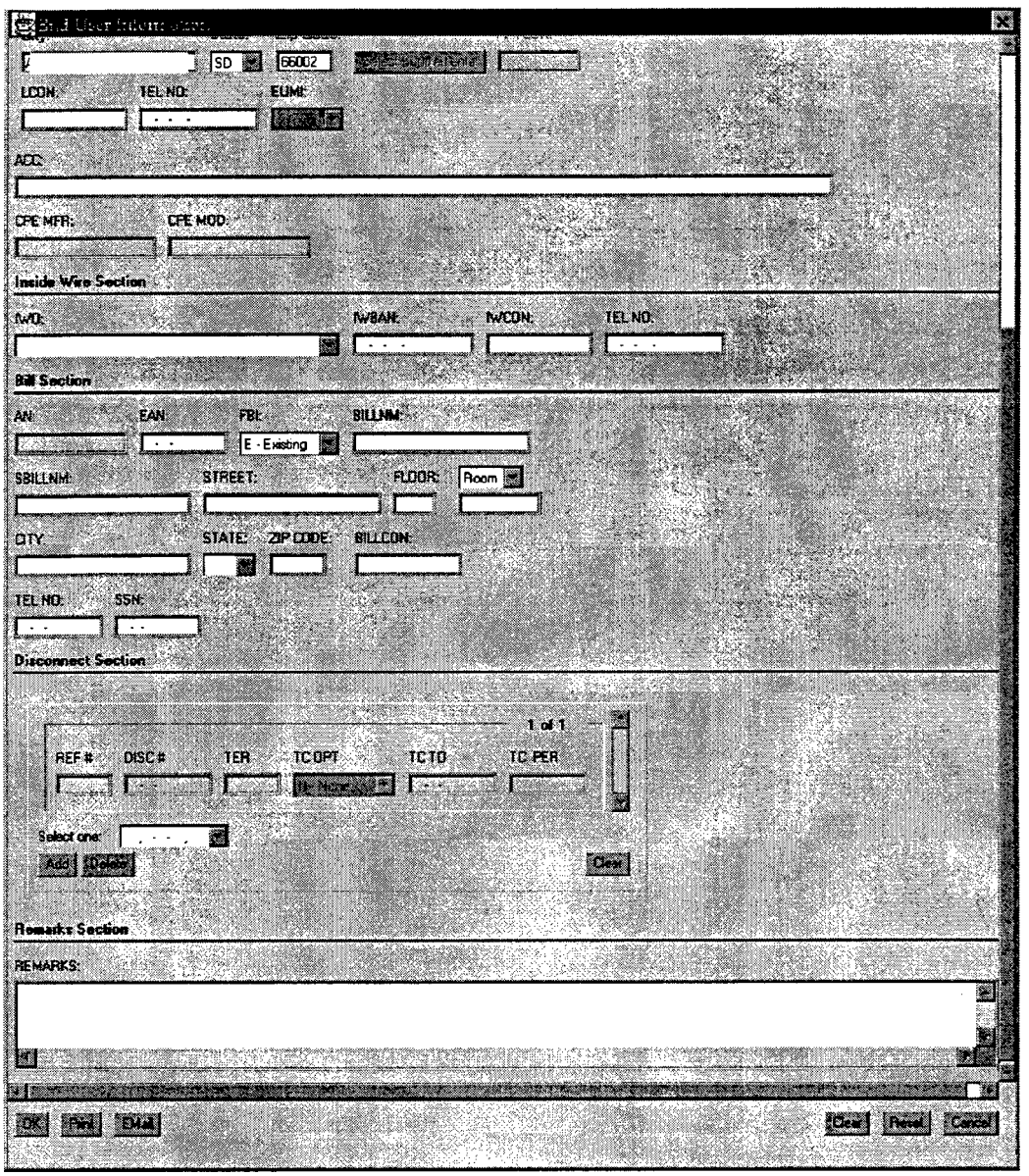


Figure 22 End User Information form (page 2)

Resale form (page 1) in Figure 23 shows enhanced fields.

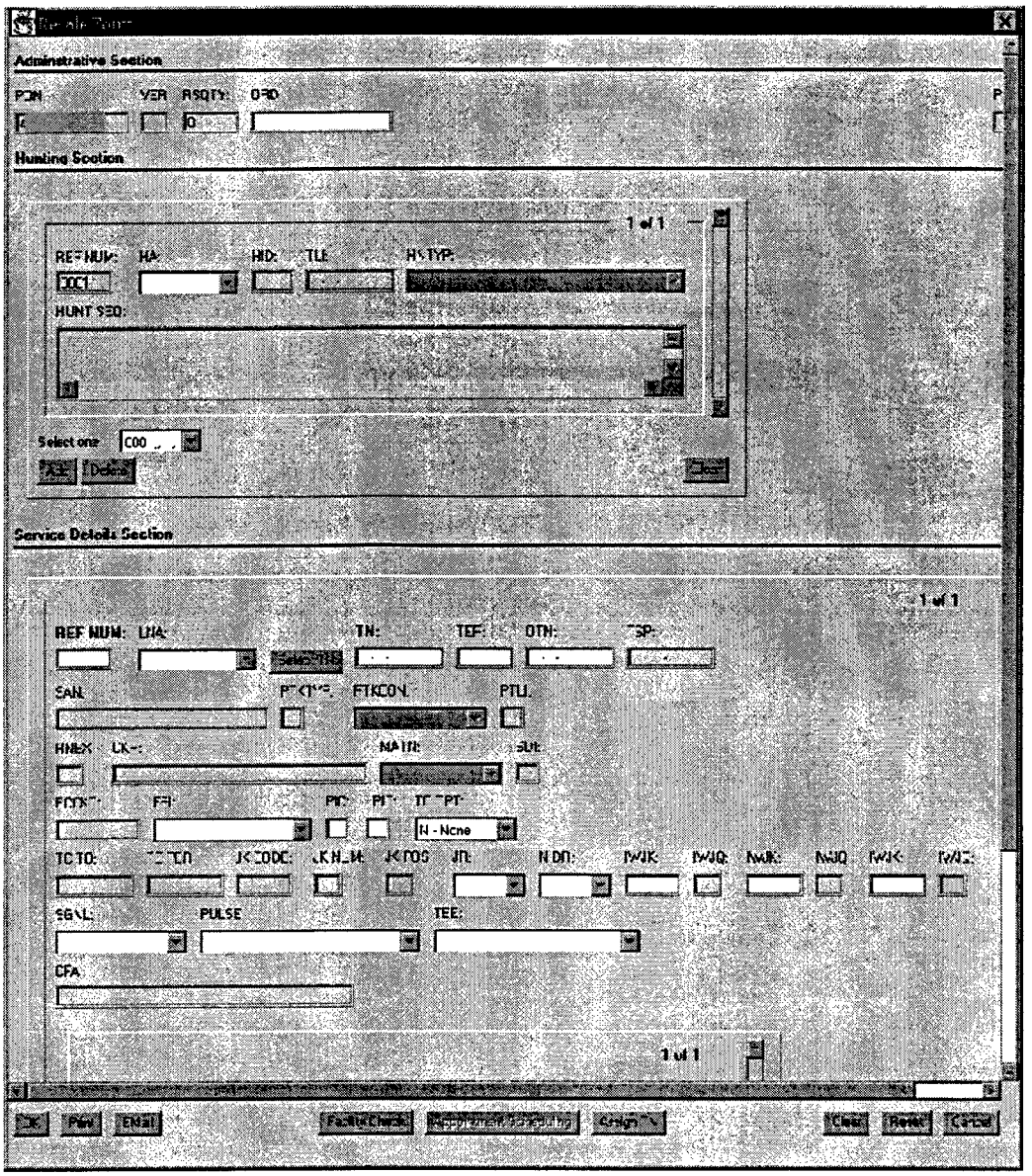


Figure 23 Resale form (page 1)

Directory Listing form (page 1) in Figure 25 shows enhanced fields.

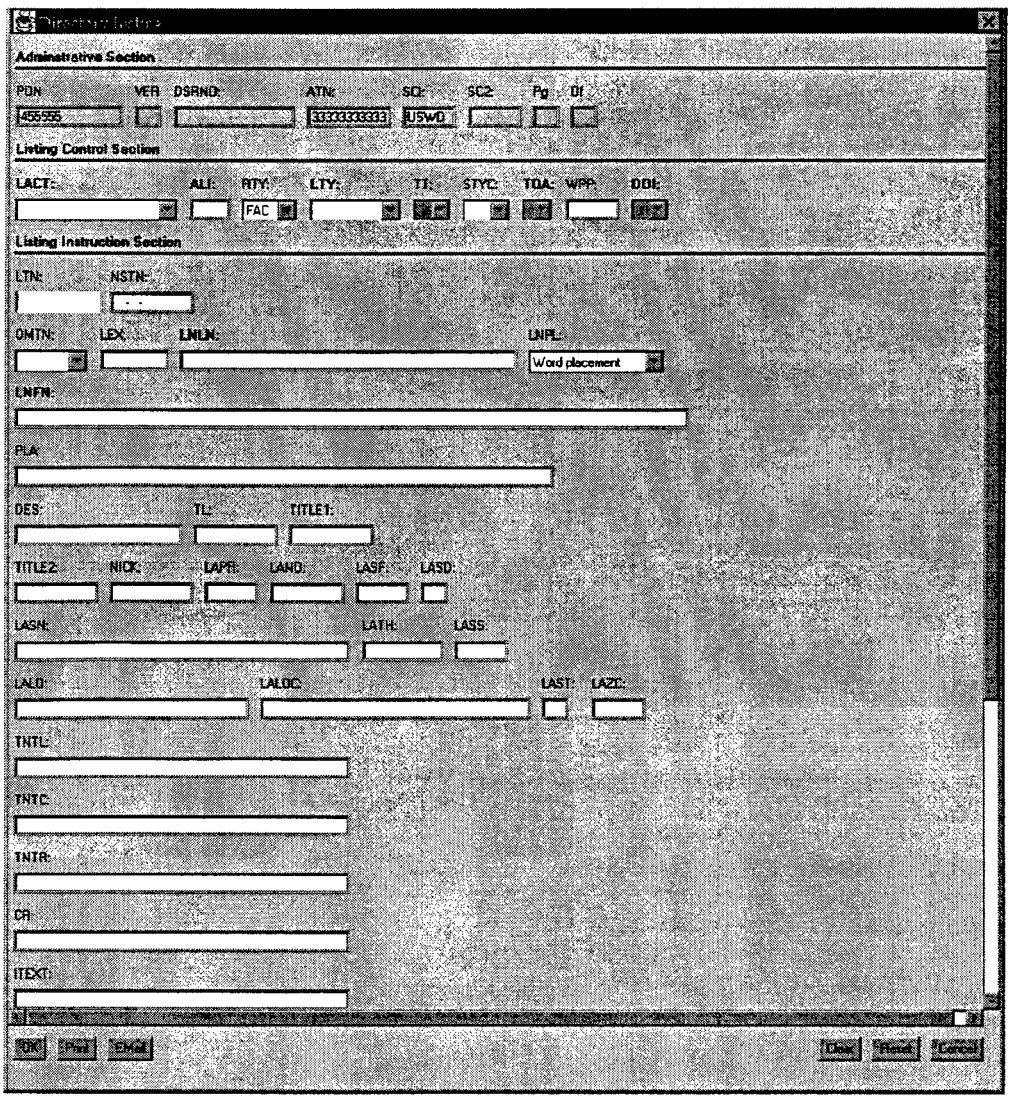


Figure 25 Directory Listing form (page 1)

Directory Listing form (page 1) in Figure 25 shows enhanced fields.

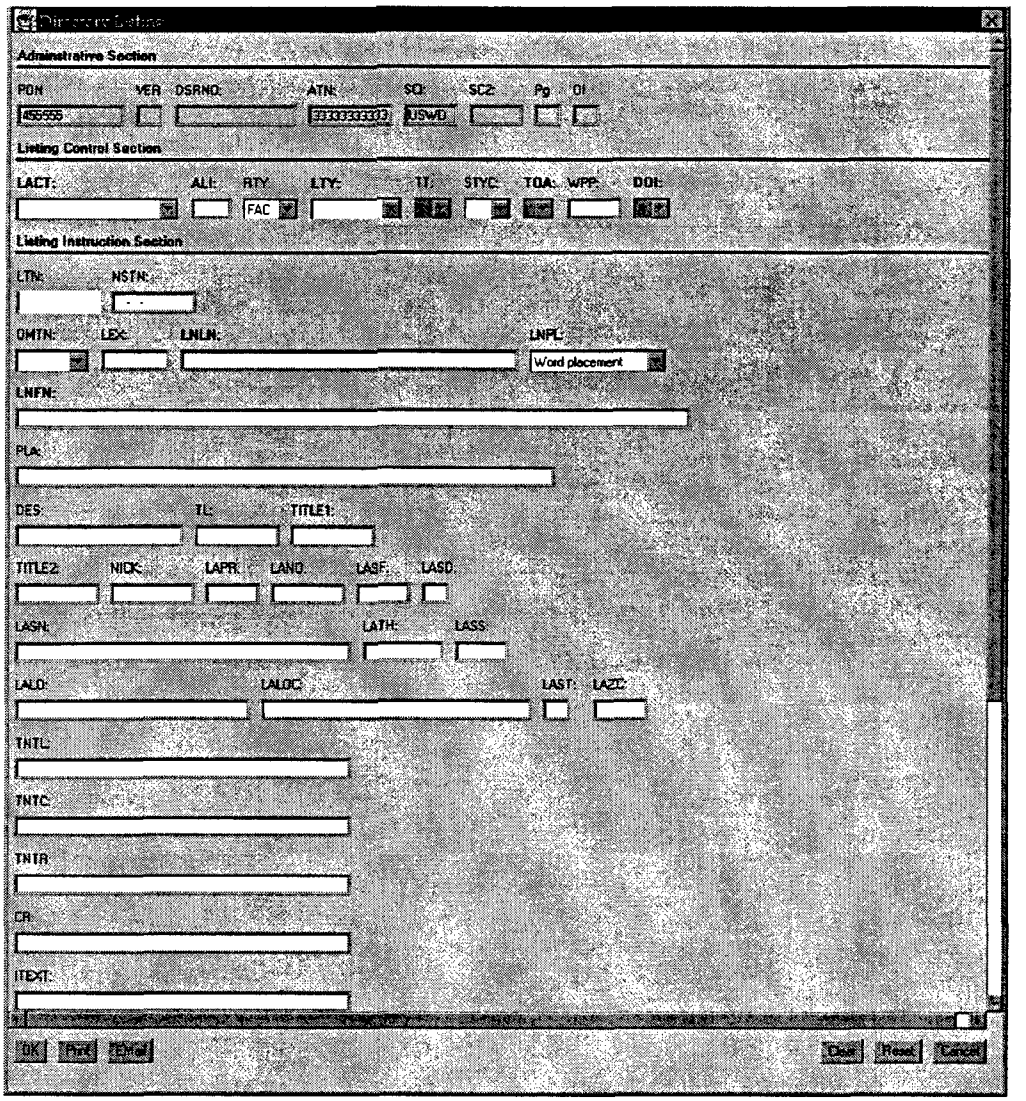


Figure 25 Directory Listing form (page 1)

Directory Listing form (page 2) in Figure 26 shows enhanced fields.

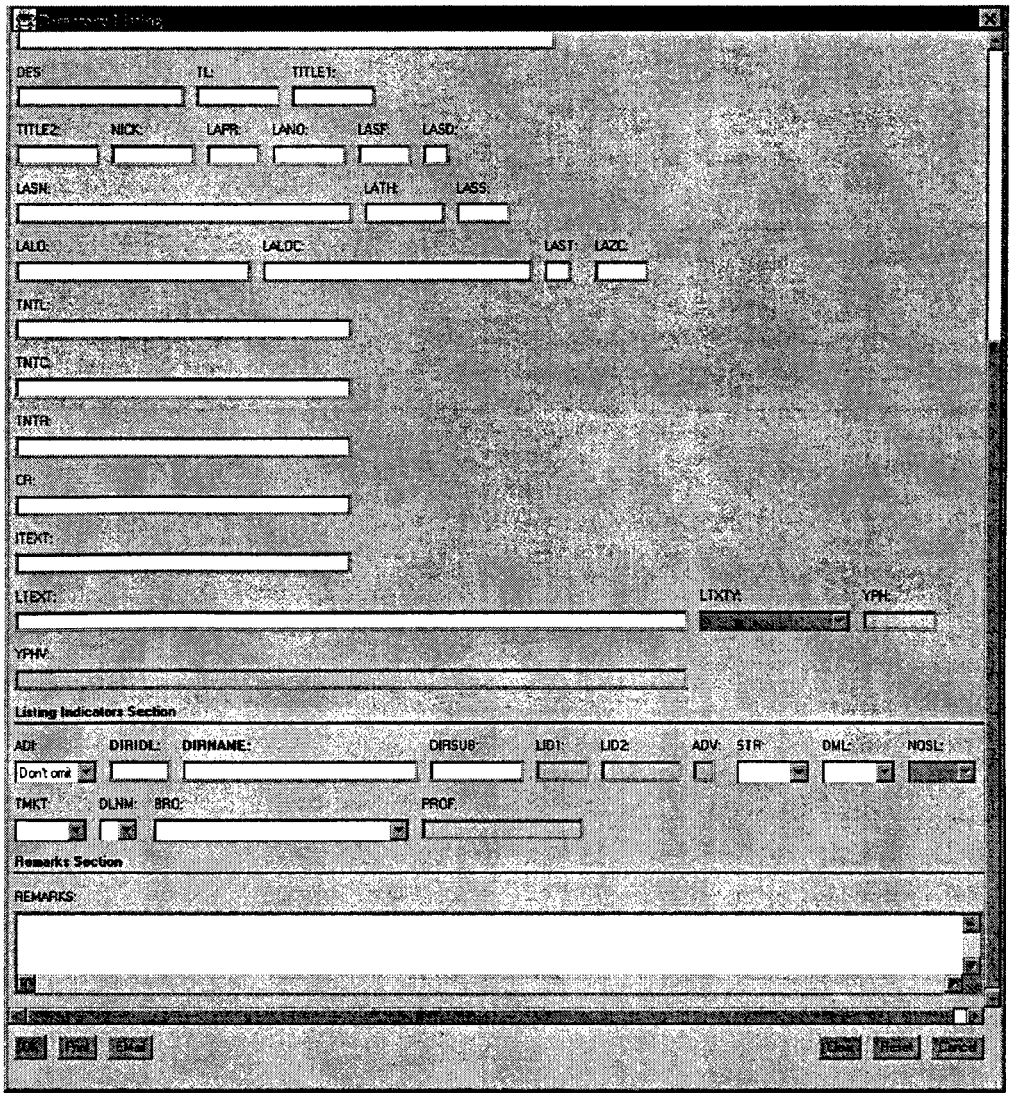


Figure 26 Directory Listing form (page 2)

Figure 27 shows Order Confirmation window.

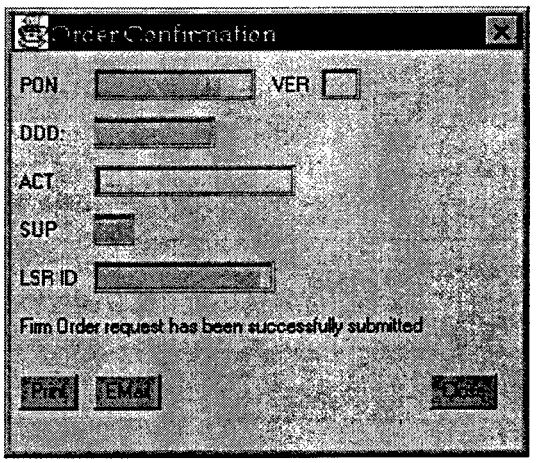


Figure 27 Order Confirmation window

Figure 28 shows Loop Service form with enhancements.

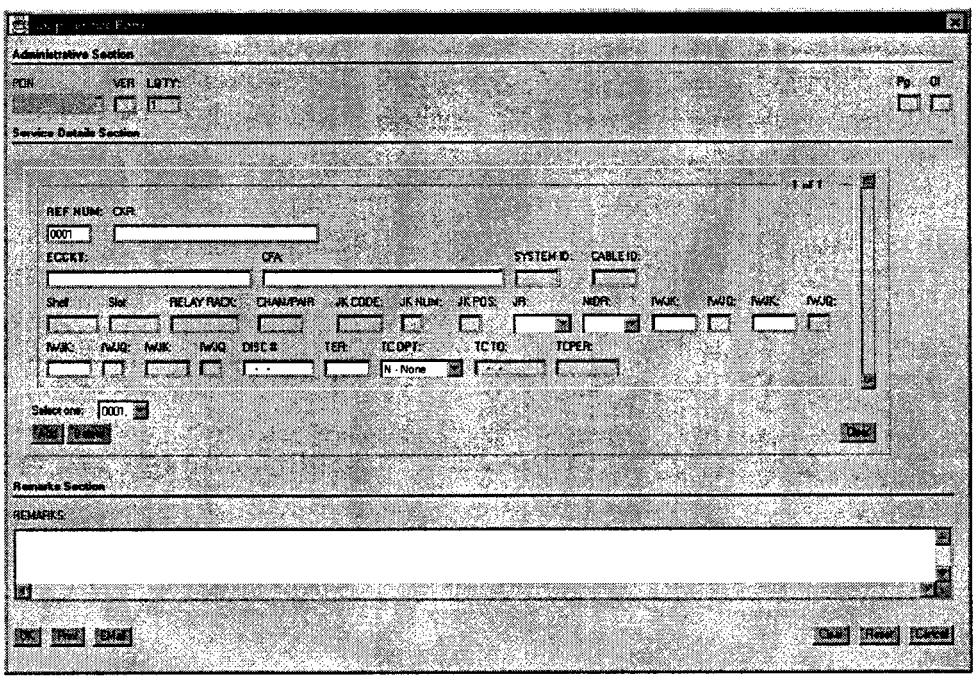


Figure 28 Loop Service form

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages: 1**
Phone:	**Date:** June 26,1998
Re: IMA Release Notification	**CC:**

As scheduled, U S WEST is implementing the planned EDI capabilities in Release 3.1 on June 26, 1998. This weekend's implementation will have no impact to operations, and IMA will be available without any scheduled downtime. Specific information regarding this release is presented in the release notes which can be located in the LSP Information Website on IMA's Main Menu.

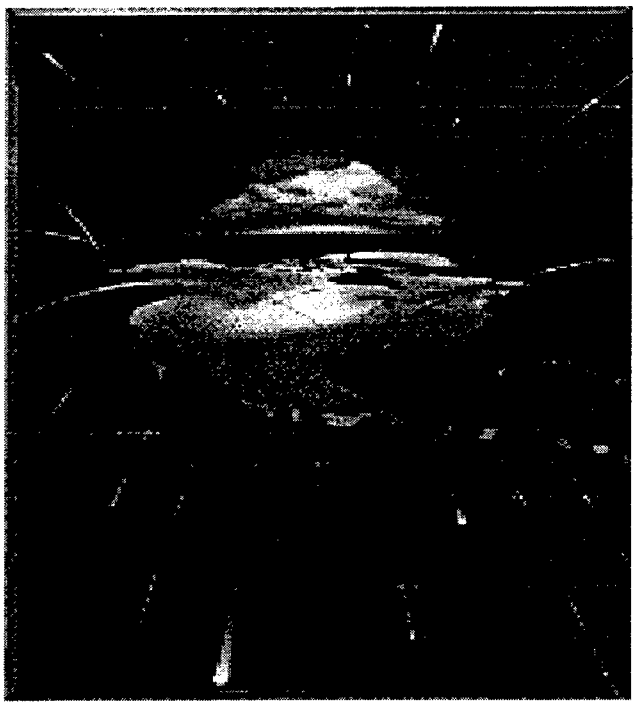
Due to response time performance testing concerns with Release 3.1 that could have impacted Co-provider operations for certain desktop environments, U S WEST will implement 3.1 capabilities for the IMA graphical user interface (GUI) at a future date. Therefore the current IMA GUI will remain in production, and all supporting documentation is still applicable.

If you have any questions, please contact the Training & Deployment Team on pager 303/473-2017.

Thank you,

Barbara "Pete" Peterson
IMA Training & Deployment Manager

Interconnect Mediated Access



Software Release Notes

Modification Date: June 26, 1998

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Version Notice

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Release	Date	Software Release
Release 1	6/5/98	3.1

Purpose of Document Release 1

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, version 3.1, to be implemented on Friday, June 26, 1998.

Document Ownership

Obtain additional copies of this document from the following organization:

IMA Documentation Project Manager
U S WEST Communications, Inc.
U S WEST Information Technologies
1005 17th Street, Suite 1690
Denver, CO 80202
(303) 896 - 1529

Document Owner	Susan Embry-Busch
Document Author	Brenda Salario

Important: *This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.*

Trademarks

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General Overview

Summary

The thrust of Software Release 3.1 is to increase the transaction types supported by Electronic Data Exchange (EDI). Enhancements that directly affect users are outlined below.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.1, to be implemented at 20:00 hours MDT on Friday, June 26, 1998.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and all related U S WEST employees such as help desk personnel and system administrators.

Dissemination

Currently, the IMA Deployment Team headed by Manager Barbara Peterson is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at number 303-896-2705, or email address bpeters@uswest.com.

EDI

Additional transaction types were added in Release 3.0. Now, with Release 3.1 more transaction types have been added. Following is a list of the transaction types with their descriptions.

- CSR - a CSR may be requested during the order fulfillment process to verify listing, billing and services related information.
- Facility availability - a query on the availability of facilities may be performed based on the telephone number or end-user address, which are in turn to be obtained through a prior Address Validation operation.
- Address Validation - address validation is available through the EDI interface.
- Directory Listing - provides the ISC with the ability to retrieve, view and process POTS LSRs with complex listings.
- PBX for POTS - adds the ability to order PBX services.

- Loop - takes a packaged flat rate or business rate service and breaks the Loop component out to the package to provide a Co-Provider the ability to serve an address which otherwise could not be done in a timely and cost efficient manner by building their own facility.
- Loop with Number Portability - transfers a telephone number to a LSP so that the end customer does not incur a telephone number change (number portability). The local loop component of the packaged flat rate or business rate is available to serve an address that the LSP could not otherwise do in a timely and cost efficient manner by building their own facility.
- Number Portability - transfers a telephone number to a LSP so that the end customer does not have to incur a telephone number change. U S West will disconnect the existing telephone service provided to the customer.
- Service Availability Query - process will provide the Co-Provider the ability to confirm that services being requested are available at the serving wire center.
- Service Order Inquiries - provides the Co-Provider the ability to inquire on the status of a LSR.

U S WEST IMA CO-PROVIDER WEBSITE - Netscape

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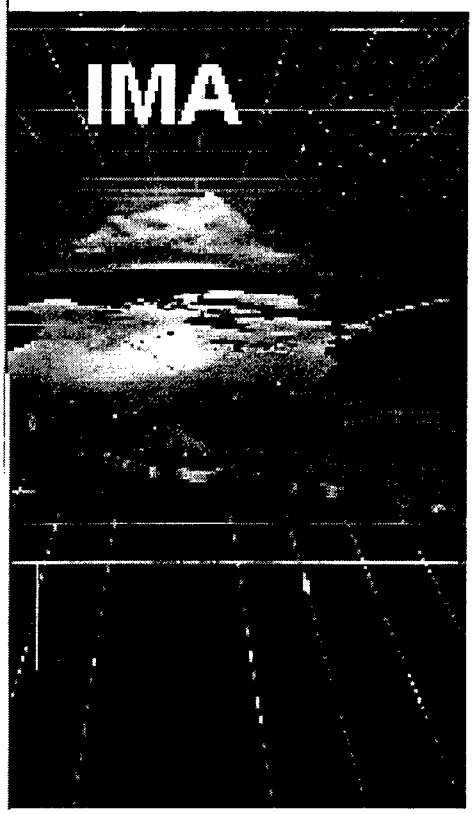
ST better here®

Interconnect Mediated Access



WELCOME

This web site is designed to keep you informed and to answer your questions about Interconnect Mediated Access (IMA). Your feedback about this site is appreciated. Send your comments via e-mail to: IMAGRP@uswest.com.

A 3.1/3.2 ... now one release. See news.

customer forum NEW!
This page contains information users like yourselves have experienced and want to share with others.

documents
This section contains the latest versions of IMA user documentation.

events NEW!
This section contains a link to the IMA training class schedule and registration form located on the Interconnect Resale and Resource Guide web site.

FAQs NEW!
This section contains answers to questions most often asked by the user.

news NEW!
This section is designed to provide you with the latest information on what is happening with IMA, IMA users, and the IMA software.

release notes NEW!
This section contains information about each IMA software release.

Customer Forum | Documents | Events | FAQs | News | Release Notes | Contact Us

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Document: Done

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Interconnect Mediated Access

News

This page is being designed to provide you with the latest information on what is happening with IMA, IMA users, and the IMA software. As news is added to this site, the old articles will be archived. Old news can be accessed via an "archive" button on this page.

Software Release Information

As scheduled, U S WEST is implementing the planned EDI capabilities in Release 3.1 on June 26, 1998. This weekend's implementation will have no impact to operations, and IMA will be available without any scheduled downtime. Specific information regarding this release is presented in the release notes which can be located in the LSP Information Website on IMA's Main Menu.

Due to response time performance testing concerns with Release 3.1 that could have impacted Co-Provider operations for certain desktop environments, U S WEST will implement 3.1 capabilities for the IMA graphical user interface (GUI) at a future date. Therefore the current IMA GUI will remain in production, and all supporting documentation is still applicable.

If you have any questions, please contact the Training & Deployment Team on pager **(303) 473-2017**.

Thank you,

Barbara "Pete" Peterson

IMA Training & Deployment Manager

We are very interested in your feedback pertaining to releases; you can e-mail us at IMACRP@uswest.com

Maintenance & Repair via IMA

We have received a lot of positive feedback from the Co-Providers who use the Repair function in IMA to submit trouble reports for their customers. This function allows for reporting trouble on POTS and Design Services lines. The Co-Providers have said they are pleased with IMA's ease of use, its ability to monitor trouble reports submitted for their company, its ability to query the trouble record status, its ability to review the last three trouble entries reported, and the option it provides to deny or accept closure of a trouble ticket. If you are not currently taking advantage of this useful tool, call Cory Hamilton at (303) 896-2744 to learn more about IMA and the product training opportunities currently available.

EDI (Electronic Data Interchange)

Hello. I am Mark Lewis and I am the IMA EDI coordinator with the IMA Training and Deployment team.

EDI is a means of doing business electronically. EDI is commonly described as a computer-to-computer exchange of business information using national and industry standards.

U S WEST first introduced IMA EDI functionality in IMA Release 2.1. This functionality allows for POTS ordering. Of the many enhancements contained in IMA Release 3.0, EDI Pre-Order functionality for telephone number reservation and appointment scheduling is available.

The successful implementation of inter-organizational EDI is achieved only though mutual commitment and a coordinated effort. Toward that goal, I will be working with Account Executives to facilitate the distribution of documentation to coordinate the EDI testing and implementation process.

If you are interested in doing business with U S WEST using EDI, contact your Account Executive for additional information.

IMA Hours

The normal hours of operation of the IMA system are Monday through Friday, 6:00 am (MDT) until 8:00pm (MDT). We do not guarantee system availability on Saturdays. When the IMA system will not be available because of scheduled maintenance or a release, we will make every attempt to notify you ahead of time so you can plan accordingly. If you have any questions regarding the hours of operations of IMA system, contact Barbara "Pete" Peterson via e-mail at bpeters@uswest.com or via telephone at (303) 896-2705.

Last Update: 06/26/98 11:04:18

Document: Done

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages: 1**
Phone:	**Date:** July 1,1998
Re: System Maintenance	**CC:**

U S WEST will be performing system maintenance during the week of July 6, 1998.

The IMA system will be unavailable from 7pm on Wednesday, July 8, to 6am, Thursday, July 9 (MDT).

The IMA system will be unavailable in the Eastern Region only, (Iowa, Minnesota, Nebraska, North and South Dakota) from 5pm Friday, July 10 to 6am, Monday, July 13 (MDT).

Also, the Maintenance and Repair portion of IMA will be unavailable in the Eastern Region from 12 noon on Friday, July 10 to 6am, Monday, July 13 (MDT).

If you have any questions, please contact the Training & Deployment Team on pager 303/473-2017.

Thank you,

Barbara "Pete" Peterson
IMA Training & Deployment Manager

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages: 4**
Phone:	**Date:** August 14,1998
Re: IMA Desktop Requirements	**CC:**

Attached are the Interconnect Mediated Access (IMA) Co-Provider Desktop Requirements. This is the recommended configuration that will deliver the maximum benefits of the enhanced IMA GUI. These requirements are also located in the NEWS section of the menu option "LSP Information Website" within IMA, and will also be included in the next release of the "IMA POTS/Design Services User Guide."

As always, if you have any questions about the requirements or any other IMA topic, please call the Training Team at pager 303/473-2017 or the LSP Help Desk at 888/796-9102.

Thank you,

Barbara "Pete" Peterson
IMA Deployment & Training Manager
bpeters@uswest.com

Co-Provider Desktop Requirements

U S WEST

Interconnect

Mediated Access

Co-Provider Desktop Requirements
August 6, 1998

Overview:

This memo describes the hardware and software desktop requirements for users of the U S WEST Interconnect Mediated Access (IMA) application.

These requirements are based on the IMA application environment. If non-IMA applications are concurrently running with IMA, then these requirements may need to be increased.

Hardware Requirements

- Intel Pentium 233 Mhz
- 17" SVGA Monitor
- SVGA Video Card with 2 MB memory
- 96 MB RAM*
- 56 Kbps Modem (dial-up connection to U S WEST)
  or
- Dedicated LAN connection to U S WEST*
- 200 MB free disk space (after all software installation and Windows© VM file allocation)

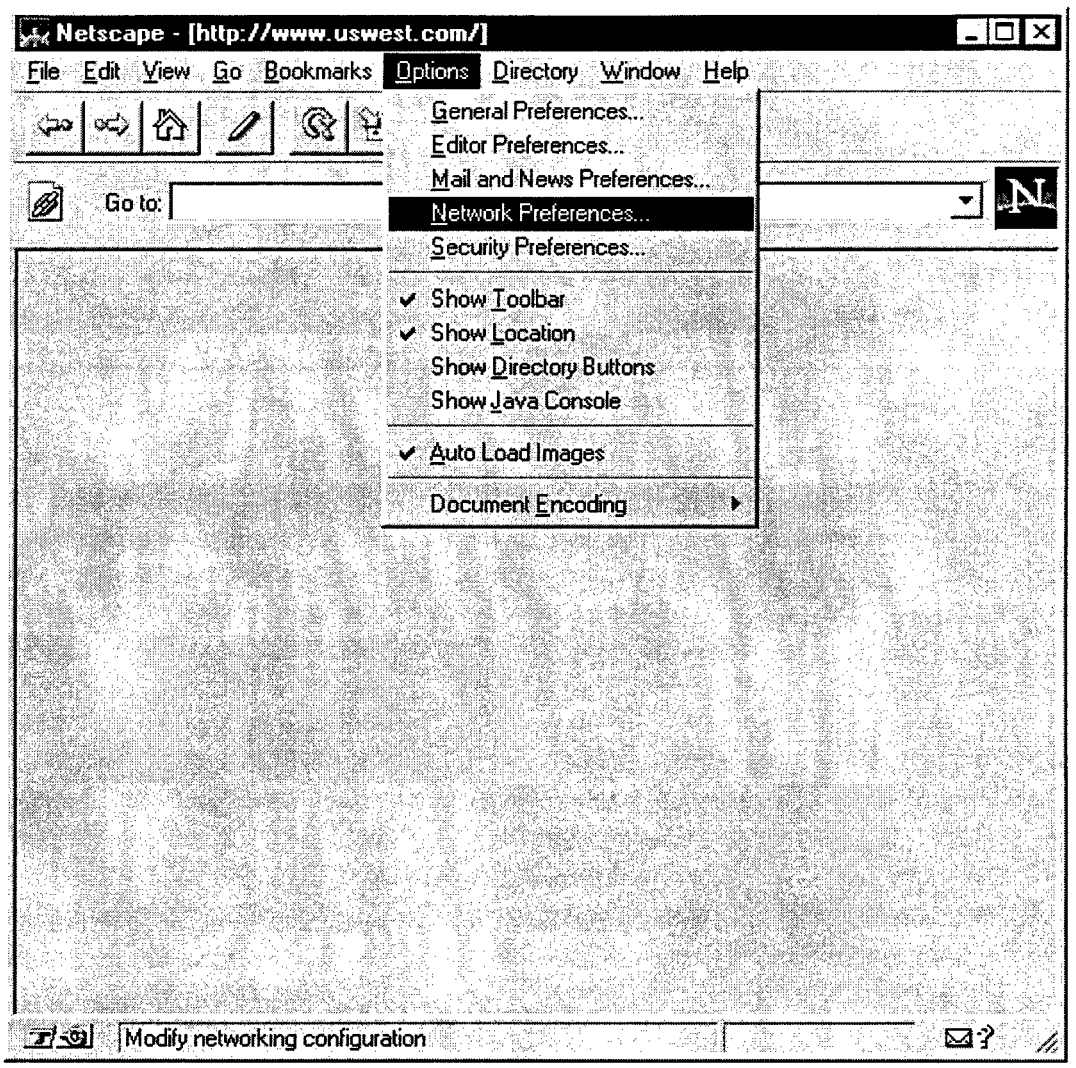
Software Requirements

- Microsoft Windows95©
  or
- Microsoft Windows© NT (Service Pack 3)*
- Netscape Navigator© 3.01

**Additional memory (RAM) and a faster network connection may improve performance of the IMA application. In addition, Microsoft Windows© NT may allow you to access more screens in IMA concurrently than with Microsoft Windows© 95 (due to fixed system resources in Microsoft Windows© 95).*

Netscape Navigator 3.01 Cache and Verify Settings

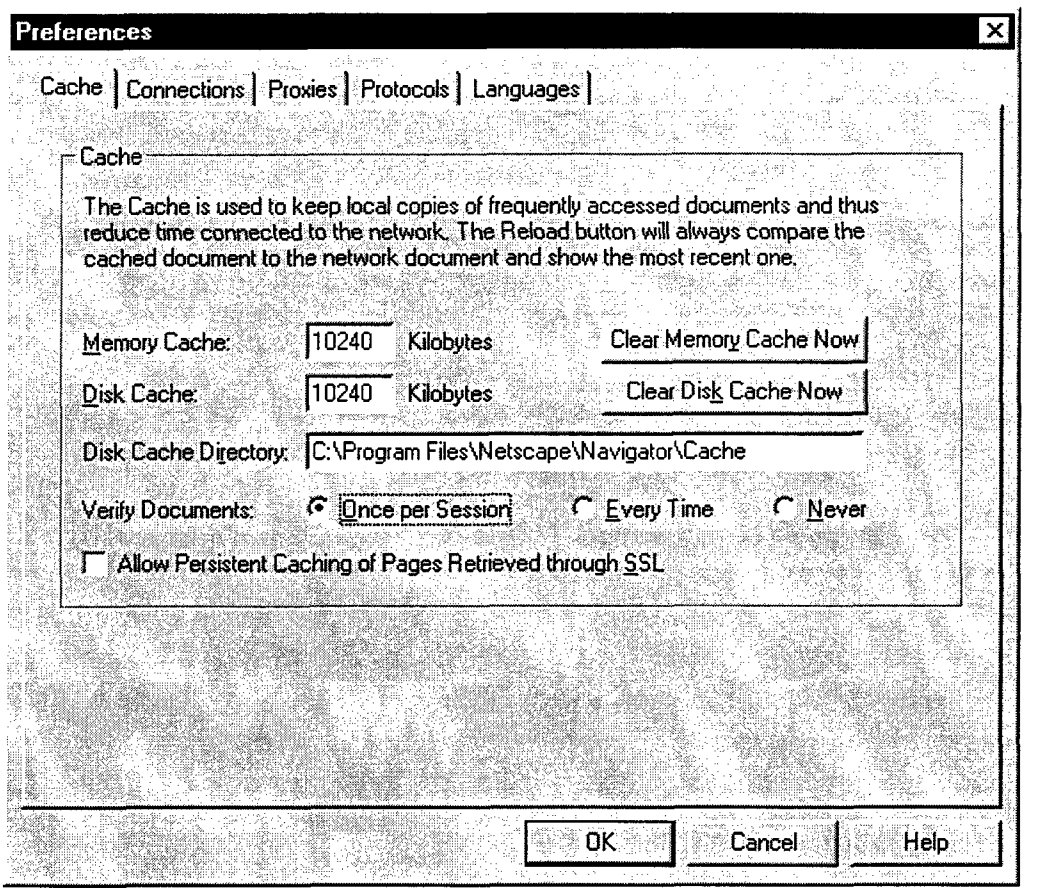
The default cache settings for Netscape Navigator© 3.01 must be increased to allow IMA to operate correctly. The Preferences screen can be reached from selecting Network Preferences from the Options menu in Navigator© (see below).



In the Preferences screen, update the following values:

- Set the value for **Memory Cache** to **10240**
- Set the value for **Disk Cache** to be **10240**.
- Set **Verify Documents** to be **Once per Session**

Do not change any of the other values.


Preferences
Cache
Connections
Proxies
Protocols
Languages
Cache
The Cache is used to keep local copies of frequently accessed documents and thus reduce time connected to the network. The Reload button will always compare the cached document to the network document and show the most recent one.
Memory Cache:
10240
Kilobytes
Clear Memory Cache Now
Disk Cache:
10240
Kilobytes
Clear Disk Cache Now
Disk Cache Directory:
C:\Program Files\Netscape\Navigator\Cache
Verify Documents:
Once per Session
Every Time
Never
Allow Persistent Caching of Pages Retrieved through SSL
OK
Cancel
Help

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**From:** IMA Deployment Team
Fax:	**Pages:** 3
Phone:	**Date:** August 26, 1998
Re: IMA RELEASE 3.2	**CC:**

The Interconnect Mediated Access group will be implementing an upgrade of the IMA software on Friday, September 25, 1998.

The release notes for IMA version 3.2 will be available Friday, September 4, 1998, on the IMA LSP Information Website. The LSP Information Website is an IMA menu option.

CLASS REGISTRATION:

Because Release 3.2 will contain significant changes in appearance and functionality, we are scheduling training sessions to familiarize users prior to implementation. These sessions will be approximately 2 hours long. The attached schedule lists the sessions available to the Co-Providers. (NOTE: The sessions on September 10, 11, 16 and 18 are live presentations at USWest sites; September 21 is a video conference presentation at sites listed.)

Please reply by Wed., September 2, 1998 by faxing a completed registration form (located on the last page of this fax). A confirmation of the date and location will be sent to you by Fri., September 4,1998. * The on-site classes will be cancelled if fewer than 5 register and you will be notified of this cancellation.

Please bring a copy of the release notes with you when attending the video training sessions. If you have any questions, please contact Norm Klingbile, (303) 896-2710 or email at nklingb@uswest.com.

As always, for system questions, please contact our help desk at (888) 796-9102, and thank you for your cooperation and patience throughout these system enhancements.

Barbara "Pete" Peterson
IMA Training and Deployment Manager (303/896-2705)

U S West Locations

September 10, 1998 (Thursday)	Seattle, Washington	2:00-4:00 p.m. (Pacific Time)
September 11, 1998 (Friday)	Portland, Oregon	9:00-11:00 a.m. (Pacific Time)
September 16, 1998 (Wednesday)	Minneapolis, Minnesota	2:00-4:00 p.m. (Central Time)
September 18, 1998 (Friday)	Denver, Colorado	3:00-5:00 p.m. (Mountain Time)

***Video Conferences**	**September 21, 1998**	**Two 2 Hr. Sessions** 10:00-12:00 a.m. & 2:00-4:00 p.m.(MDT)

CITY	**ADDRESS**	**ROOM**
Bellevue, WA	450 110th Ave. NE	516A
Bend, OR	100 N. W. Kearney	1st floor.
Des Moines, IA	4201 Kingman Blvd.	Training Rm.
Denver, CO	1801 California	320-1
Englewood, CO	7800 E. Orchard	4th flr. Minnesota Rm.
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	12th floor
Omaha, NE	1314 Douglas On the Mall	Cornhusker
Phoenix, AZ	5090 N. 40th Street	102
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	1809
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870K
Englewood, CO	7800 E. Orchard	4th Flr., Minnesota Rm
Helena, MT	701 N. Main	
Minneapolis, MN	150 S. 5th Street	530
Omaha, NE	1314 Douglas On the Mall	Heartland
Phoenix, AZ	5090 N. 40th Street	108
Portland, OR	421 S. W. Oak	109B
Seattle, WA	1600 7th Ave.	410
Sioux Falls, SD	125 S. Dakota	1st Floor
Denver (host site), CO	1005 17th Street	1870 K

***Please indicate your interest only at this time. Do not make airline/hotel reservations until notified.**

CLASS REGISTRATION

SEND TO: [redacted]/FAX: [redacted]

NAME: _____

COMPANY: _____

CLASS DATE: _____ **LOCATION:**

_____

TIME: _____

SEND CONFIRMATION TO: (List your name and fax number or email address):

_____

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

News!

To: **Company:**

Fax: **Pages:** 1

Phone: **Date:** August 31,1998

Re: **NEW & QUICKER METHOD TO SUBMIT ORDERS IN IMA POTS PREORDER/ORDER**

From: IMA Deployment Team

We have been listening!
To assist you in more expedient order entry, a change has been made in the method of entering a Desired Due Date (DDD):

- Enter a DDD that is 24 days out from today's date, e.g., if you were entering an order on 9/1, a DDD of 9/25 would be entered. This modification to the system will allow the order to be submitted without having to use the "GET MORE" and/or "CHANGE DATE" buttons. The buttons will not appear, but instead the ORDER SUMMARY screen will come up and you can then submit the order.*
- REMARKS: Please enter the actual Desired Due Date you would like in the REMARKS field; the Interconnect Service Center will receive these orders and manually assign a due date that will be returned on the Firm Order Confirmation.
- NOTE: The system works as always for appointments less than 24 days. If you receive the message "no slots available" you have the option to "get more" or "change date" (current functionality), and if you enter a date past 24 days, it will function as stated above.

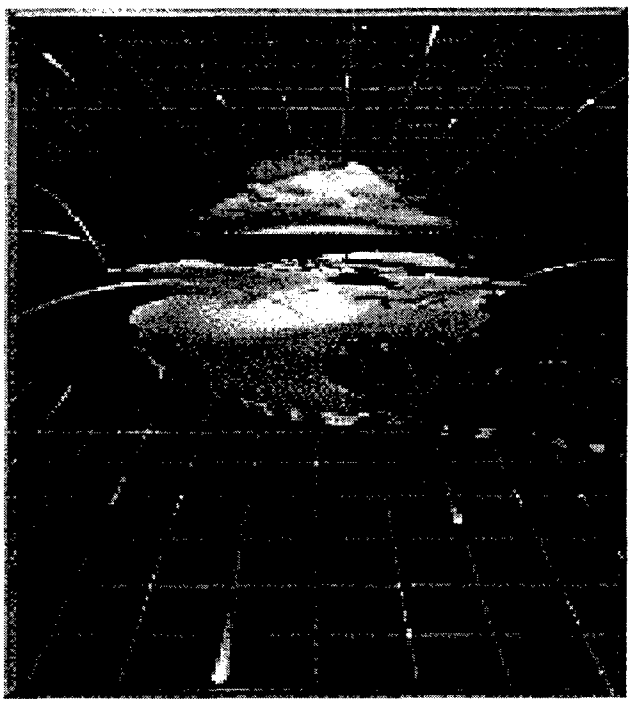
If you have any questions, please contact the IMA Training Team, pager 303/473-2017 or the LSP Help Desk, 888-796-9102.

Thank you,

Barbara "Pete" Peterson
IMA Training & Deployment Manager

* This modification will be in effect until Release 3.2 which is scheduled to be implemented the weekend of 9/25.

Interconnect Mediated Access



Software Release Notes

Modification Date: September 4, 1998

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Version Notice

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Release	Date	Software Release
Release 1	9/4/98	3.2

Purpose of Document Release 1

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, version 3.1, to be implemented on Friday, September 25, 1998.

Document Ownership

Obtain additional copies of this document from the following organization:

IMA Documentation Project Manager
U S WEST Communications, Inc.
U S WEST Information Technologies
1005 17th Street, Suite 1690
Denver, CO 80202
(303) 896 - 1529

Document Owner	Susan Embry-Busch
Document Author	Nicole Wertz

Important: *This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.*

Trademarks

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General Overview

Summary

Among the enhancements to IMA Software Release 3.2, the most prominent is the migration of the POTS Pre-Order and Order GUI into the Design Services GUI. This resulting new GUI will maintain the Design Services appearance. POTS functionality is similar to its original function with the exception of new additions to the menu options. This migration standardizes order entry and allows the user to enter any order with POTS or Design Services using one GUI. Enhancements that directly affect users are described in subsequent sections of this document.

Note: The user must use Netscape 3.01 for Software Release 3.2.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.2, to be implemented at 20:00 hours MDT on Friday, September 25, 1998. The Co-Provider User's Guides will accompany this release with a more detailed explanation of how to use the new processes and forms.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and U S WEST employees such as help desk personnel and system administrators.

Dissemination

The IMA Deployment Team is headed by Manager Barbara Peterson, who is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at 303-896-2705, or bpeters@uswest.com.

Interconnection Functions Screen

The heading on the Interconnection Functions screen will change from **POTS/PSP** and **Design Services** to **Pre-Order**, **Order** and **Status** as their own headings, integrating POTS into the Design Services GUI.

Standardized Address Fields

All windows that use a validated address have been standardized. The enhancements are a pulldown list that contains as many as the last 10 verified addresses to select from and the consistent layout of the address fields. The address fields are:

- Validated Addresses has a pulldown list, listing all validated addresses.
- Street # is a new field.
- Street # Suffix is a new field.
- Street Name.
- AHN is a new field.
- Route is a new field.
- Box is a new field.
- Floor.
- Room has a pulldown list.
- Building has a pulldown list.

Clear Button

The addition of the Clear button is standard on windows requiring input. It erases information that has not been saved on the screen.

New Products

While some of these products have existed in previous interations of the software, they are listed as new because they contain new functionality.

- Resale BRI ISDN - Basic Rate Interface Integrated Switch Digital Network.
- Loop with Number Portability on the GUI.
- Number Portability on the GUI.
- Resale Private Line.
- Unbundled Analog Line-side Switch Port.

These products are described in detail in subsequent sections of this document.

Note: *Many forms now require clicking the **Add** button (in the top left corner of the form) to activate fields for editing.*

Pre-Order Enhancements

The following Pre-Order menu items and their options, on the IMA Window, used for both POTS and Design Services, are either new or have been modified.

- Address Validation
- Review CSR
- Schedule Appointment

- Reserve Telephone Numbers
- Service Availability
- Check Facility Availability

Address Validation

The Address Validation window has a new look and new fields. Address Validation is a menu item under Pre-Order. The function of Address Validation has not changed. There is no change to the process. The new fields and enhancements are the standardized address fields previously listed and the ability to validate an address by entering a descriptive name for an address in the Street field. This form of search is called a Descriptive Address Search.

The Address Validation response windows have enhancements. The new fields and enhancements on the Address Validation Response window are:

- WTN (formerly LOCBAN) is a new field label.
- Validated Addresses lists up to the last 10 validated addresses from which to choose.
- Street # and Street # Suffix fields have been separated from Street.
- Room Type and Building Type fields have pulldown lists.
- There are now three tabs in the Address Validate Response Screen: Switch Information, PNA Remarks, and SL Remarks.
- AHN, Route, and Box are new fields.

The new fields and enhancements on the Address Near Match response window are:

- Street # and Street # Suffix fields have been separated from Street.
- House Num Range column has been added.

Review CSR Process

The Review CSR has been removed from the Address Validation process. Review CSR is an item under the Pre-Order pulldown menu as well as Address Validation. There are no changes to the functionality or the process. The validated address portion on the Review CSR screen will be pre-populated after an address validation has been performed. The AN field has been added to the Review CSR - Response window.

Schedule Appointment Process

The Schedule Appointment menu item under Pre-Order is new. This process is used to reserve an appointment date and time for a technician to be dispatched to the premises. A reserved appointment time has 24 business hours for the appointment to be included on a request for service. Appointments cannot be canceled via the GUI. This function is available under Order. For Software Release 3.2, only reservations for POTS services is available.

Reserve Telephone Numbers Process

The Telephone Number menu item under Pre-Order is new. This process is used to retrieve a list of nine available telephone numbers. The user can select all telephone numbers for reservations or specific numbers using Ctrl/Shift key combination. Telephone number reservation is necessary when requesting a new service, a new line on existing service, change of telephone number, or moving to an area outside of the current local service office. This function is available under Order, in the Resale Form. This function is not available for Design Services.

Service Availability

The Service Availability menu item under Pre-Order is in a new format. The tabs in this menu include universal service order codes (USOCs), Carriers, and switches available in that wire center. The field INFOTYPE has been added to the Request section of the window to support Resale ISDN. The value "M" for Multi-Switch queries has been added to the INFOTYPE field on the Service Availability Query screen. This function is not available for Design Services. Pricing is no longer available in the Service Availability.

Check Facility Availability

The functionality and process of Check Facility Availability has not changed.The Check Facility Availability process is used to confirm that the capacity of a facility can handle the type and volume of lines being requested. The enhancements are described below.

The POTS Facility Response window supports only POTS-specific responses. The enhancement to this window is:

- Number of New Lines field being requested is returned.

The Design Services Facilities Request and the ISDN Facilities Request enhancements are:

- Zip Code is a new field.
- Standardized address layout.
- Validated Addresses field lists up to the last 10 validated addresses.
- Loop Qualification information will be returned in the text box on the ISDN Facility Response window.

Resale BRI ISDN

Resale BRI ISDN (Basic Rate Interface Integrated Switch Digital Network) is the ability to simultaneously carry digitized voice and data traffic on one line. This capabitlity uses standard lines that already serve the customer.

In the Order Information for New LSR screen the Resale BRI ISDN appears in REQTYP as "E-Resale (POTS and ISDN). Regardless of the selected Activity Type, the required forms are displayed in the Order Information for New LSR screen.

Order Enhancements

The Order process, with the integration of POTS to the Design Services GUI enables Co-Providers to create and submit requests for POTS. The new enhancements under the Order menu include new menu item titles as well as a new option to choose from. The option New LSR replaces Order; Query LSR Status replaces Query Order Status; added functionality is Open Pending LSR. New forms include: Port Service form which supports the Unbundled Analog Line-side Switch Port service, a new product; Resale Private Line form which supports Private Line enhancements; Loop Service with Number Portability which supports unbundled loop service with number portability. The enhancements will be listed according to the screens within the Order process.

Order Information

The process and functionality of the Order process has not changed. The integration of POTS into the Order process is accomplished by adding fields on windows and pulldown lists to select POTS-specific information. The enhancements will be listed according to the Order process and the screens within that process that have changes. The enhancements on the Order Information window are:

- During Pre-Order, if TN Selection or Appointment processes were performed, PON will automatically be pre-populated. If the PON and VER are incorrect, those fields may be retyped.
- Within REQTYPE pulldown list, E -ISDN has been changed to E - (RESALE POTS and ISDN). To support Unbundled Analog Line-side Switch Port, the value is F. To support Private Line, the value is K.
- BAN has a pulldown list and is now a required field. (See the System Administration Guide regarding mandatory field input and formatting.)
- State field has been removed.
- Z-Conversion as specified, no Directory Listing has been added to the Activity pulldown list.
- Form Name will list the forms that are needed according to the selected REQTYP.
- A Save button has been added to each of the OBF form screens to allow the form to be saved in a pending state and retrieved at a later date.
- Print button has been changed to Print Preview.

Pending LSR

A new enhancement to the Order process is saving a pending LSR and retrieving it at a later date. Information to an order is entered into the Order Information for a New LSR screen. By clicking the save button, the LSR will go into a pending state. A pending LSR will be retained for 30 calendar days. A pending LSR has the following maintenance actions:

- Can be retrieved for review and/or editing
- Can be re-saved after additional review and/or editing
- Can be submitted
- Can be purged from the system

- Can be purged by the system as a result of the expiration of the retention date

When the user selects the Fetch Pending LSR button, the user will retrieve LSRs in submitted, issued, in review, and pending status.

Important: *After 24 hours, the telephone number and appointment will be returned unless the order is submitted.*

Local Services Request Form

The addition and deletion of fields comprise the enhancements to the Local Services Request window. Following is a list of enhanced fields.

- APPTIME is a new field.
- SCA has a pulldown list.
- AGAUTH has a pulldown list.
- TSP has been moved to the resale form.
- SAN has been moved to the resale form.
- RTR has a pulldown menu.

End User Information Form

The addition and deletion of fields comprise the enhancements to the End User Information window. Following is a list of enhanced fields.

- LSO has been moved to the LSR.
- LST has been moved to the LSR.
- NCI has been moved to the LSR.
- SEC NCI has been moved to the LSR.
- APTCON is a new field.
- EUMI has a pulldown list.
- IWO has a pulldown list.
- AN replaces LOCBAN.
- EAN is a new field.
- FBI has a pulldown list.
- CPE MFR is a new field.
- CPE MOD is a new field.
- TC TO PRI is a new field.
- TC TO SEC is a new field.
- TC ID is a new field.
- TC Name is a new field.

Resale Form

The addition and deletion of fields comprise the enhancements to the Resale Form window. Following is a list of enhanced fields.

- REFNUM in the hunting section is a new field.
- HA has a pulldown list.
- HNTYP has a pulldown list.
- HID is a new field.
- TLI is a new field.
- HUNT SEQ can hold 512 characters.
- Add, Delete, and Clear buttons have been added to the top of Hunting Section.
- Hunting Section is repeatable.
- LNA has a pulldown list.
- Select TN button is new and is used to select from previously reserved TNs for this PON.
- TER is a new field.
- TSP is a new field.
- SAN is a new field.
- PTKTYP is a new field.
- PTKCON is a new field.
- PTLI is a new field.
- TC OPT has a pulldown list.
- NIDR has a pulldown list.
- SGNL has a pulldown list.
- PULSE has a pulldown list.
- TBE has a pulldown list.
- FA has a pulldown list.
- Facility Check, Appointment Scheduling, and Assign TN buttons have been added to the bottom of the window.

Note: *Selecting an address from the validated address field will automatically populate required fields in the location and access section.*

Directory Listing

The addition and deletion of fields and the ability to order complex directory listing services comprise the enhancements to the Directory Listing window. Valid order activities for directory listing services are new connect, conversion as specified/partial conversion, change of existing services, transfer, and record changes. Major enhancements concerning the directory listing on this form are the tabs DSR and DL/DSCR, which allows the Co-Provider to switch between the frames.

Following is a list of enhanced fields on the Listings screen.

- LACT has a pulldown list.

- RTY has a pulldown list.
- LTY has a pulldown list.
- TOA has a pulldown list.
- DOI has a pulldown list.
- OMTN has a pulldown list.
- LNPL has a pulldown list.
- LTEXT replaces LOI.
- LTXTY has a pulldown list.
- ADI has a pulldown list.
- DIRNAME is a new field.
- DML has a pulldown list.
- NOSL has a pulldown list.
- OMSD is a new field.
- TMKT has a pulldown list.
- BRO has a pulldown list.

Switch Port Service

Unbundled Analog Line-side Switch Port is a new product offered within IMA. This is a 2-wire, Analog, POTS-type line switch connection that offers only the features available out of that specific wire center. The Switch Port Service form is now included in the Order Information Screen when this product is selected in the REQTYP field.

The form allows the user to enter information specific to the telephone number and features requested by the customer. It is similar to the Resale form. The user must click on the Add button in the upper left corner of each section before any entries can be initiated.

Loop Service with Number Portability

The new Loop Service with Number Portability form now appears as required when making a conversion of this REQTYP in the Order Information for New LSR Screen. The form displays an Administrative Section, a Service Details Section, and Remarks section. Each section is accessed by clicking on the Add button in the upper left hand corner.

This type of order enables the end users to retain their present telephone numbers when transferring service to a different Co-Provider.

Loop Service Form

The addition and deletion of fields comprise the enhancements to the Loop Service window. Following is a list of enhanced fields.

- ECCKT is a bolded field.
- CFA is a new field.
- JR has a pulldown list.
- NIDR has a pulldown list.
- TC OPT has a pulldown list.

Loop with Number Portability

Loop with Number Portability transfers a telephone number to an LSP so that the end customer does not incur a telephone number change (number portability). The local loop component of the packaged flat rate, or business rate, is available to serve an address that the LSP could not otherwise serve in a timely and cost-efficient manner.

Number Portability

Number Portability transfers a telephone number to an LSP so that the end customer does not have to incur a telephone number change. U S WEST will disconnect the existing telephone service provided to the customer.

Resale for Private Line

Another Resale Private Line form resides in the Order Information for New LSR Screen. The Resale Private Line form is used for all types of end-to-end circuit orders except suspend and restore.

This form requires extensive information on location access, billing, primary and secondary location service details, and remarks. This form allows direct access to each section.

Order Submit Confirmation

When submitting a Firm Order, the system returns the "Order Submit Confirmation Screen" to the user. The user clicks **"Commit"** to send the order. The system will return to an LSR ID.

If the user selects Service Inquiry, the following message displays: This is a Service Inquiry request that will not result in the generation of a firm order. You may return to the Order Information screen at this time if a Firm Order is required. Otherwise, press "Commit."

Order Confirmation

When the second character of the order's REQTYP is A, the following message displays: "Service Inquiry request has been successfully submitted." When the second character of the order's REQTYP is B, the following message displays: "Firm Order request has been successfully submitted."

EDI

The following transaction types have been added:

- Unbundled Analog Line-side Switch is new product. A new form, Port Service, has been created to support this product.
- Private Line is a new form. Resale for Private Line, has been created for this product.

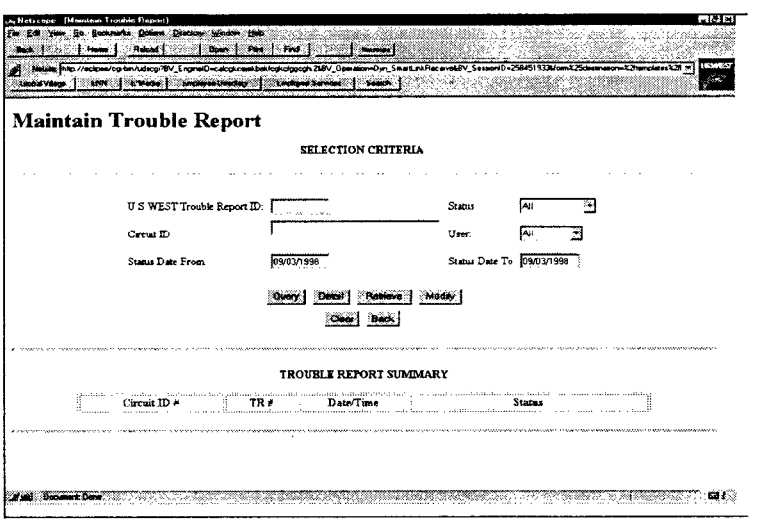
- ISDN - Integrated Switch Digital Network is a new form. Resale for ISDN has been created for this product.
- Address Validation Query Exceptions.
- Descriptive Address Enhancements. This enables the user to search for an address using the descriptive name for a specific address.
- New enhancements to CSR and AVQ.
- RMKB to Address Validation has been added.

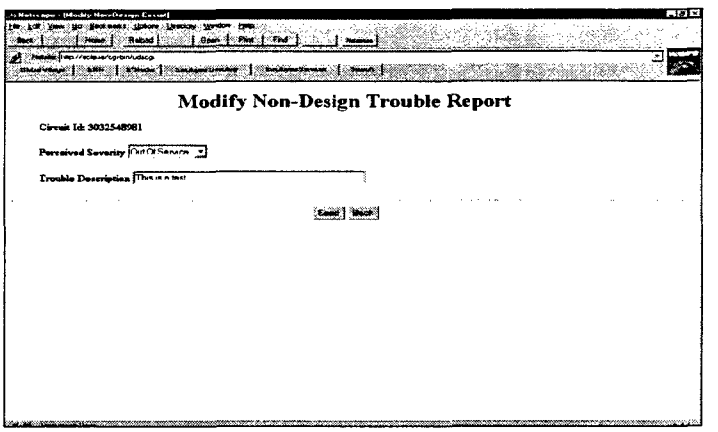
Maintenance and Repair

The following enhancements to Maintenance and Repair are:

- Addition of the Modify button.
- Modify only a POTS ticket or a Non-Design ticket.
- Only tickets in a open/active or deferred state may be modified.

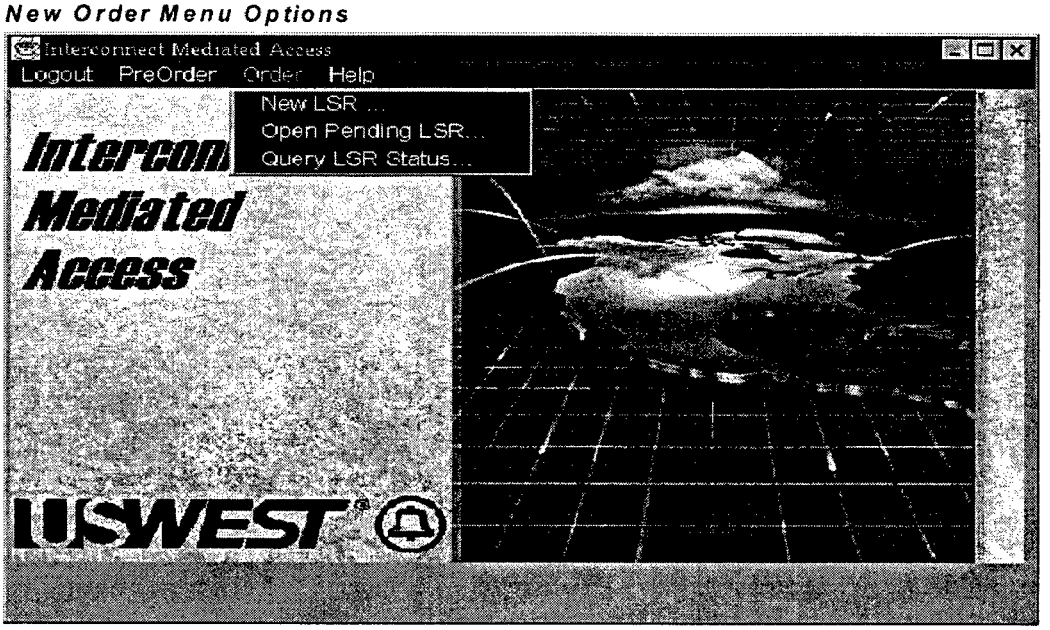
New Screen Shots for Maintenance and Repair include:




Modify Non-Design Trouble Report
Circuit Id: 3032548981
Perceived Severity
Trouble Description

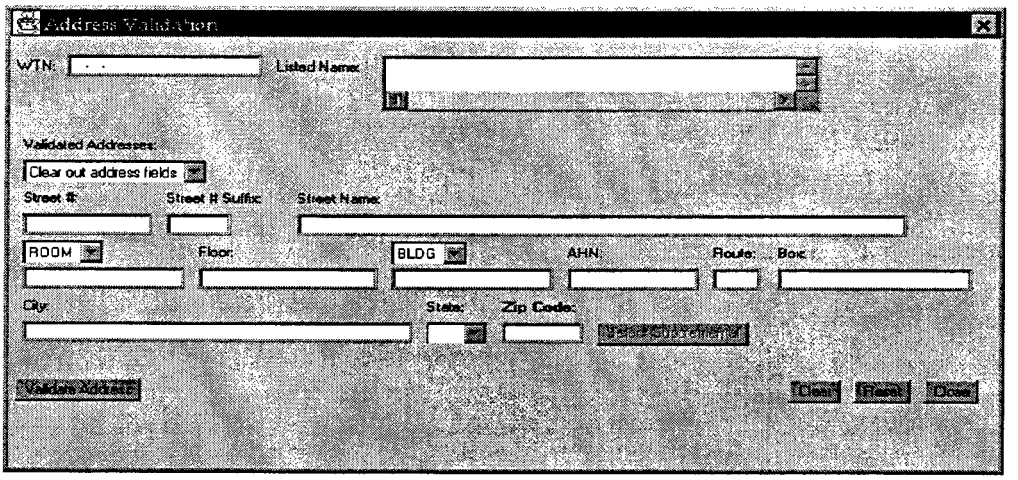
The New Screen Shots include

New Order Menu Options

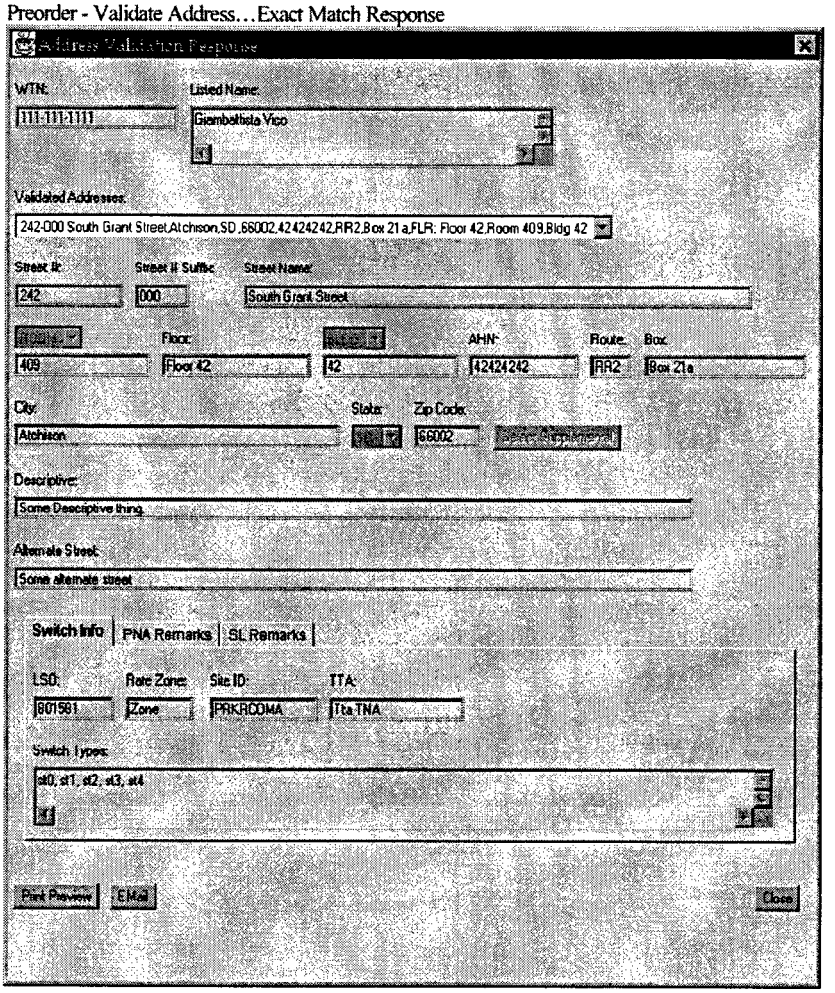


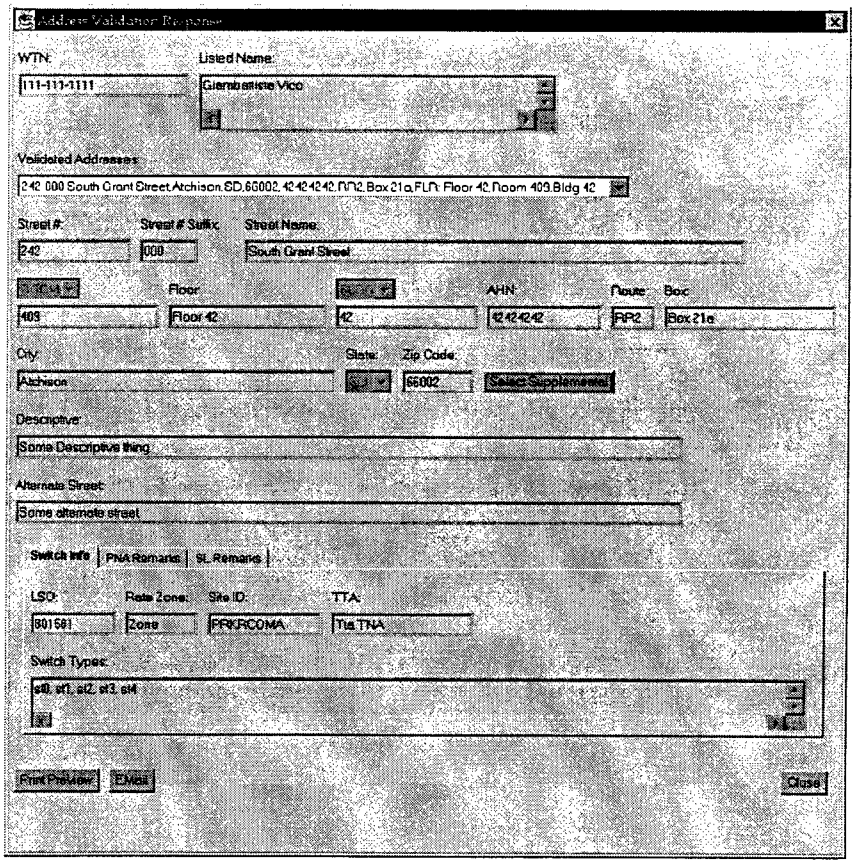
Preorder

Preorder - Validate Address...

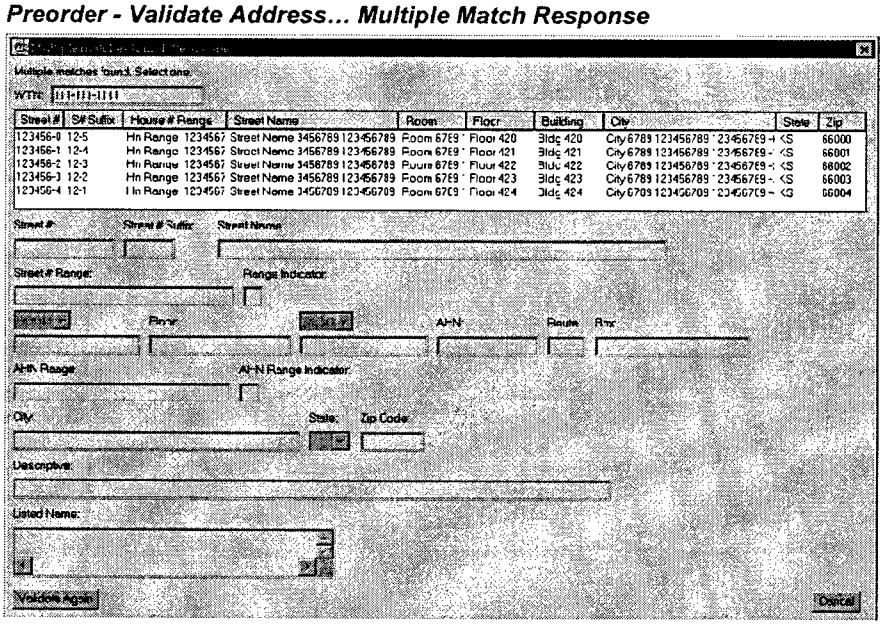


Preorder - Validate Address...Exact Match Response





Preorder - Validate Address... Multiple Match Response



Preorder - Validate Address...Near Match Response

Near matches found. Select one.

WTN: 111-111-1111

Street #	S# Suffix	House # Range	Street Name	Room	Floor	Building	City	State	Zip
123456-0	12-5	Hn Range 1234567	Street Name 3456789	123456789 Room 6789	Floor 420	Bldg 420	City 6789	123456789 123456789 - KS	66000
123456-1	12-4	Hn Range 1234567	Street Name 3456789	123456789 Room 6789	Floor 421	Bldg 421	City 6789	123456789 123456789 - KS	66001
123456-2	12-3	Hn Range 1234567	Street Name 3456789	123456789 Room 6789	Floor 422	Bldg 422	City 6789	123456789 123456789 - KS	66002
123456-3	12-2	Hn Range 1234567	Street Name 3456789	123456789 Room 6789	Floor 423	Bldg 423	City 6789	123456789 123456789 - KS	66003
123456-4	12-1	Hn Range 1234567	Street Name 3456789	123456789 Room 6789	Floor 424	Bldg 424	City 6789	123456789 123456789 - KS	66004

Street #: Street # Suffix: Street Name:

Street # Range: Range Indicator:

Floor: AHN: Route: Box:

AHN Range: AHN Range Indicator:

City: State: Zip Code:

Descriptive:

Listed Name:

Validate Again Cancel

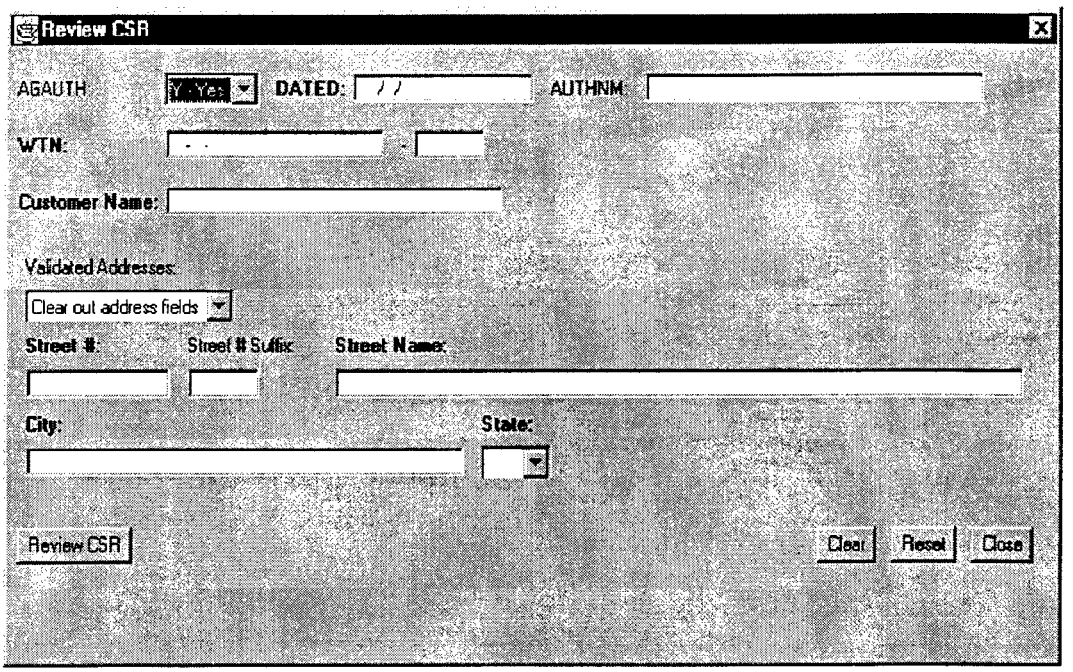
Preorder - Validate Address...Supplemental Matches

Supplemental matches found. Select one.

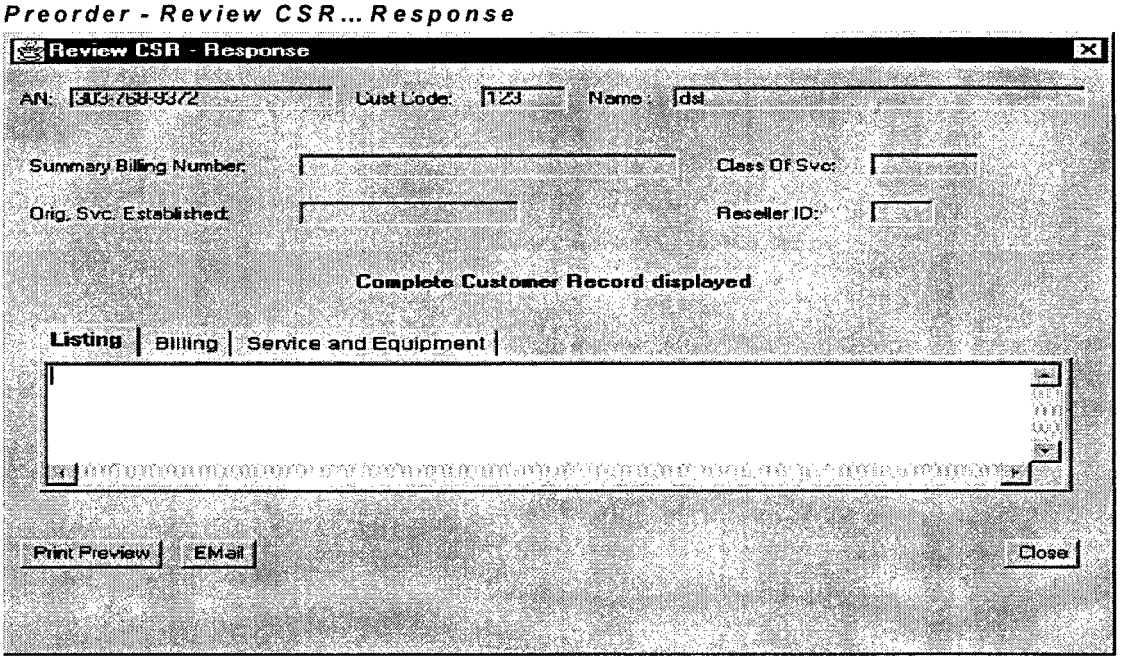
Floor	Room	Building
Floor 420	Room 400	Bldg 420
Floor 421	Room 401	Bldg 421
Floor 422	Room 402	Bldg 422
Floor 423	Room 403	Bldg 423
Floor 424	Room 404	Bldg 424

OK Cancel

Preorder - Review CSR...



Preorder - Review CSR... Response



Preorder - Schedule Appointment...

Appointment Scheduling

Request Section

PON: VER:

WTN: - - # Of Lines Requiring Dispatch:

Of Jacks:

Type of Service:

Business Line Single Line

Residential Line Multi Line

Government Line

Enter Other Work Required USOC:

Add Delete

Other work Required USOCs:

Response Section

Non-premises Time Required:

Premises Time Required:

Total Time Required:

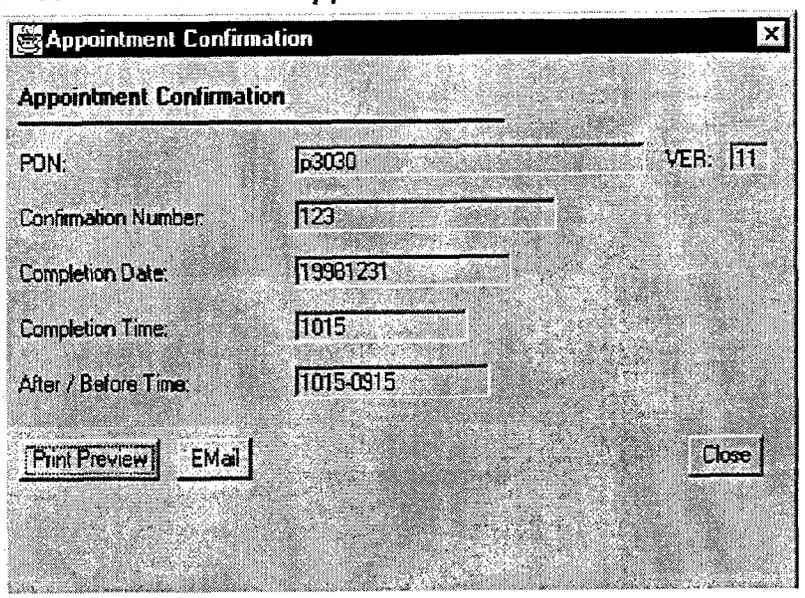
Request Available Appointment

Reserve Highlighted Appointment

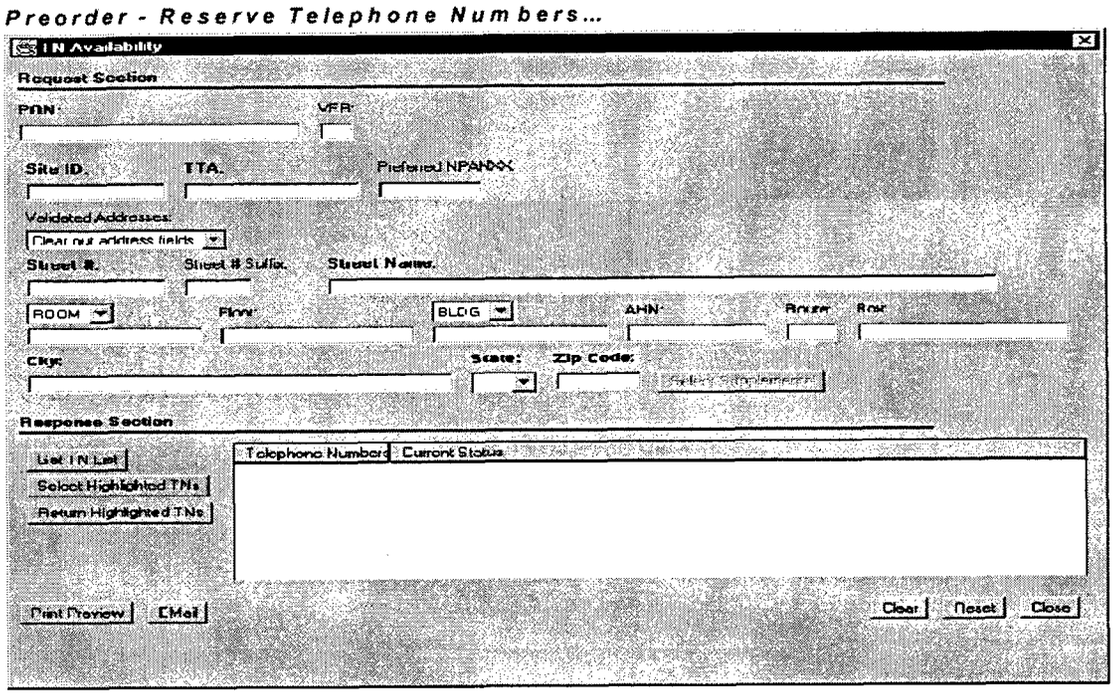
Available Appointments:

Print Preview EMail Clear Close

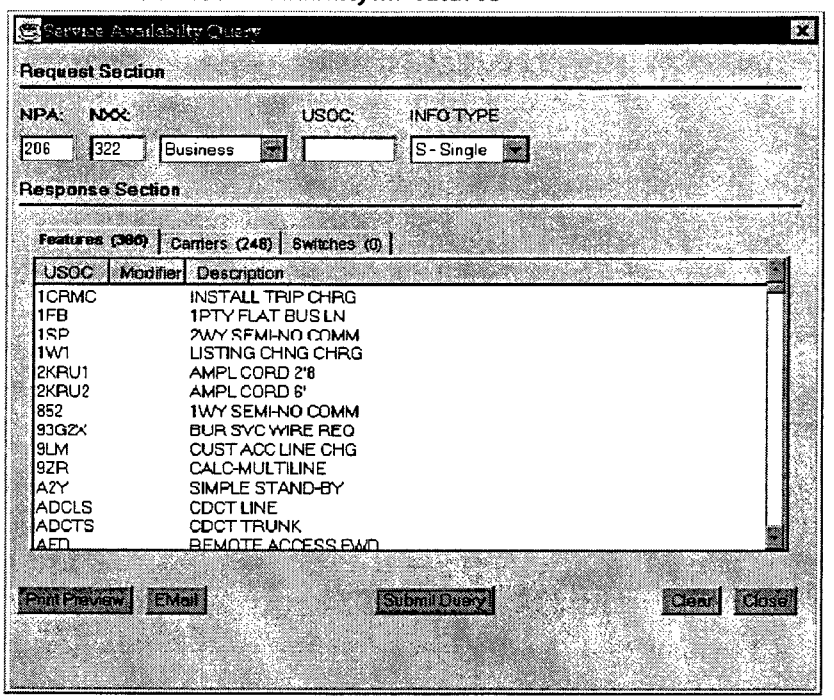
Preorder - Schedule Appointment...Confirmation



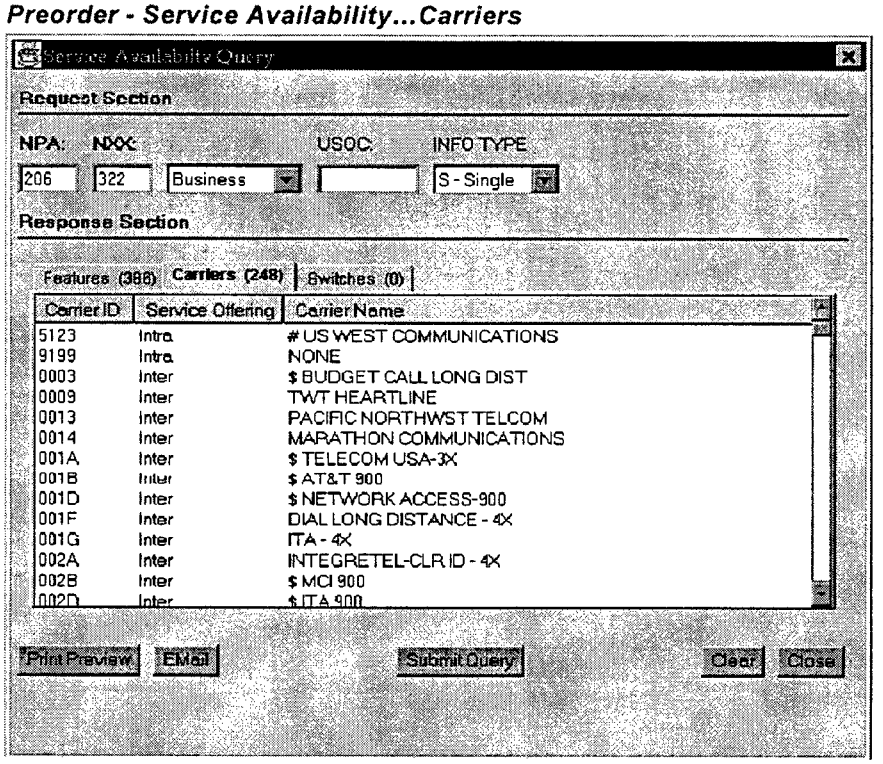
Preorder - Reserve Telephone Numbers...



Preorder - Service Availability...Features



Preorder - Service Availability...Carriers



Preorder - Service Availability...Switches

Service Availabilty Query

Request Section

NPA: 206 NXX: 322 Business USOC: INFO TYPE: M - Multiple

Response Section

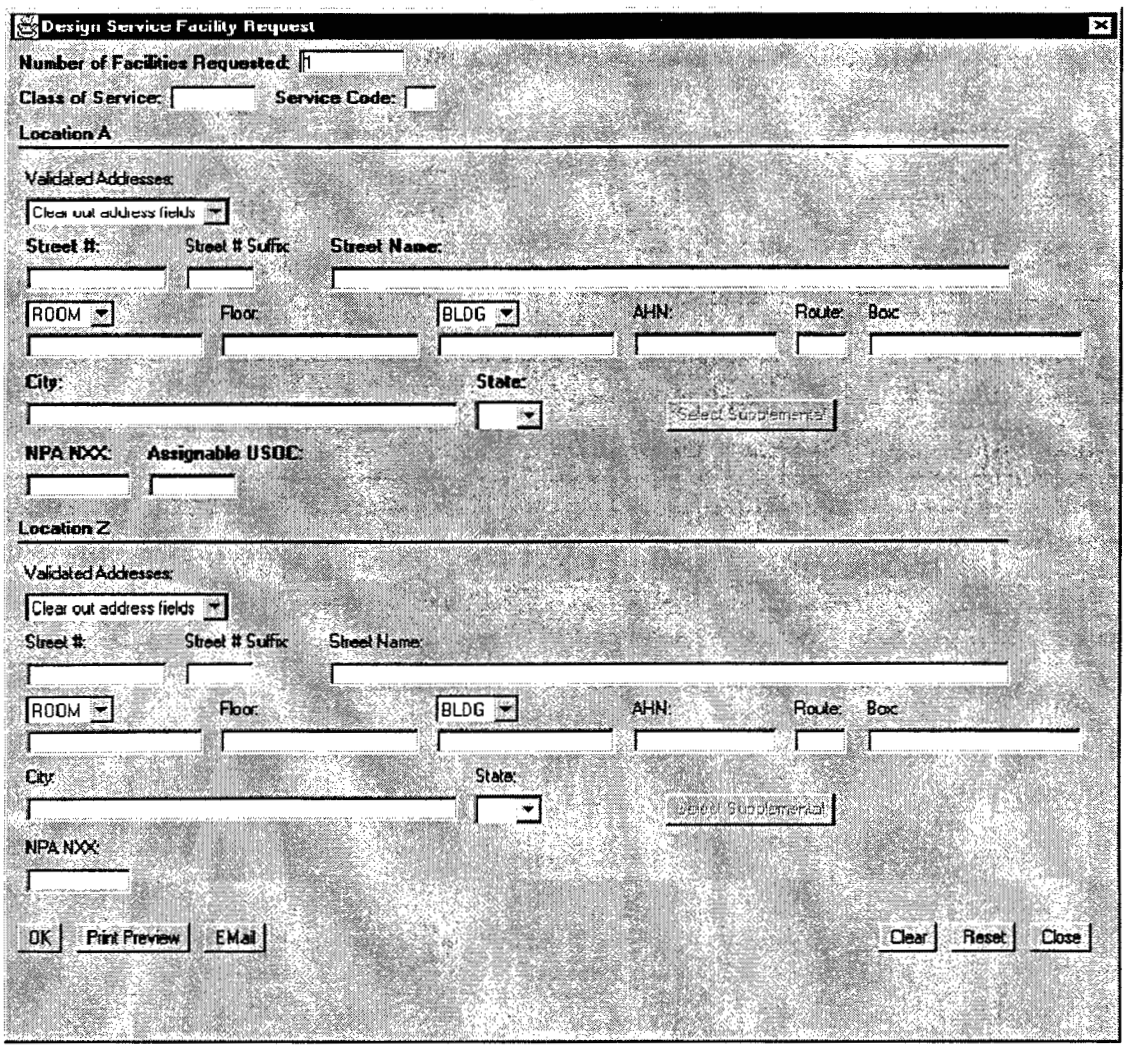
Features (0) | Carriers (0) | **Switches (1)**

1AESS (11)

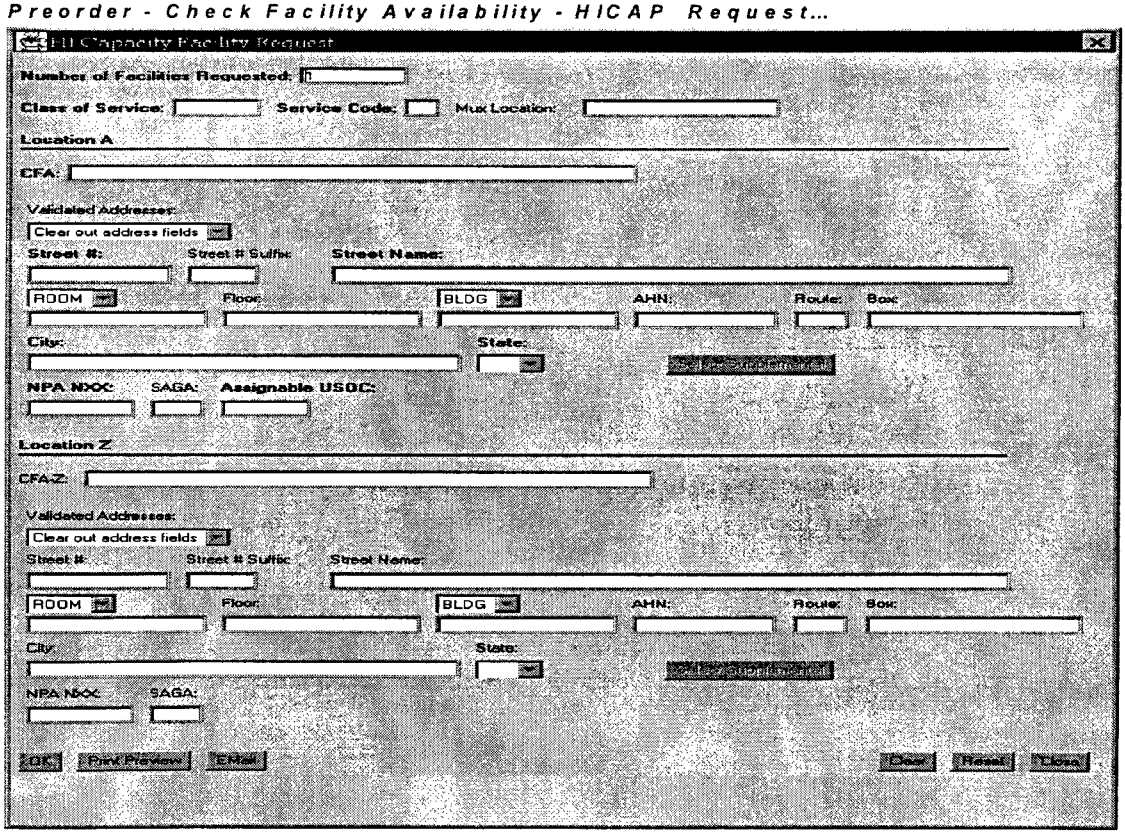
NPA NXX
320
322
323
324
325
328
329
568
720
726
860

Print Preview | EMail | Submit Query | Clear | Close

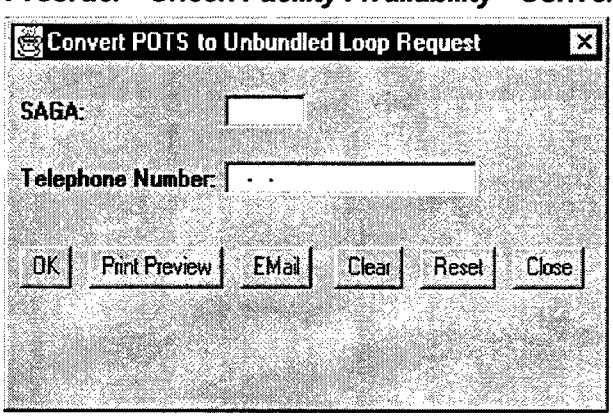
Preorder - Check Facility Availability - Design Services Request...



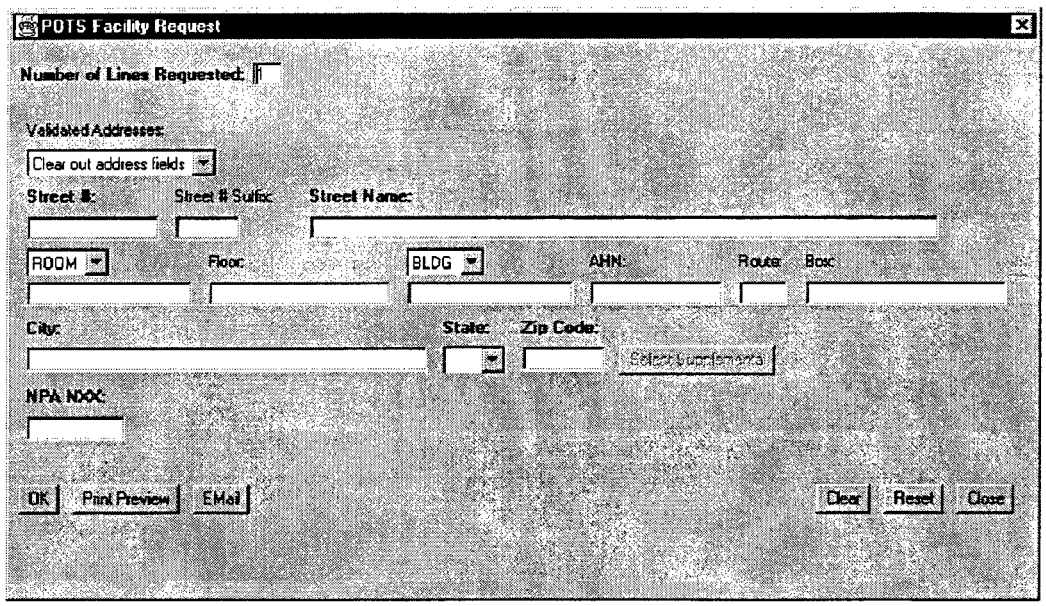
Preorder - Check Facility Availability - HICAP Request...



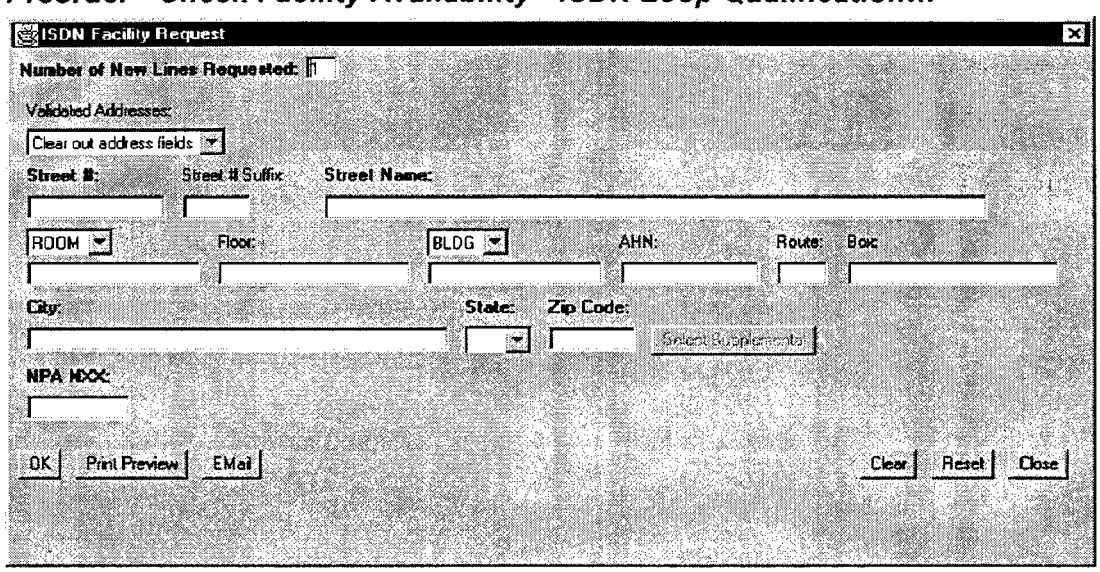
Preorder - Check Facility Availability - Convert POTS to Unbundled Loop...



Preorder - Check Facility Availability - POTS Facility Request...

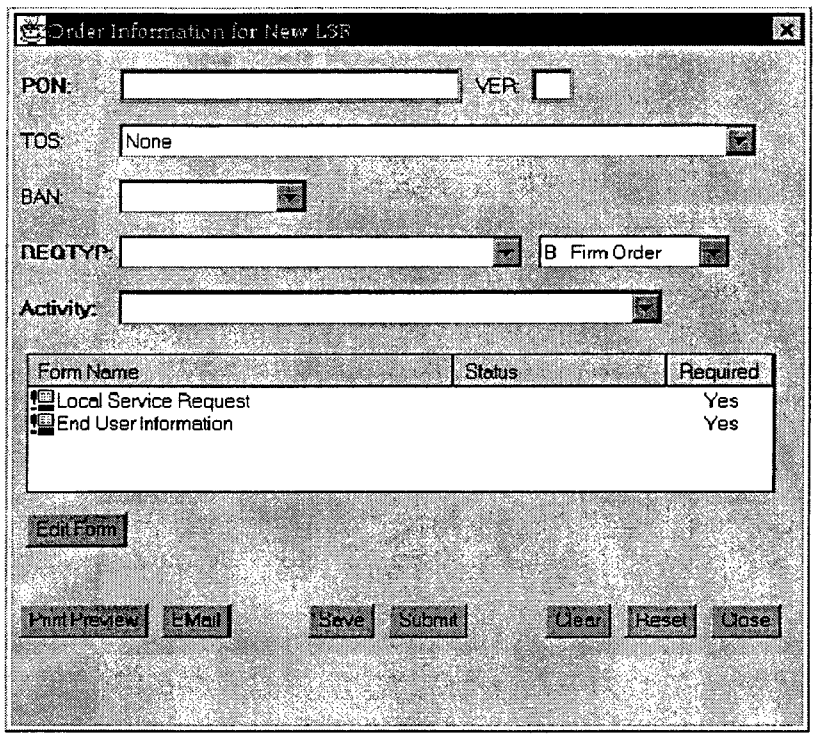


Preorder - Check Facility Availability - ISDN Loop Qualification...

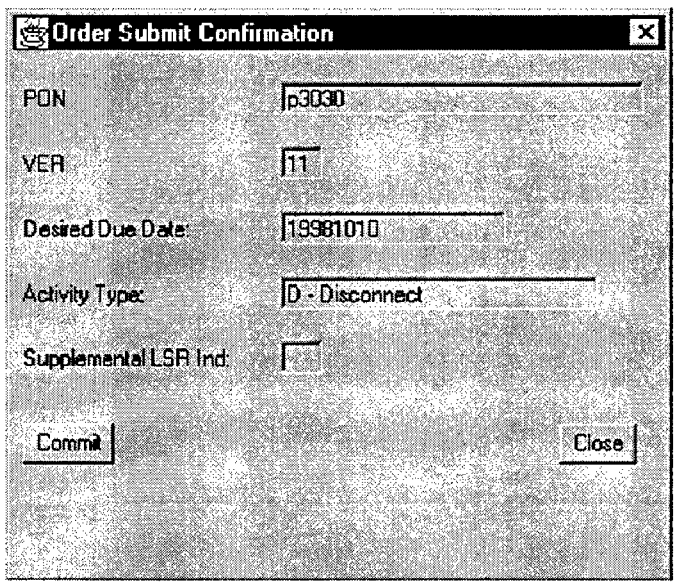


Order

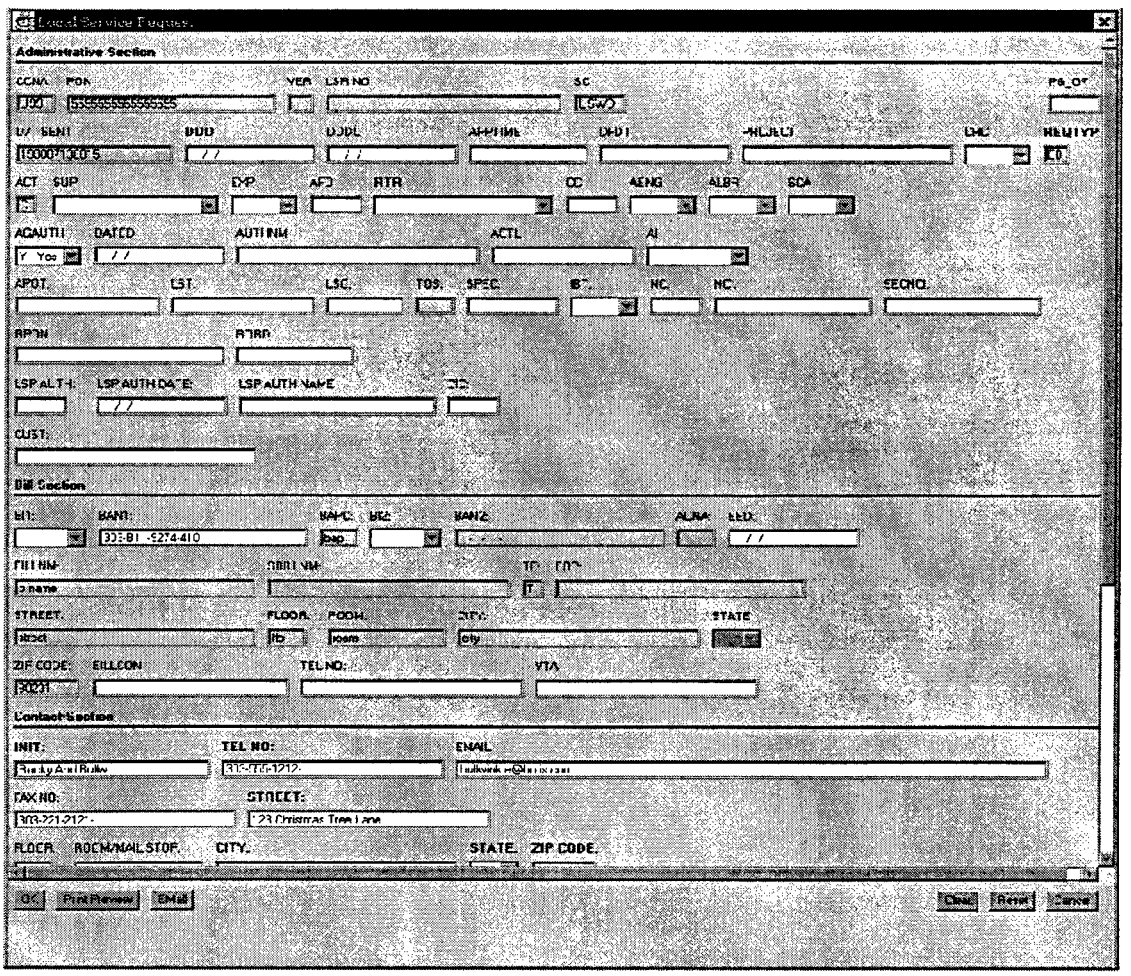
Order - Order Information Screen...



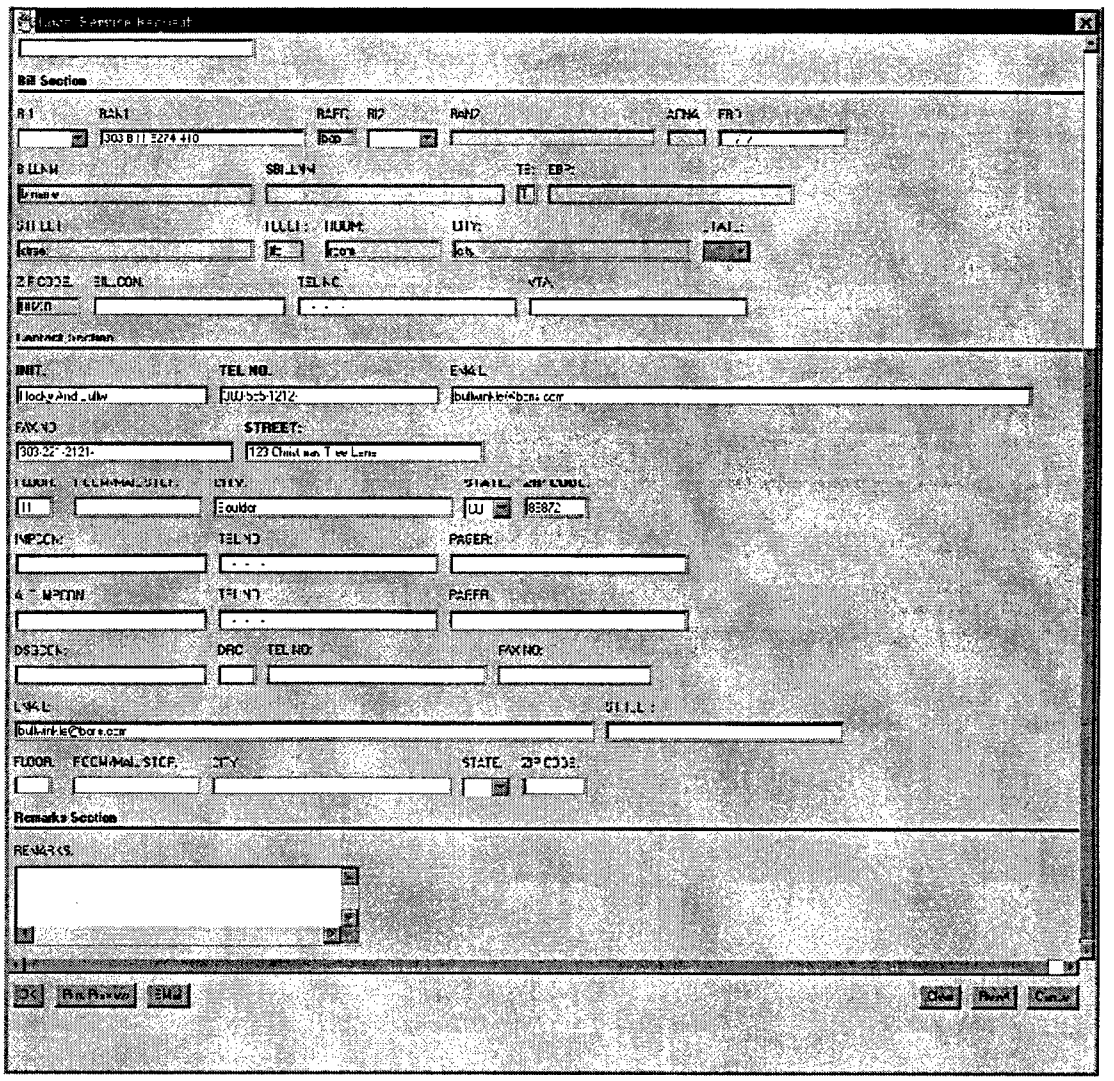
Order - Order Information Screen...Order Submit Confirmation



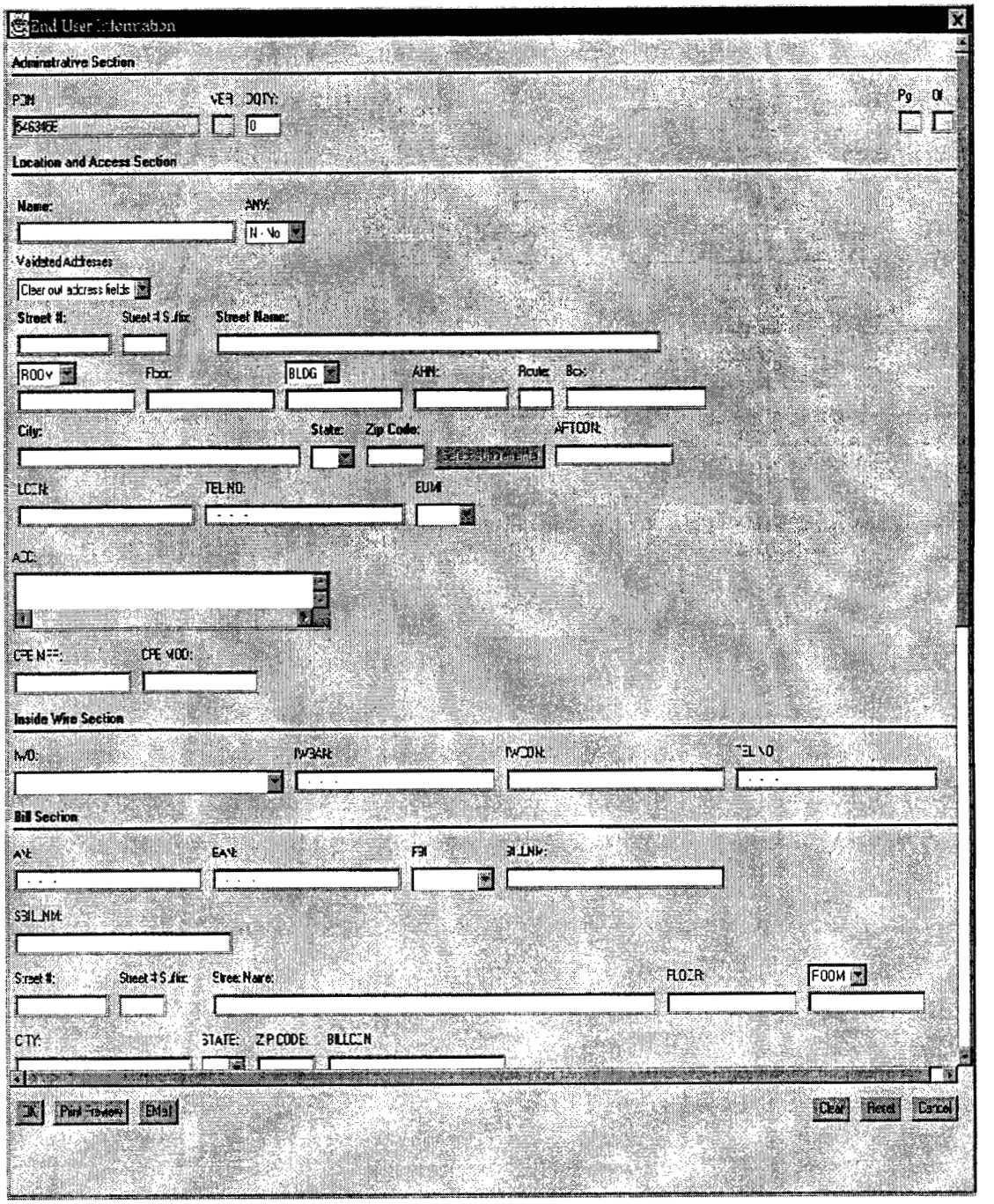
Order - Order Information Screen...LSR (shot 1)



Order - Order Information Screen...LSR (shot 2)



Order - Order Information Screen...EUI (shot 1)



US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** September 4,1998
Re: IMA Release Notes – Version 3.2	**From:** IMA Deployment Team

The Interconnect Mediated Access Group will be implementing an upgrade of the IMA software beginning on Friday, September 25, at 8:00PM (MST). Notification regarding system availability will be out one week prior to the release on Friday, September 18, 1998.

The release notes for IMA version 3.2 are available today, Friday, September 4, 1998, on the IMA Information Website, which is a menu option on the IMA menu. The release notes offer an overview of the changes for release 3.2. More detailed information will be contained in the User Guides, which will be updated and made available on the IMA Information Website by September 25, 1998.

If you would like to be updated on Saturday, September 26, regarding the status of the upgrade, please page Jo Netherton at (888) 710-1423.

As always, for system questions please contact our help desk at (888)796-9102.

Thank you,

Barbara "Pete" Peterson
IMA Training & Deployment Manager
bpeters@uswest.com
(303) 896-2705

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** September 18,1998
Re: **3.2 release reminder**	**From:** IMA Deployment Team

As we informed you on September 4 via fax, the implementation of Interconnect Mediated Access (IMA) release 3.2 will begin on Friday, September 25, 1998, at 8:00 p.m. (MDT) and will be complete by Monday, September 28 at 6:00 a.m. (MDT). The system will be unavailable during this time period. On Saturday, September 26, if you require a status on the 3.2 implementation, you can page our Training Team Lead, Jo Netherton at 888-710-1423.

Also, a reminder that the Release Notes reside in the Information Website, a menu option within IMA. Just click on it and then choose "Release Notes". If you have any questions, please contact the Help Desk at 888-796-9102.

NOTE: There are two video classes occurring on Monday, September 21 at 10:00 a.m. (MDT) and at 2:00 p.m. (MDT) to review this release (registration for this was sent out in August). If you would still like to know the viewing locations for these classes, please contact Jo Netherton at 303-896-2988 no later than 1:00 p.m. (MDT).

And, as always, we thank you for your cooperation and patience during these exciting and very productive release weekends,

Barbara "Pete" Peterson
IMA Training & Services Manager
303/896-2705, bpeters@uswest.com

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** September 23,1998
Re: 3.2 Release Information	**From:** IMA Deployment Team

As you know, the IMA Team will be installing IMA release version 3.2 this weekend, beginning Friday evening, September 25, at 8:00pm MDT. The release will be available Monday, September 28, 1998.

Here are a few important items associated with this release:

1. The initial login to IMA will take a couple of moments. As your PC accesses IMA for the first time, information is loaded into the cache of your computer. This makes subsequent accesses quicker. We especially suggest updating your cache settings as listed in the desktop requirements document located on our LSP Information Website.

2. The LOCBAN (local billing account number) has been replaced by WTN (working telephone number). WTN is used to access CSR's (customer service records). The CSR response screen will display a customer service record, which includes the usual information related to billing, listing, and service and equipment. Additionally, the CSR response screen will display the AN (account number) which could be different from the WTN. If the AN is different from the WTN, the software will automatically default to AN to populate fields on subsequent screens, since that is considered the correct account number connected to that customer's records.

3. Attaching a Billing Account Number (BAN) is now a requirement when placing an order through IMA. The correct format for Billing Account Numbers is xxx-xxx-xxxx-xxx (where x=a number or letter) and the length must be 16 characters, which includes the hyphens. If you have questions related to your BANS, please contact your US West account manager.

The IMA training team will be available next week to answer any questions you might have about the new software release. Our pager number is 303-473-2017. Also, the help desk can be reached at 1-888-796-9102. If you require additional training, schedule it through Cory Hamilton at 303-896-2744.

Also, if there is enough interest, the training team will schedule another video conference during the week of September 28 or October 5.

Barbara "Pete" Peterson
IMA Training & Services Manager
303/896-2705, bpeters@uswest.com

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:	**Company:**
Fax:	**Pages:** 1
Phone:	**Date:** September 24, 1998
Re: IMA Release 3.2 Installation	**From:** IMA Deployment Team

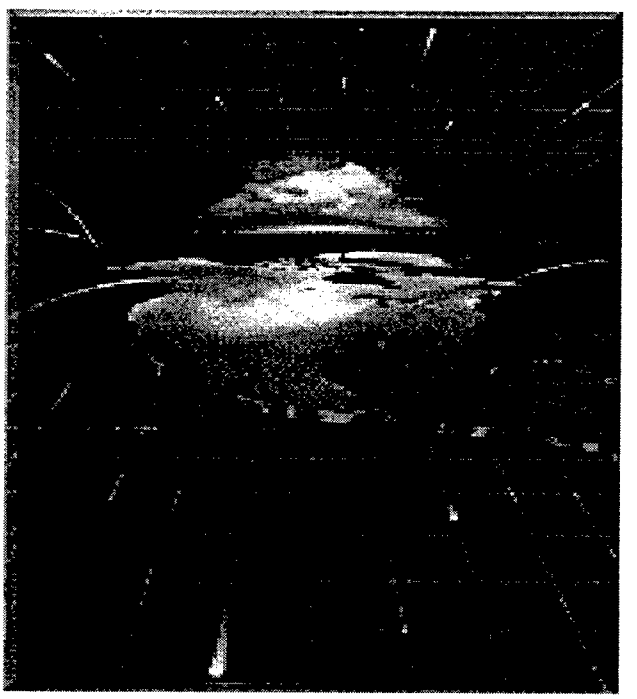
As you know and have been informed throughout September and as late as yesterday, September 23, the implementation of IMA release 3.2 will begin on Friday, September 25, 1998, at 6:00pm MDT. Please note that this was originally scheduled to begin at 8:00pm MDT. The system will be available again Monday morning, September 28, 1998, beginning at 6:00am MDT. If you require a status on this implementation, you can page our Deployment Team Lead for 3.2, Jo Netherton, on Saturday, September 26, 1998 (pager number 1-888-710-1423).

As always, if you have questions, please contact our help desk at 1-888-796-9102.

Thank you

Barbara "Pete" Peterson
IMA Training and Services Manager
303-896-2705
bpeters@uswest.com

Interconnect Mediated Access



Software Release Notes

Modification Date: September 25, 1998

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Version Notice

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Release	Date	Software Release
Release 1	9/25/98	3.2

Purpose of Document Release 1

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, 3.2, to be implemented on Friday, September 25, 1998.

Document Ownership

Obtain additional copies of this document from the following organization:

IMA Documentation Project Manager
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(303) 896 - 1529

Document Owner	Susan Embry-Busch
Document Author	Nicole Wertz

Important: *This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.*

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General Overview

Summary

Among the enhancements to IMA Software Release 3.2, the most prominent is the migration of the POTS Pre-Order and Order GUI into the Design Services GUI. This resulting new GUI will maintain the Design Services appearance. POTS functionality is similar to its original function with the exception of new additions to the menu options. This migration standardizes order entry and allows the user to enter any order with POTS or Design Services using one GUI. Enhancements that directly affect users are described in subsequent sections of this document.

Note: The user must use Netscape 3.01 for Software Release 3.2.

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.2, to be implemented at 20:00 hours MDT on Friday, September 25, 1998. The Co-Provider User's Guides will accompany this release with a more detailed explanation of how to use the new processes and forms.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and U S WEST employees such as help desk personnel and system administrators.

Dissemination

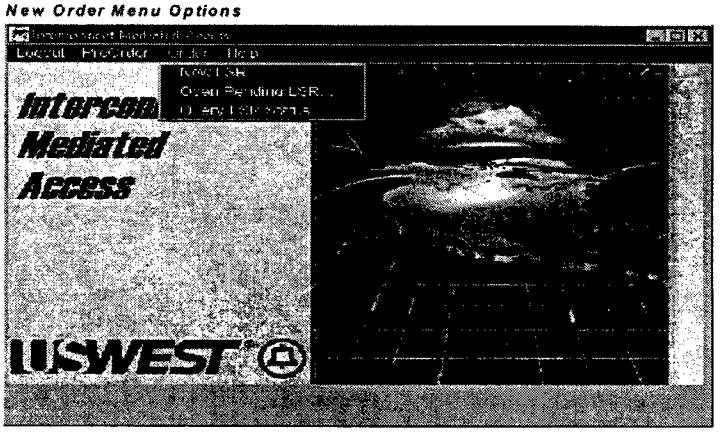
The IMA Deployment Team is headed by Manager Barbara Peterson, who is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at 303-896-2705, or bpeters@uswest.com.

Interconnection Functions Screen

The heading on the Interconnection Functions screen will change from **POTS/PSP** and **Design Services** to **Pre-Order, Order** and **Status** as their own headings, integrating POTS into the Design Services GUI.

The New Interconnect Function Screen Shots include: :

New Order Menu Options



Standardized Address Fields

All windows that use a validated address have been standardized. The enhancements are a pulldown list that contains as many as the last ten verified addresses to select from and the consistent layout of the address fields. The address fields are:

- Validated Addresses has a pulldown list, listing all validated addresses.
- Street # is a new field.
- Street # Suffix is a new field.
- Street Name.
- AIIN is a new field.
- Route is a new field.

- Box is a new field.
- Floor.
- Room has a pulldown list.
- Building has a pulldown list.

Clear Button

The addition of the Clear button is standard on windows requiring input. It erases information that has not been saved on the screen.

New Products

While some of these products have existed in previous iterations of the software, they are listed as new because they contain new functionality.

- Resale BRI ISDN - Basic Rate Interface Integrated Switch Digital Network.
- Loop with Number Portability on the GUI.
- Number Portability on the GUI.
- Resale Private Line.
- Unbundled Analog Line-side Switch Port.

These products are described in detail in subsequent sections of this document.

*Note: Many forms now require clicking the **Add** button (in the top left corner of the form) to activate fields for editing.*

Pre-Order Enhancements

The following Pre-Order menu items and their options, on the IMA Window, used for both POTS and Design Services, are either new or have been modified.

- Address Validation
- Review CSR
- Schedule Appointment
- Reserve Telephone Numbers
- Service Availability
- Check Facility Availability

Address Validation

The Address Validation window has a new look and new fields. Address Validation is a menu item under Pre-Order. The function of Address Validation has not changed. There is no change to the process. The new fields and enhancements are the standardized address fields previously listed and the ability to validate an address by entering a descriptive name for an address in the Street field. This form of search is called a Descriptive Address Search.

The Address Validation response windows have enhancements. The new fields and enhancements on the Address Validation Response window are:

- WTN (formerly LOCBAN) is a new field label.
- Validated Addresses lists up to the last ten validated addresses from which to choose.
- Street # and Street # Suffix fields have been separated from Street.
- Room Type and Building Type fields have pulldown lists.
- There are now three tabs in the Address Validate Response Screen: Switch Information, PNA Remarks, and SL Remarks.
- AHN, Route, and Box are new fields.

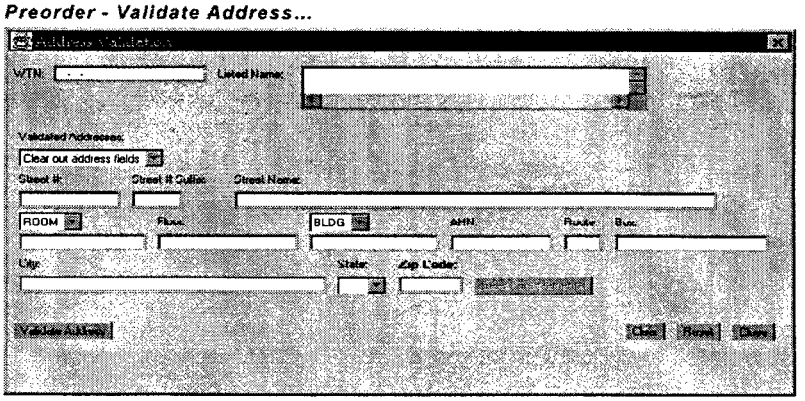
The new fields and enhancements on the Address Near Match response window are:

- Street # and Street # Suffix fields have been separated from Street.
- House Num Range column has been added.

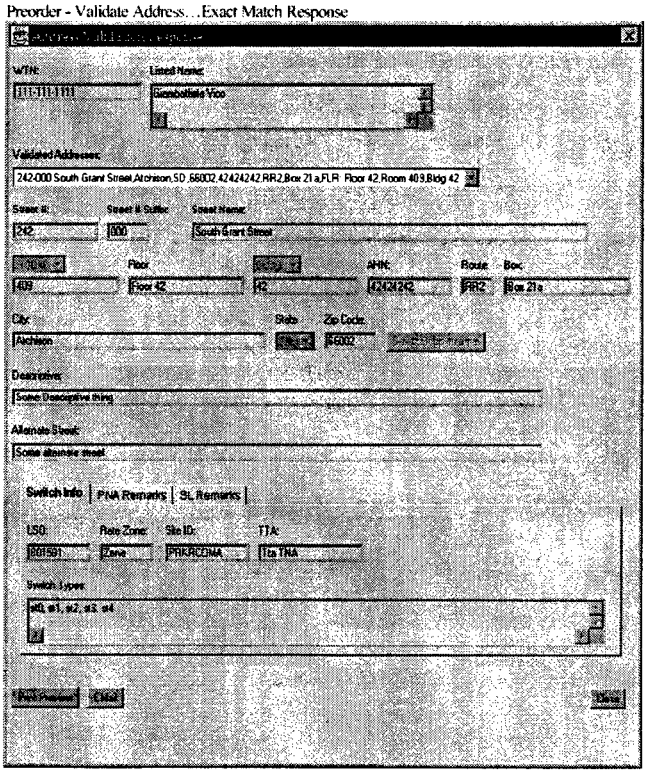
New Address Validation Screens include:

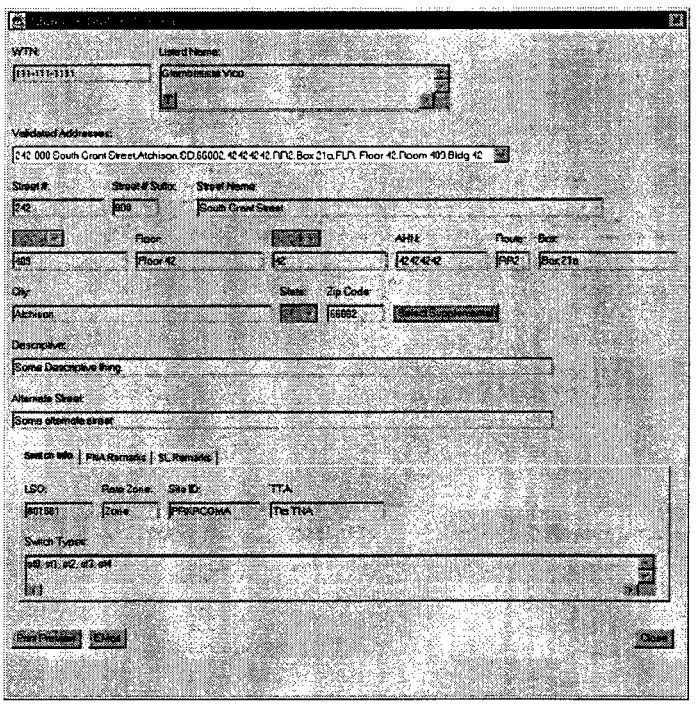
Preorder

Preorder - Validate Address...

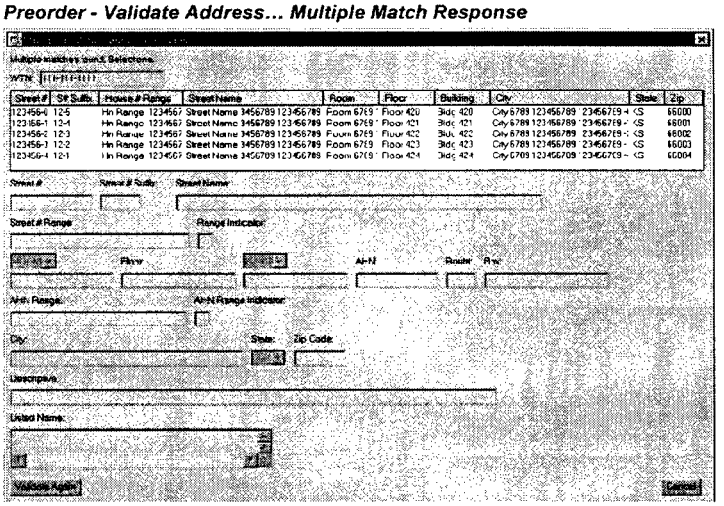


Preorder - Validate Address...Exact Match Response

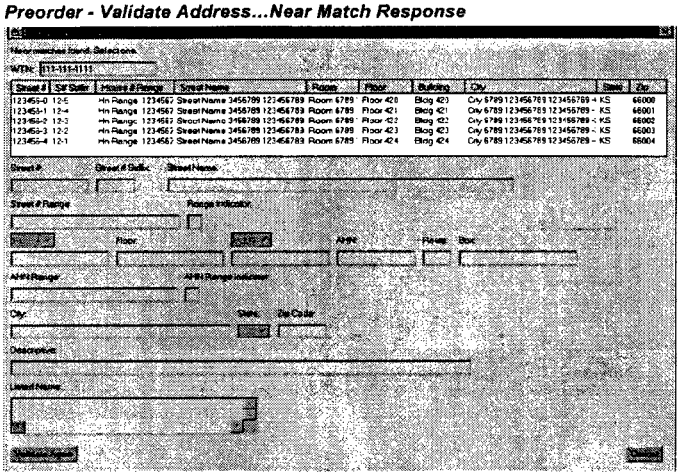




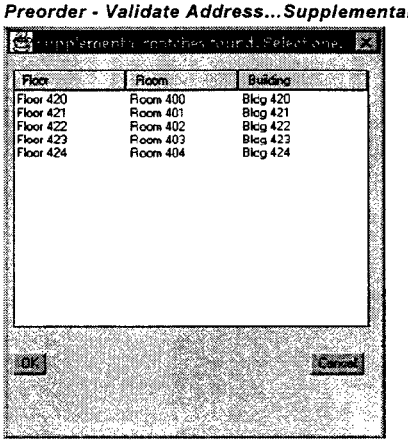
Preorder - Validate Address... Multiple Match Response



Preorder - Validate Address...Near Match Response



Preorder - Validate Address...Supplemental Matches

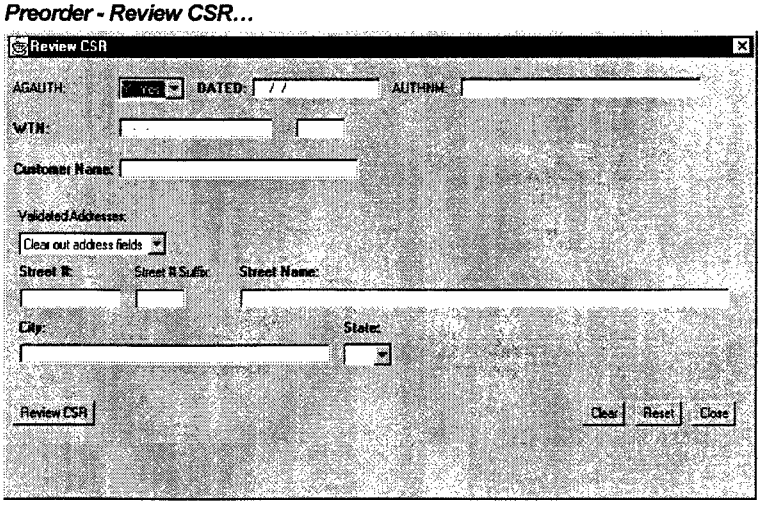


Review CSR Process

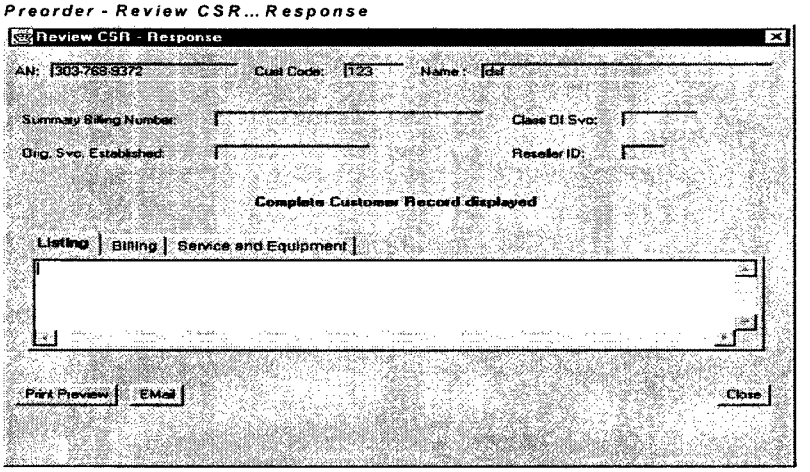
The Review CSR has been removed from the Address Validation process. Review CSR is an item under the Pre-Order pulldown menu as well as Address Validation. There are no changes to the functionality or the process. The validated address portion on the Review CSR screen will be pre-populated after an address validation has been performed. The AN field has been added to the Review CSR - Response window.

New Review CSR Process Screens include:

Preorder - Review CSR...



Preorder - Review CSR... Response

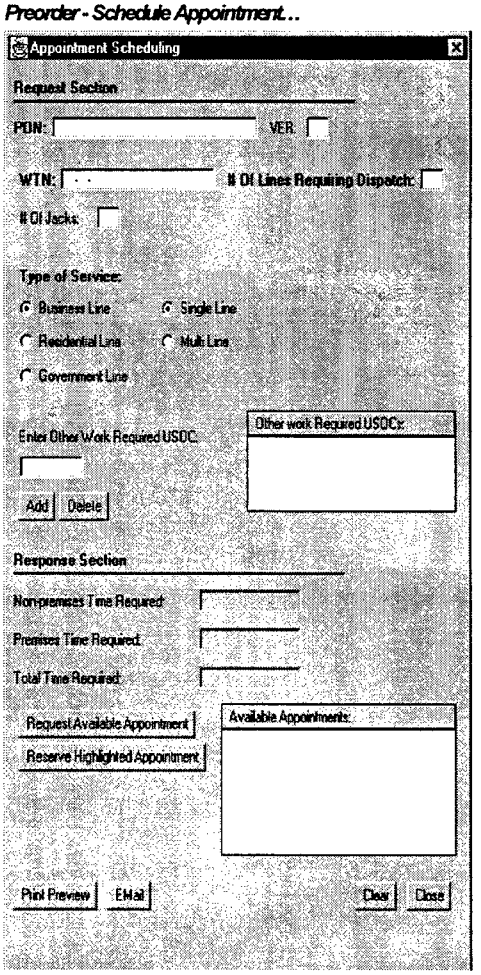


Schedule Appointment Process

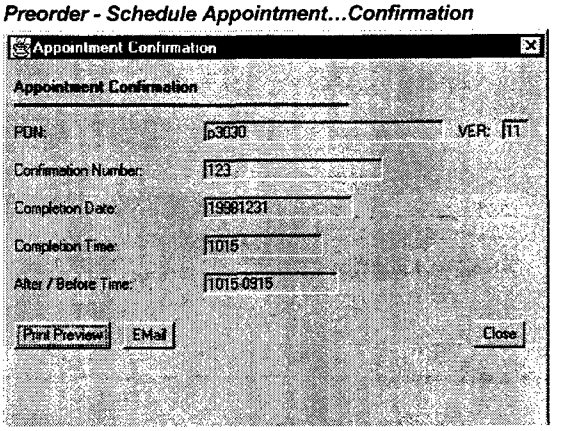
The Schedule Appointment menu item under Pre-Order is new. This process is used to reserve an appointment date and time for a technician to be dispatched to the premises. A reserved appointment time has 24 business hours for the appointment to be included on a request for service. Appointments cannot be canceled via the GUI. This function is available under Order. For Software Release 3.2, only reservations for POTS services is available.

New Schedule Appointment Process Screens include:

Preorder - Schedule Appointment...



Preorder - Schedule Appointment...Confirmation

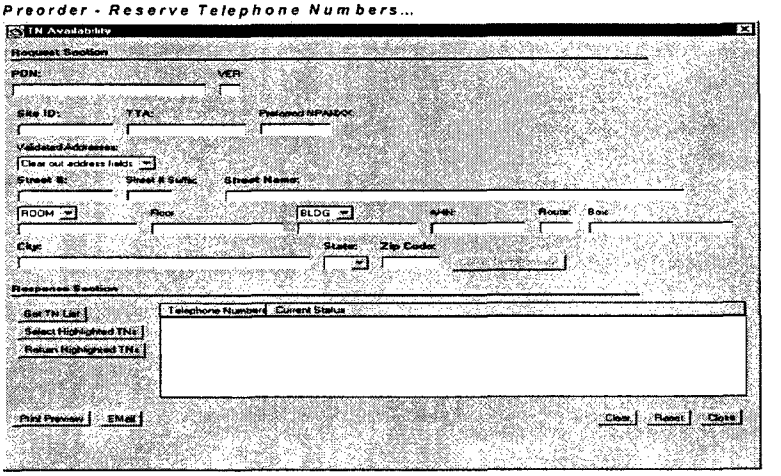


Reserve Telephone Numbers Process

The Telephone Number menu item under Pre-Order is new. This process is used to retrieve a list of nine available telephone numbers. The user can select all telephone numbers for reservations or specific numbers using Ctrl/Shift key combination. Telephone number reservation is necessary when requesting a new service, a new line on existing service, change of telephone number, or moving to an area outside of the current local service office. This function is available under Order, in the Resale Form. This function is not available for Design Services.

New Reserve Telephone Numbers Process Screens include:

Preorder - Reserve Telephone Numbers...

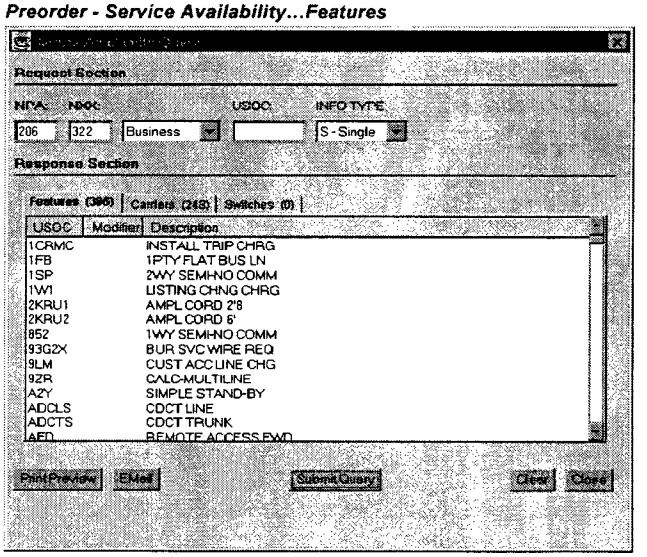


Service Availability

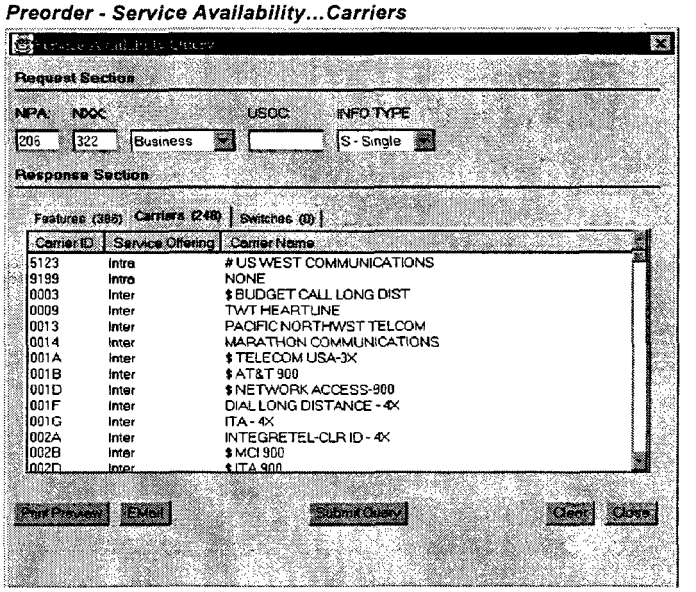
The Service Availability menu item under Pre-Order is in a new format. The tabs in this menu include universal service order codes (USOCs), Carriers, and switches available in that wire center. The field INFOTYPE has been added to the Request section of the window to support Resale ISDN. The value "M" for Multi-Switch queries has been added to the INFOTYPE field on the Service Availability Query screen. This function is not available for Design Services. Pricing is no longer available in the Service Availability.

New Service Availability Screens include:

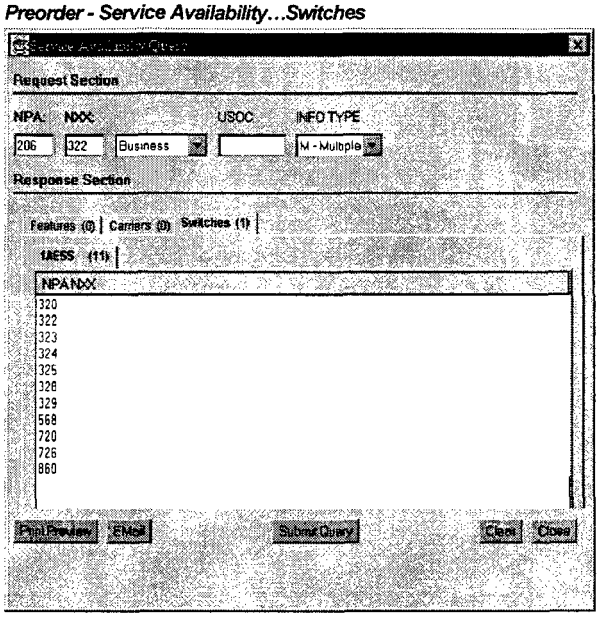
Preorder - Service Availability...Features



Preorder - Service Availability...Carriers



Preorder - Service Availability...Switches



Check Facility Availability

The functionality and process of Check Facility Availability has not changed.The Check Facility Availability process is used to confirm that the capacity of a facility can handle the type and volume of lines being requested. The enhancements are described below.

The POTS Facility Response window supports only POTS-specific responses. The enhancement to this window is:

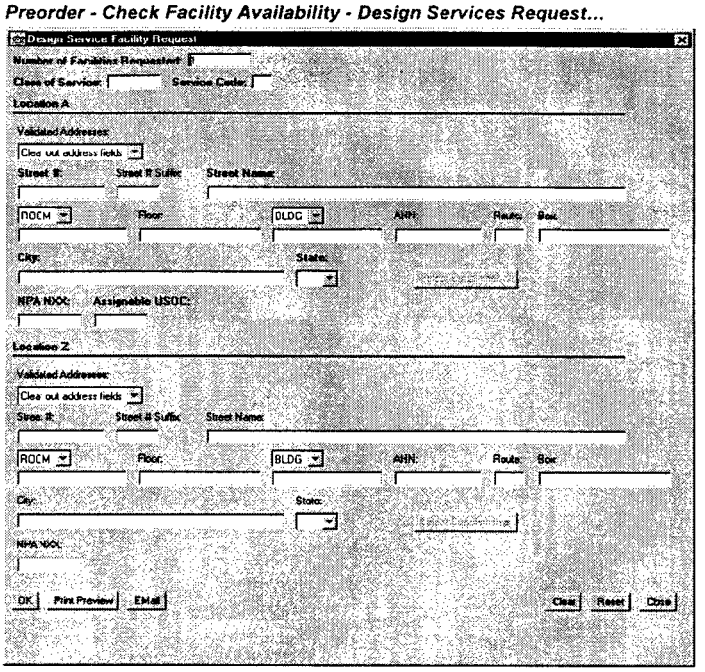
- Number of New Lines field being requested is returned.

The Design Services Facilities Request and the ISDN Facilities Request enhancements are:

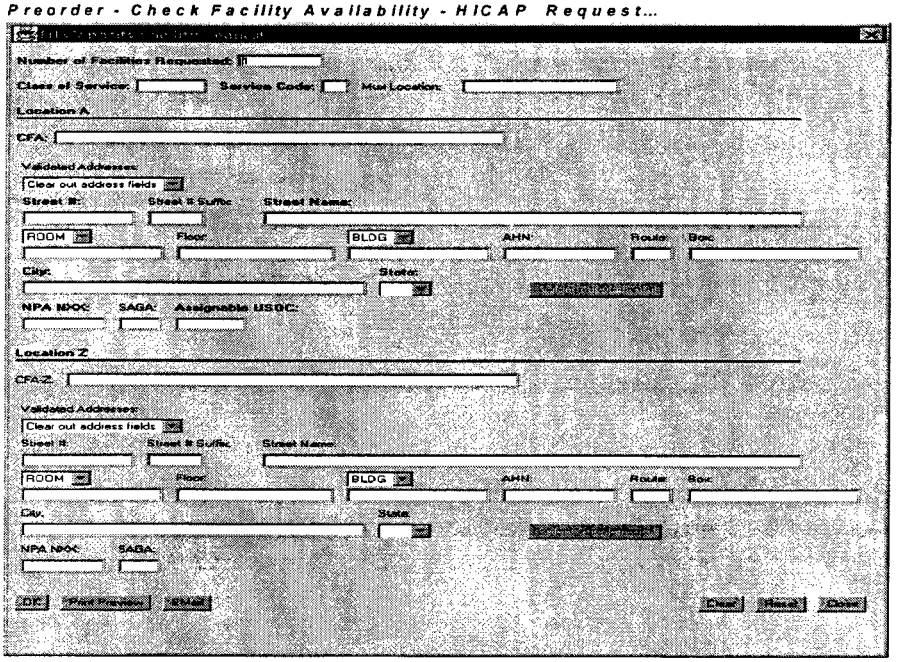
- Zip Code is a new field.
- Standardized address layout.
- Validated Addresses field lists up to the last ten validated addresses.
- Loop Qualification information will be returned in the text box on the ISDN Facility Response window.

New Check Facility Availability Screens include:

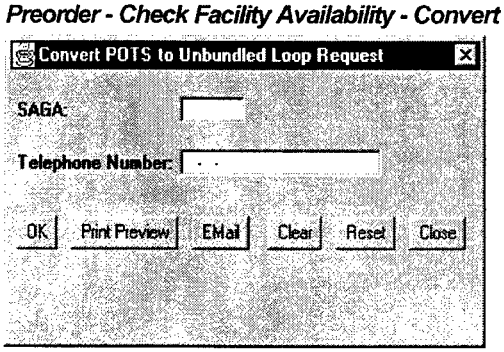
Preorder - Check Facility Availability - Design Services Request...



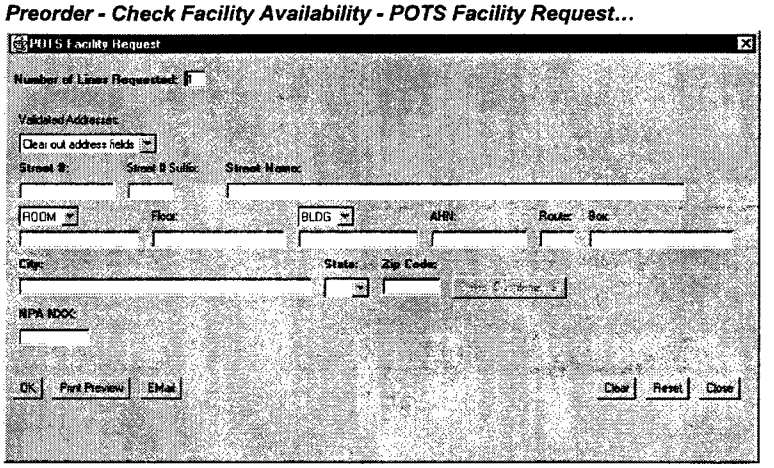
Preorder - Check Facility Availability - HICAP Request...



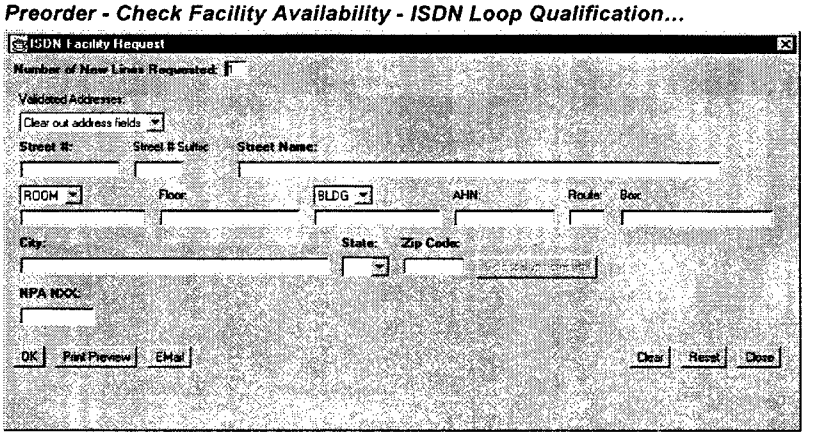
Preorder - Check Facility Availability - Convert POTS to Unbundled Loop...



Preorder - Check Facility Availability - POTS Facility Request...



Preorder - Check Facility Availability - ISDN Loop Qualification...



Resale BRI ISDN

Resale BRI ISDN (Basic Rate Interface Integrated Switch Digital Network) is the ability to simultaneously carry digitized voice and data traffic on one line. This capability uses standard lines that already serve the customer.

In the Order Information for New LSR screen the Resale BRI ISDN appears in REQTYP as "E-Resale (POTS and ISDN). Regardless of the selected Activity Type, the required forms are displayed in the Order Information for New LSR screen.

Order Enhancements

The Order process, with the integration of POTS to the Design Services GUI, enables Co-Providers to create and submit requests for POTS. The new enhancements under the Order menu include new menu item titles as well as a new option to choose from. The option New LSR replaces Order; Query LSR Status replaces Query Order Status; added functionality is Open Pending LSR. New forms include: Port Service form which supports the Unbundled Analog Line-side Switch Port service, a new product; Resale Private Line form which supports Private Line enhancements; Loop Service with Number Portability which supports unbundled loop service with number portability. The enhancements will be listed according to the screens within the Order process.

Order Information

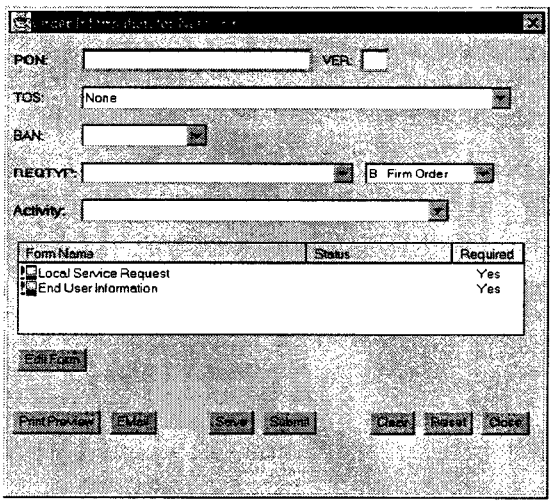
The process and functionality of the Order process has not changed. The integration of POTS into the Order process is accomplished by adding fields on windows and pulldown lists to select POTS-specific information. The enhancements will be listed according to the Order process and the screens within that process that have changes. The enhancements on the Order Information window are as follows:

- During Pre-Order, if TN Selection or Appointment processes were performed, PON will automatically be pre-populated. If the PON and VER are incorrect, those fields may be retyped.
- Within REQTYPE pulldown list, E -ISDN has been changed to E - (RESALE POTS and ISDN). To support Unbundled Analog Line-side Switch Port, the value is F. To support Private Line, the value is K.
- BAN has a pulldown list and is now a required field. (See the System Administration Guide regarding mandatory field input and formatting.)
- State field has been removed.
- Z-Conversion as specified, no Directory Listing has been added to the Activity pulldown list.
- Form Name will list the forms that are needed according to the selected REQTYP.
- A Save button has been added to each of the OBF form screens to allow the form to be saved in a pending state and retrieved at a later date.
- Print button has been changed to Print Preview.

Order Information Screen:

Order

Order - Order Information Screen...



Pending LSR

A new enhancement to the Order process is saving a pending LSR and retrieving it at a later date. Information for an order is entered into the Order Information for a New LSR screen. By clicking the save button, the LSR will go into a pending state. A pending LSR will be retained for 30 calendar days. A pending LSR has the following maintenance actions:

- Can be retrieved for review and/or editing
- Can be re-saved after additional review and/or editing
- Can be submitted
- Can be purged from the system
- Can be purged by the system as a result of the expiration of the retention date

When the user selects the Fetch Pending LSR button, the user will retrieve LSRs in submitted, issued, in review, and pending status.

Important: *After 24 hours, the telephone number and appointment will be returned unless the order is submitted.*

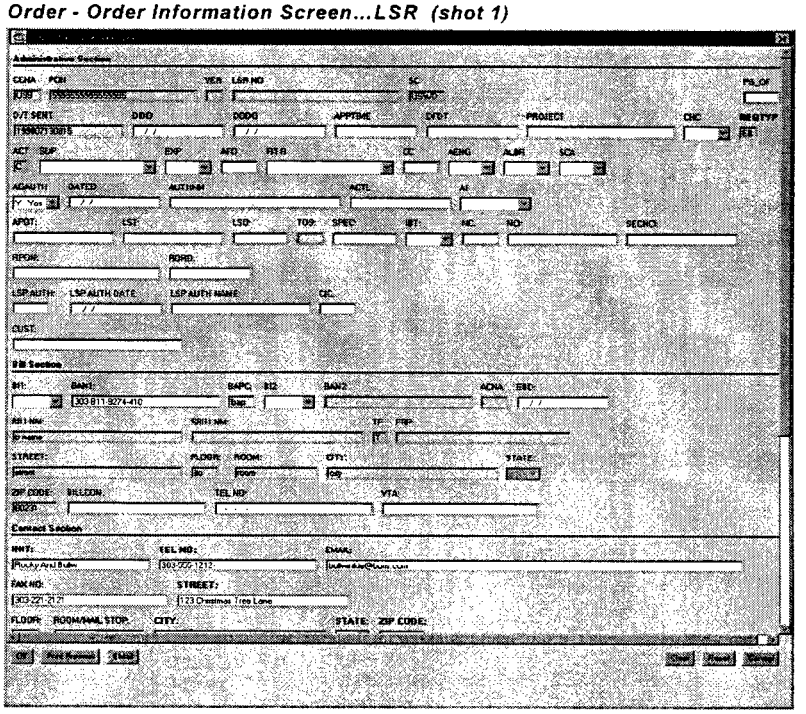
Local Services Request Form

The addition and deletion of fields comprise the enhancements to the Local Services Request window. Following is a list of enhanced fields.

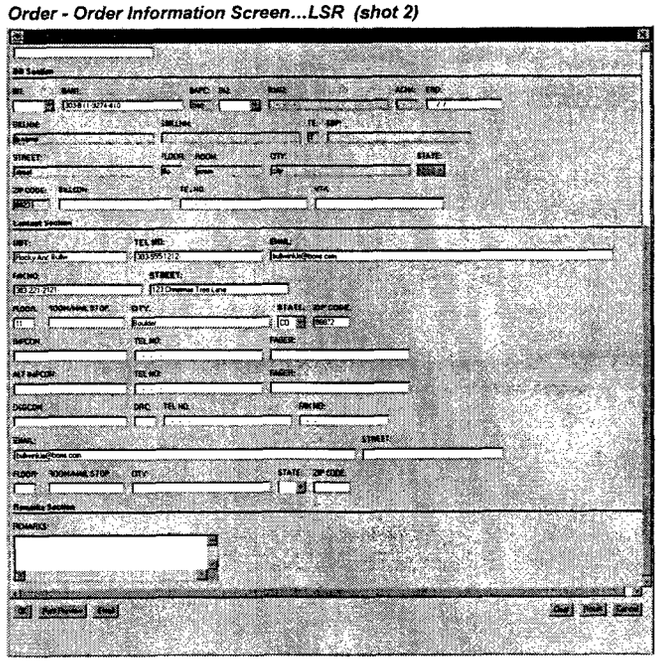
- APPTIME is a new field.
- SCA has a pulldown list.
- AGAUTH has a pulldown list.
- TSP has been moved to the resale form.
- SAN has been moved to the resale form.
- RTR has a pulldown menu.

New Order Information Screens for LSR include:

Order - Order Information Screen...LSR (shot 1)



Order - Order Information Screen...LSR (shot 2)



End User Information Form

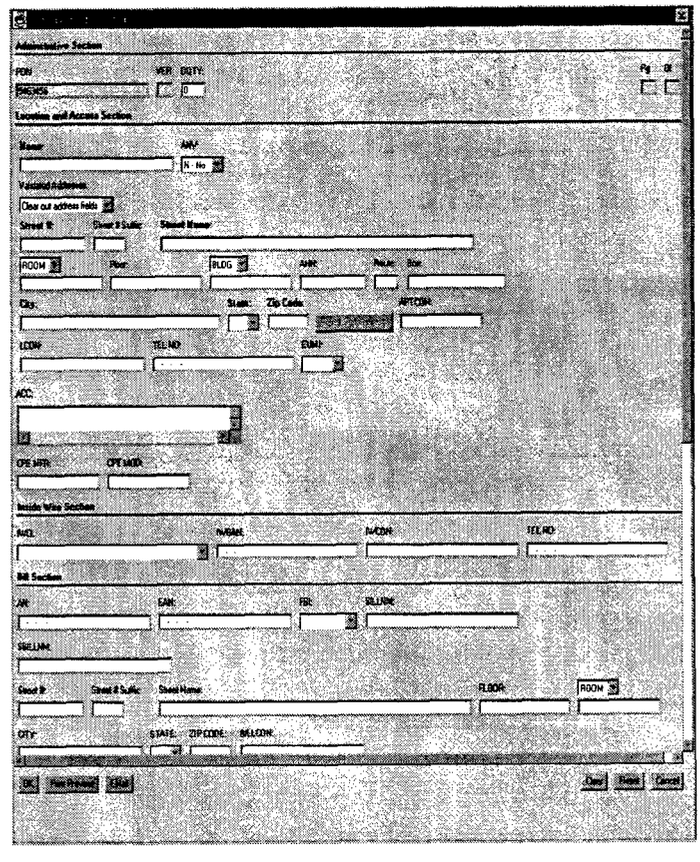
The addition and deletion of fields comprise the enhancements to the End User Information window. Following is a list of enhanced fields.

- LSO has been moved to the LSR.
- LST has been moved to the LSR.
- NCI has been moved to the LSR.
- SEC NCI has been moved to the LSR.
- APTCON is a new field.
- EUMI has a pulldown list.
- IWO has a pulldown list.
- AN replaces LOCBAN.
- EAN is a new field.
- FBI has a pulldown list.
- CPE MFR is a new field.
- CPE MOD is a new field.
- TC TO PRI is a new field.
- TC TO SEC is a new field.
- TC ID is a new field.

- TC Name is a new field.

New Order Information EU Screen

Order - Order Information Screen...EUI (shot 1)



Resale Form

The addition and deletion of fields comprise the enhancements to the Resale Form window. Following is a list of enhanced fields.

- REFNUM in the hunting section is a new field.
- HA has a pulldown list.
- HNTYP has a pulldown list.
- HID is a new field.
- TLI is a new field.
- HUNT SEQ can hold 512 characters.
- Add, Delete, and Clear buttons have been added to the top of Hunting Section.
- Hunting Section is repeatable.

- LNA has a pulldown list.
- Select TN button is new and is used to select from previously reserved TNs for this PON.
- TER is a new field.
- TSP is a new field.
- SAN is a new field.
- PTKTYP is a new field.
- PTKCON is a new field.
- PTLI is a new field.
- TC OPT has a pulldown list.
- NIDR has a pulldown list.
- SGNL has a pulldown list.
- PULSE has a pulldown list.
- TBE has a pulldown list.
- FA has a pulldown list.
- Facility Check, Appointment Scheduling, and Assign TN buttons have been added to the bottom of the window.

Note: *Selecting an address from the validated address field will automatically populate required fields in the location and access section.*

Directory Listing

The addition and deletion of fields and the ability to order complex directory listing services comprise the enhancements to the Directory Listing window. Valid order activities for directory listing services are new connect, conversion as specified/partial conversion, change of existing services, transfer, and record changes. Major enhancements concerning the directory listing on this form are the tabs DSR and DL/DSCR, which allows the Co-Provider to switch between the frames.

Following is a list of enhanced fields on the Listings screen.

- LACT has a pulldown list.
- RTY has a pulldown list.
- LTY has a pulldown list.
- TOA has a pulldown list.
- DOI has a pulldown list.
- OMTN has a pulldown list.
- LNPL has a pulldown list.
- LTEXT replaces LOI.
- LTXTY has a pulldown list.
- ADI has a pulldown list.
- DIRNAME is a new field.
- DML has a pulldown list.

- NOSL has a pulldown list.
- OMSD is a new field.
- TMKT has a pulldown list.
- BRO has a pulldown list.

Switch Port Service

Unbundled Analog Line-side Switch Port is a new product offered within IMA. This is a 2-wire, Analog, POTS-type line switch connection that offers only the features available out of that specific wire center. The Switch Port Service form is now included in the Order Information Screen when this product is selected in the REQTYP field.

The form allows the user to enter information specific to the telephone number and features requested by the customer. It is similar to the Resale form. The user must click on the Add button in the upper left corner of each section before any entries can be initiated.

Loop Service with Number Portability

The new Loop Service with Number Portability form now appears as required when making a conversion of this REQTYP in the Order Information for New LSR Screen. The form displays an Administrative Section, a Service Details Section, and Remarks section. Each section is accessed by clicking on the Add button in the upper left hand corner.

This type of order enables the end users to retain their present telephone numbers when transferring service to a different Co-Provider.

Loop Service Form

The addition and deletion of fields comprise the enhancements to the Loop Service window. Following is a list of enhanced fields.

- ECCKT is a bolded field.
- CFA is a new field.
- JR has a pulldown list.
- NIDR has a pulldown list.
- TC OPT has a pulldown list.

Loop with Number Portability

Loop with Number Portability transfers a telephone number to an LSP so that the end customer does not incur a telephone number change (number portability). The local loop component of the packaged flat rate, or business rate, is available to serve an address that the LSP could not otherwise serve in a timely and cost-efficient manner.

Number Portability

Number Portability transfers a telephone number to an LSP so that the end customer does not have to incur a telephone number change. U S WEST will disconnect the existing telephone service provided to the customer.

Resale for Private Line

Another Resale Private Line form resides in the Order Information for New LSR Screen. The Resale Private Line form is used for all types of end-to-end circuit orders except suspend and restore.

This form requires extensive information on location access, billing, primary and secondary location service details, and remarks. This form allows direct access to each section.

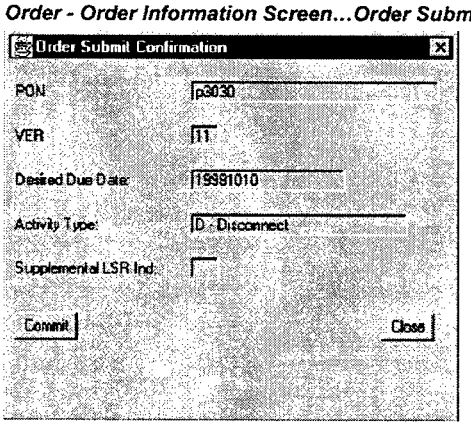
Order Submit Confirmation

When submitting a Firm Order, the system returns the "Order Submit Confirmation Screen" to the user. The user clicks **"Commit"** to send the order. The system will return to an LSR ID.

If the user selects Service Inquiry, the following message displays: This is a Service Inquiry request that will not result in the generation of a firm order. You may return to the Order Information screen at this time if a Firm Order is required. Otherwise, press "Commit."

New Order Information Screen:

Order - Order Information Screen...Order Submit Confirmation



Order Confirmation

When the second character of the order's REQTYP is A, the following message displays: "Service Inquiry request has been successfully submitted." When the second character of the order's REQTYP is B, the following message displays: "Firm Order request has been successfully submitted."

EDI

The following transaction types have been added:

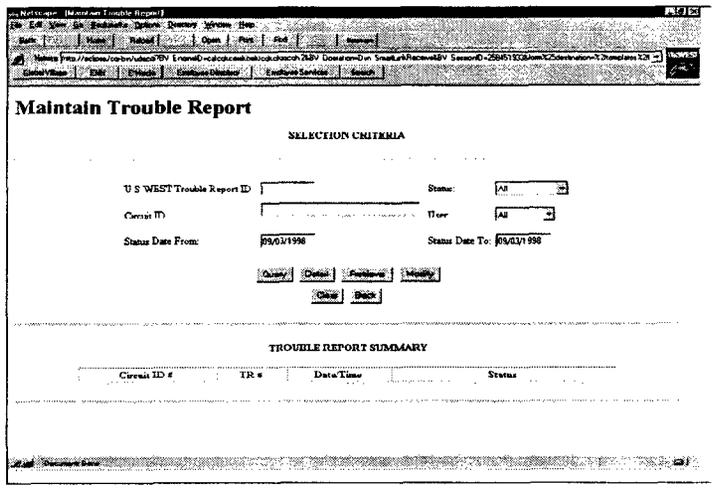
- Unbundled Analog Line-side Switch is new product. A new form, Port Service, has been created to support this product.
- Private Line is a new form. Resale for Private Line, has been created for this product.
- ISDN - Integrated Switch Digital Network is a new form. Resale for ISDN has been created for this product.
- Address Validation Query Exceptions.
- Descriptive Address Enhancements. This enables the user to search for an address using the descriptive name for a specific address.
- New enhancements to CSR and AVQ.
- RMKB to Address Validation has been added.

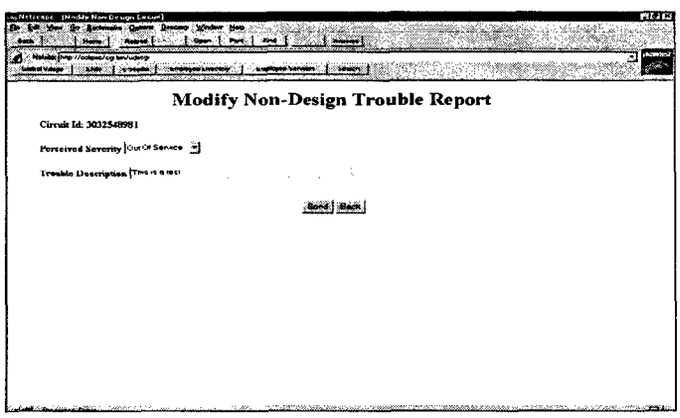
Maintenance and Repair

The following enhancements to Maintenance and Repair are:

- Addition of the Modify button.
- Modify only a POTS ticket or a Non-Design ticket.
- Only tickets in an open/active or deferred state may be modified.

New Screen Shots for Maintenance and Repair include:


Maintain Trouble Report
SELECTION CRITERIA
U S WEST Trouble Report ID
Status:
All
Circuit ID
User
All
Status Date From:
09/01/1998
Status Date To:
09/01/1998
TROUBLE REPORT SUMMARY
Circuit ID #
TR #
Date/Time
Status


Modify Non-Design Trouble Report
Circuit Id: 303254981
Perceived Severity
Out Of Service
Trouble Description

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:		**Company:**	
Fax:		**Pages:**	1
Phone:		**Date:**	October 23, 1998
Re:	Fax for IMA Extended Repair Hours	**From:**	IMA Training & Services Team

Effective immediately, IMA Maintenance and Repair routine downtime has been aligned with normally scheduled Maintenance and Repair Legacy system downtime. This will provide maximum availability for IMA Maintenance and Repair users. Please refer to the schedule below for system availability. All times listed are Mountain Standard Time unless otherwise stated.

IMA pre-order and order supported hours are not affected by this change.

	Monday-Friday	**Saturday**	**Sunday**
*IMA Maintenance and Repair Hours	02:15 - 23:15	02:15 - 22:00	07:00 - 23:15

* Due to legacy system downtime, IMA Maintenance and Repair for Design Services will be unavailable from 3am to 4am Monday through Friday, and 10pm Saturday to 6am Sunday, in each local time zone.

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:		**Company:**	
Fax:		**Pages:**	1
Phone:		**Date:**	November 20, 1998
Re:	IMA Release Notes – Version 3.3	**From:**	IMA Training & Services Team

- **Comments:**

The Interconnect Mediated Access Group will be implementing an upgrade of the IMA software beginning on Friday, December 11, at 8:00PM (MST). Notification regarding system availability will be out one week prior to the release on Friday, December 4, 1998.

The release notes for IMA version 3.3 are available today, Friday, November 20, 1998, on the IMA Information Website, which is a menu option on the IMA menu. The release notes offer an overview of the changes for release 3.3. More detailed information will be contained in the User Guides, which will be updated and made available on the IMA Information Website by December 11, 1998.

If you would like to be updated on Saturday, December 12, regarding the status of the upgrade, please page Cory Hamilton at (800) 759-7243 PIN 321-2412.

As always, for system questions please contact our help desk at (888)796-9102.

Thank you,

Barbara "Pete" Peterson
IMA Training & Deployment Manager
bpeters@uswest.com
(303) 896-2705

Interconnect Mediated Access

Software Release Notes

Modification Date: November 20, 1998

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U S WEST Information Technologies, Inc.

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Version Notice

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Release	Date	Software Release
Release 1	10/20/98	3.3

Purpose of Document Release 1

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, 3.2, to be implemented on Friday, September 25, 1998.

Document Ownership

Obtain additional copies of this document from the following organization:

IMA Documentation Project Manager
U S WEST Communications, Inc.
U S WEST Information Technologies
1005 17th Street, Suite 1690
Denver, CO 80202
(303) 896 - 1529

Document Owner	Susan Embry-Busch
Document Author	Kirsten Petersen

Important: *This document has been through a formal review process. To the best of our knowledge it is accurate. There may be further modifications and we reserve the right to make those modifications.*

Trademarks

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General Overview

Purpose

The purpose of IMA Software Release Notes is to inform IMA users of enhancements made to the most recent software version, Software Release 3.3, to be implemented at 18:00 hours MST on Friday, December 11, 1998. The Co-Provider User's Guide will accompany this release with a more detailed explanation of how to use the new processes and forms. The User's Guide will also provide definitions of the new field names.

Summary

Among the enhancements to IMA Software Release 3.3, the most prominent is the layout of the Pre-Order Check Facility Availability screens. Although the functionality of these screens is the same, a tab feature on the Request screen provides access to response information. Another prominent upgrade is the PBX for POTS Order and Unbundled Digital Line-side Switch Port - BRI ISDN Capable option via the GUI. This release also standardizes the buttons available on each of the Order screens. EDI enhancements include Centrex Resale and Unbundled Digital Line-side Switch Port - BRI ISDN Capable. Enhancements that directly affect users are described in subsequent sections of this document.

Note: Refer to the Desktop Requirements for additional information about how to access Software Release 3.3.

Audience

This information is to be disseminated to all users of IMA, including Co-Providers and U S WEST employees such as help desk personnel and system administrators.

Dissemination

The IMA Training and Services Team is headed by Manager Barbara Peterson, who is responsible for the dissemination of release notes. Any questions regarding release notes may be directed to her at 303-896-2705 or bpeters@uswest.com, or to members of her team.

Standardized Buttons

The following buttons have been standardized to display on all Order screens:

Button Name	Function
OK	processes the entered data
Print Preview	opens a new browser window with a preview of the information
EMail	transmits an electronic copy to the e-mail address specified in the personal profile (or enter in a new address)
Clear	deletes entries without saving them
Reset	clears the fields to the last committed data
Cancel	ends the session without retaining any of the entered information, and returns to the IMA window

Enhancements to IMA

The following enhancements have been added to release 3.3:

- PBX for POTS - GUI
- Unbundled Digital Line-side Switch Port - BRI ISDN Capable - GUI and EDI
- Centrex Resale - EDI only

Pre-Order Enhancements

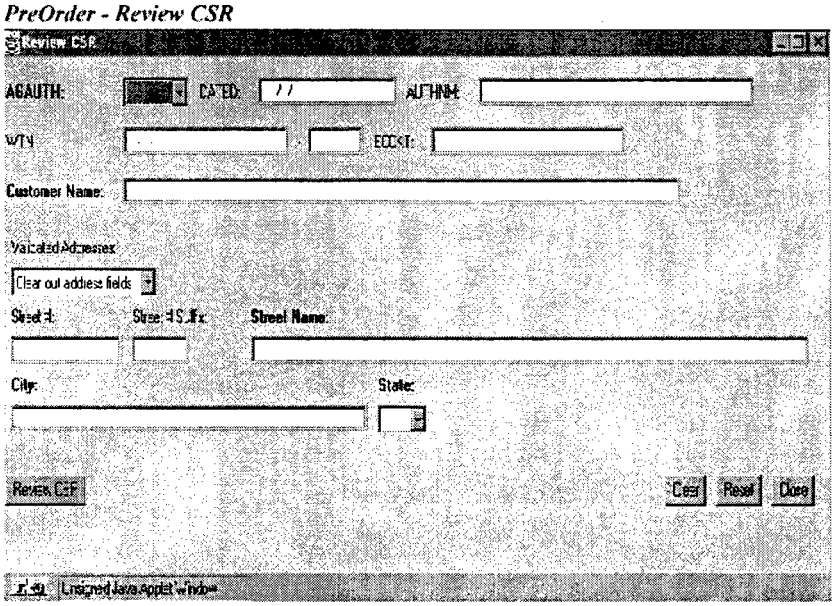
The following Pre-Order screens have been modified:

- Review CSR
  - Review CSR - Response
- Service Availability
- Check Facility Availability
  - Design Service Facility Request
  - Design Service Facility Request - Response
  - High Capacity Facility Request
  - High Capacity Facility Request - Response
  - Convert POTS to Unbundled Loop
  - Convert POTS to Unbundled Loop - Response
  - POTS Facility Request
  - POTS Facility Request - Response
  - ISDN Facility Request
  - ISDN Facility Request - Response

Review CSR

The addition of the ECCKT field comprises the enhancement to the Review CSR screen.

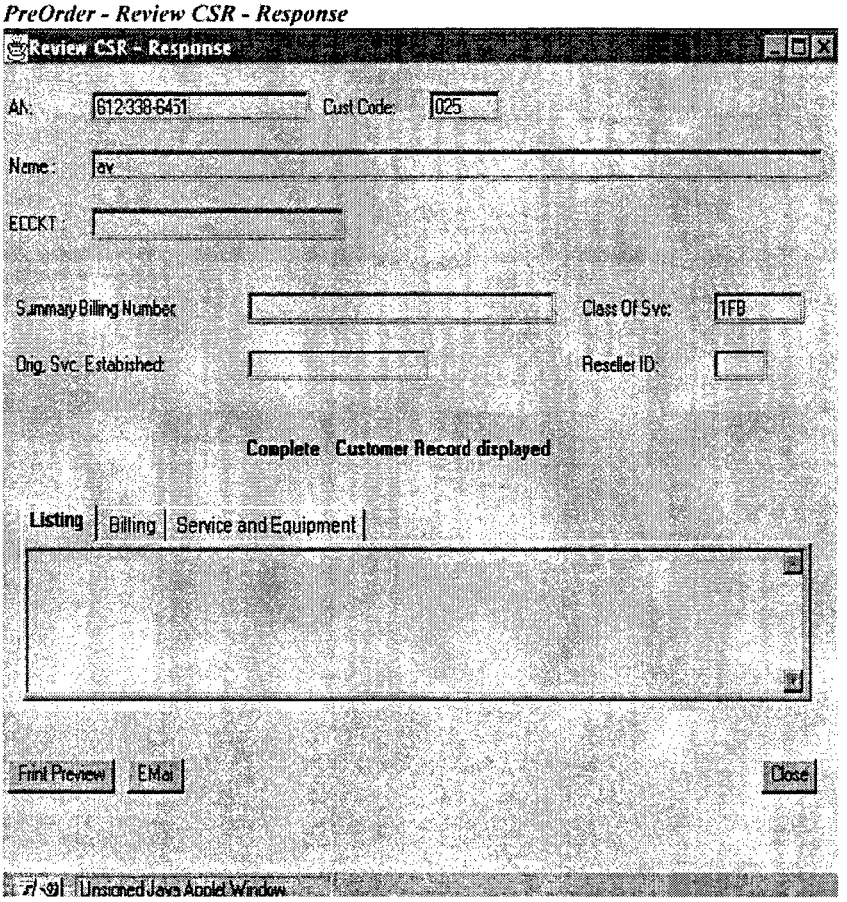
PreOrder - Review CSR



Review CSR - Response

The addition of the ECCKT field comprises the enhancement to the Review CSR Response screen.

PreOrder - Review CSR - Response

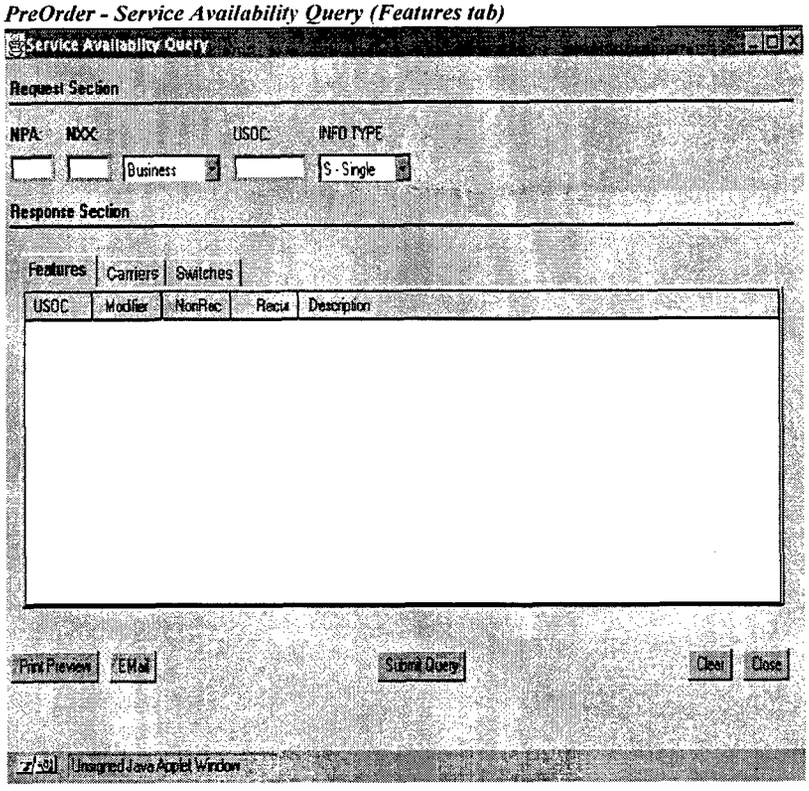


Service Availability

The following additional fields comprise the enhancement to the Service Availability screen:

- NonRec is a new field
- Recur is a new field

PreOrder - Service Availability Query (Features tab)



Check Facility Availability

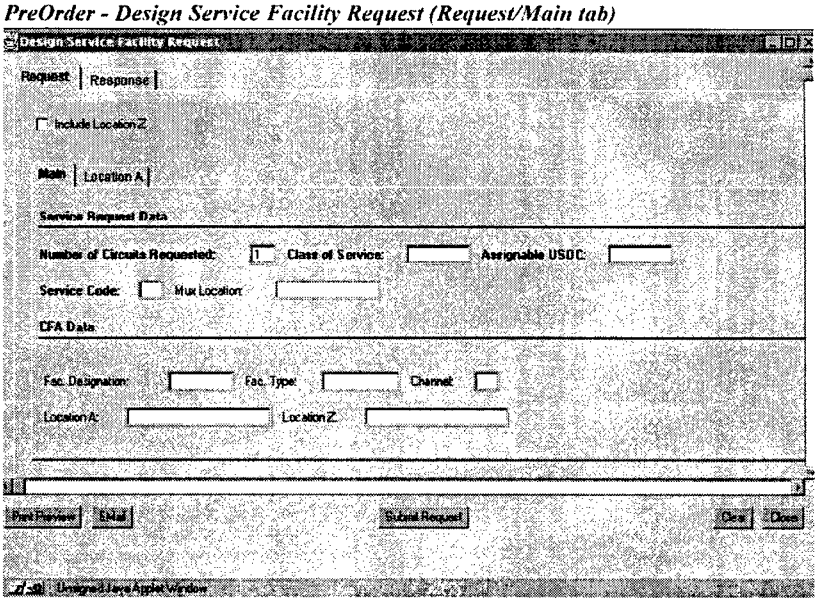
The functionality and process of Check Facility Availability has not changed.The Check Facility Availability process is used to confirm that the capacity of a facility can handle the type and volume of lines being requested. The format and enhancements are described below.

Design Services Facility Request - Request tab

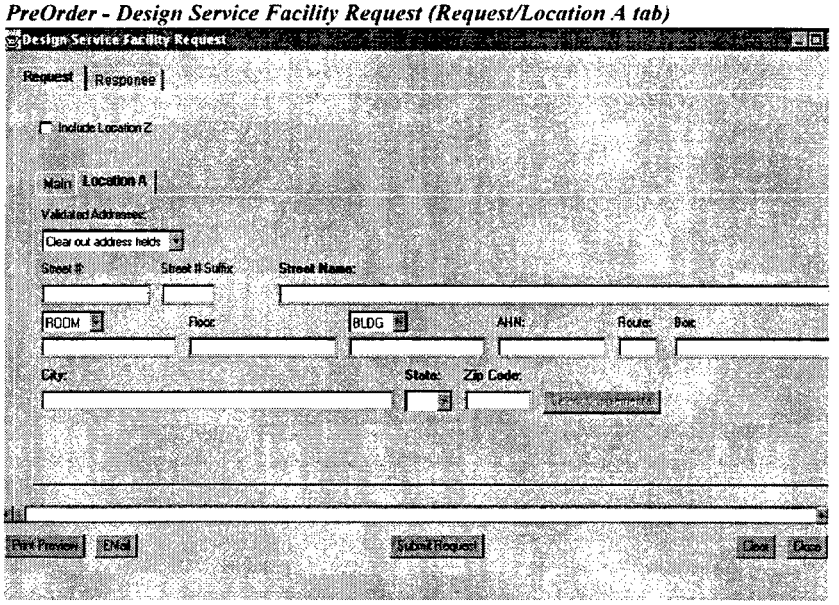
The following addition and deletion of fields comprise the enhancement to the Design Services Facility Request screen:

- Request tab is a new feature.
  - Main tab is a new feature.
    - Include Location Z is a new field/checkbox.
    - Service Request Data is a new section.
    - Number of Facilities Requested field name changed to Number of Circuits Requested.
    - Mux Location is a new field.
    - NPA NXX field has been deleted.
    - CFA Data is a new section.
    - Fac Designation is a new field.
    - Fac Type is a new field.
    - Channel is a new field.
    - Location A is a new field.
    - Location Z is a new field.
  - Location A tab is a new feature.

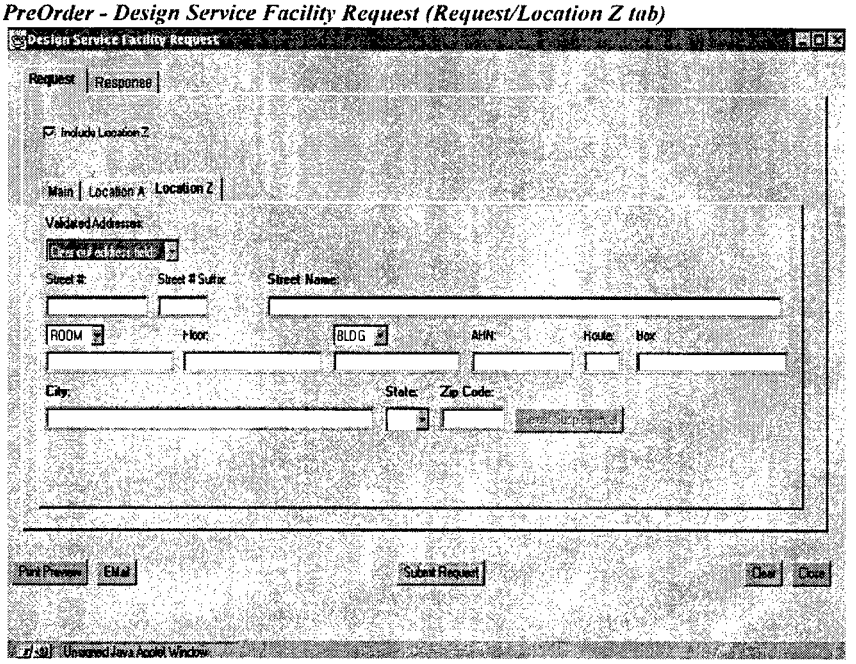
PreOrder - Design Service Facility Request (Request/Main tab)



PreOrder - Design Service Facility Request (Request/Location A tab)



PreOrder - Design Service Facility Request (Request/Location Z tab)

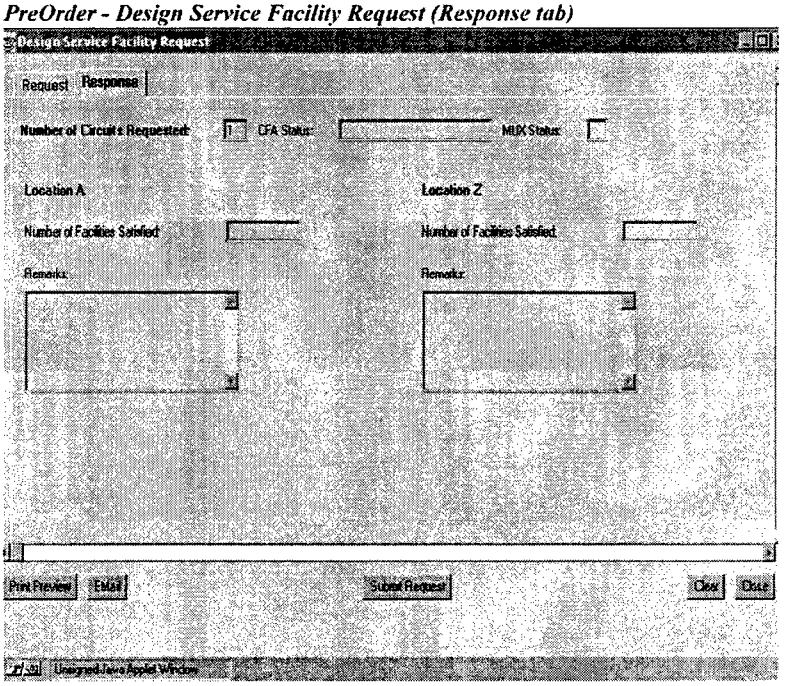


Design Services Facility Request - Response tab

This screen has been changed from a separate screen to a tab located on the Design Services Facility Request screen. The following addition and deletion of fields comprise the enhancement to the Design Services Facility Request - Response screen:

- Number of Circuits Requested is a new field.
- CFA Status is a new field.
- MUX Status is a new field.
- Location A - Number of Facilities Requested has been deleted.
- Location Z - Number of Facilities Requested has been deleted.

PreOrder - Design Service Facility Request (Response tab)



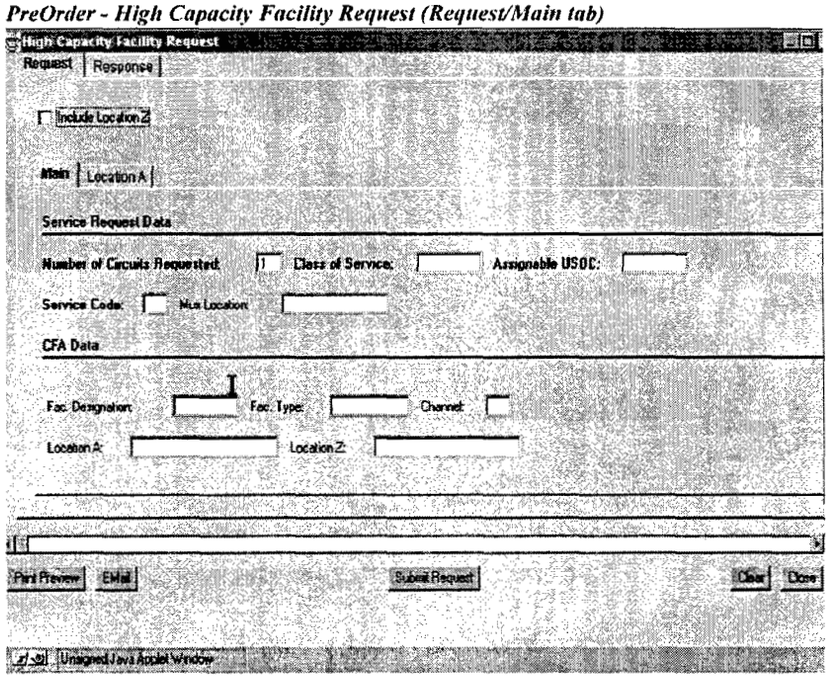
The following addition and deletion of fields comprise the enhancement to the High Capacity Facility Request screen:

Request tab is a new feature.

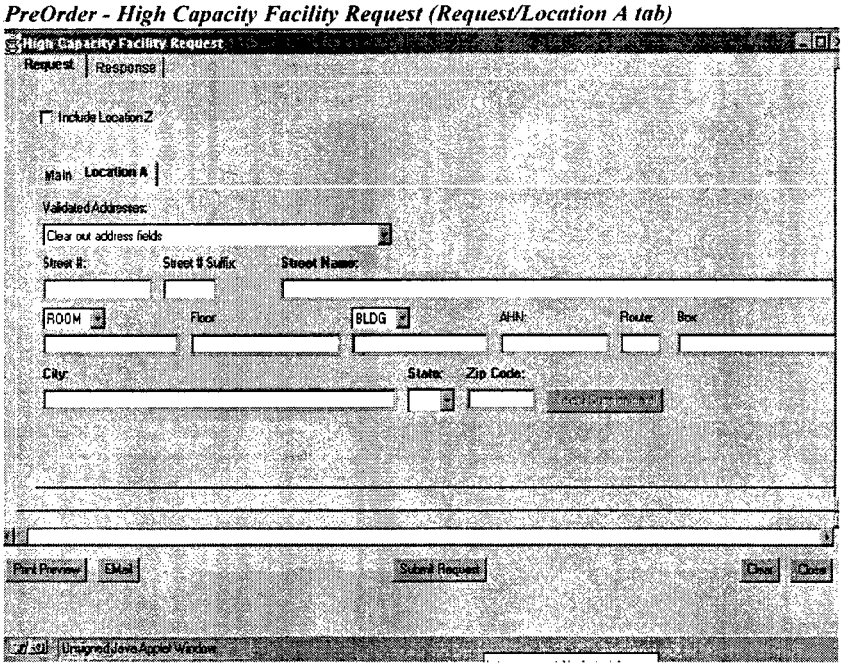
-
  - Include Location Z is a new field/checkbox.
    Service Request Data is a new section.
  -
    Requested.
  -
  - NPA NXX field has been deleted.
    CFA Data is a new section.
  -
  - Fac Type is a new field.
    Channel is a new field.
  -
  - Location Z is a new field.

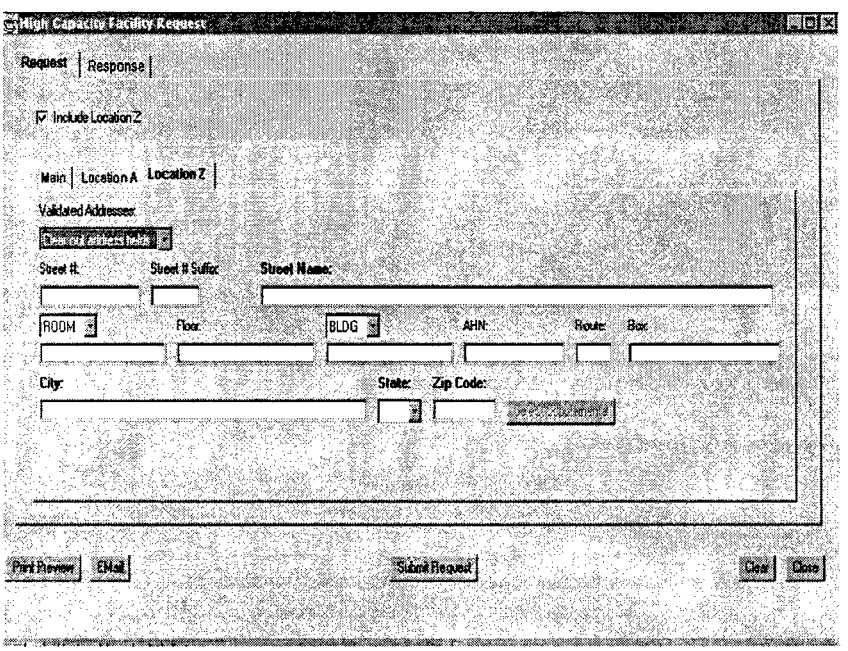
Location A tab is a new feature.

PreOrder - High Capacity Facility Request (Request/Main tab)



PreOrder - High Capacity Facility Request (Request/Location A tab)



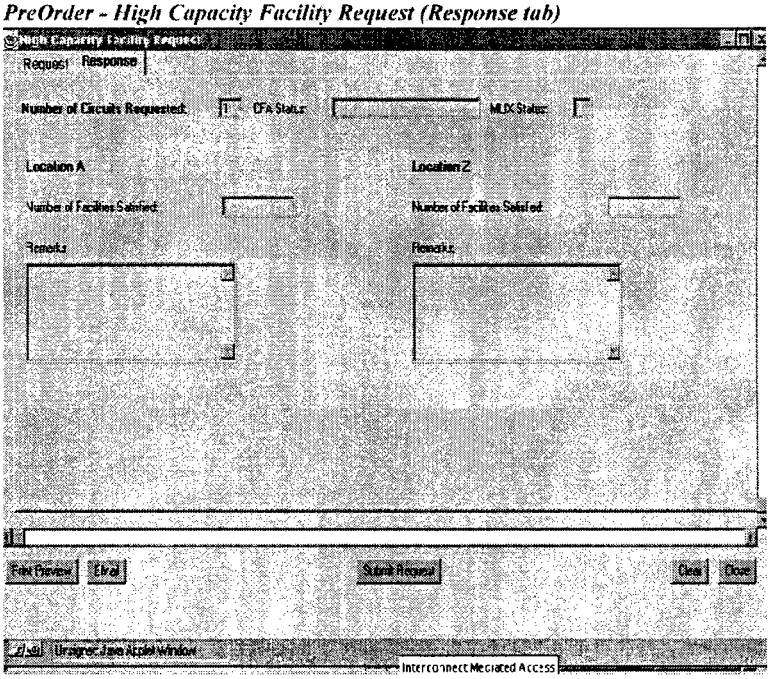


High Capacity Facility Request - Response tab

This screen has been changed from a separate screen to a tab located on the High Capacity Facility Request screen. The following addition and deletion of fields comprise the enhancement to the High Capacity Facility Request - Response screen:

- Number of Circuits Requested is a new field.
- CFA Status is a new field.
- MUX Status is a new field.
- Location A - Number of Facilities Requested field has been deleted.
- Location Z - Number of Facilities Requested field has been deleted.
- Location A - CFA Status field has been moved to the Request/Main tab, CFA Data section.
- Location Z - CFA Status field has been moved to the Request/Main tab, CFA Data section.

PreOrder - High Capacity Facility Request (Response tab)

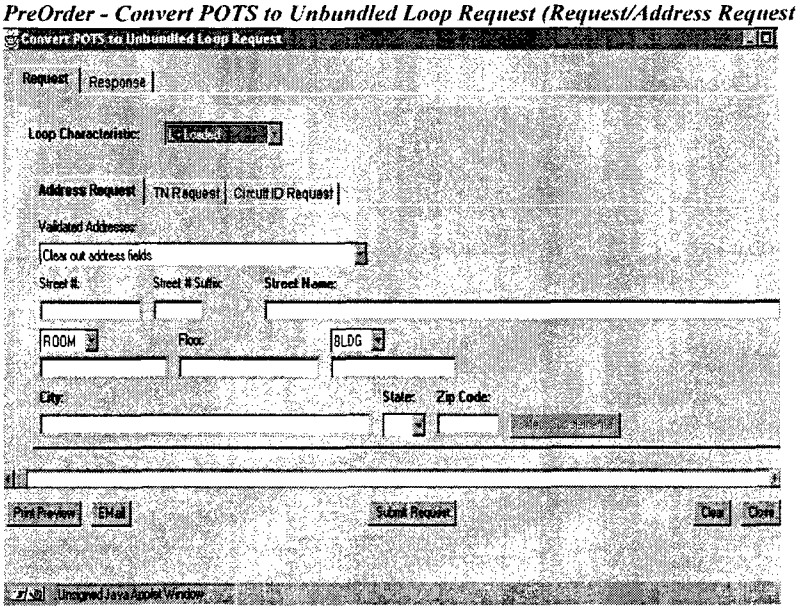


Convert POTS to Unbundled Loop Request - Request tab

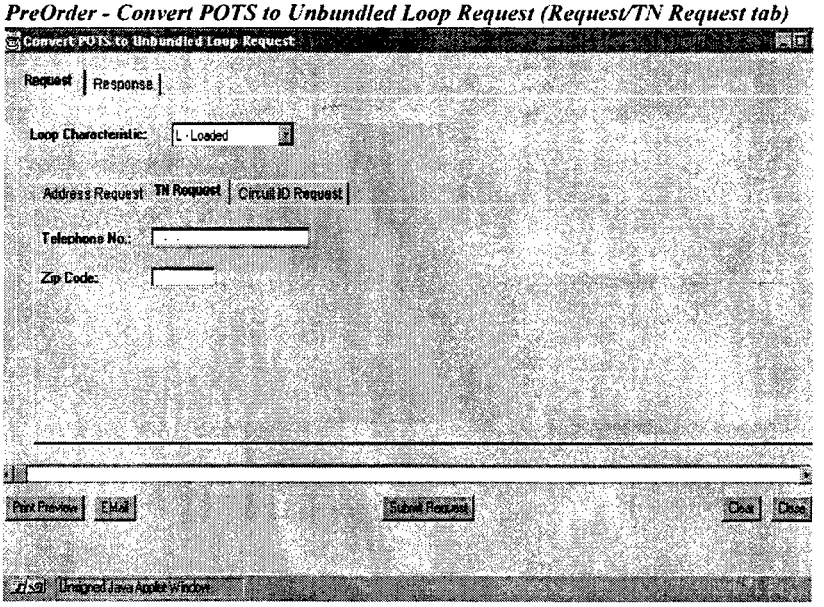
The following addition and deletion of fields comprise the enhancement to the Convert POTS to Unbundled Loop Request screen:

- SAGA field has been deleted.
- Loop Characteristic is a new field.
- Address Request tab is a new feature.
  - Validated Addresses is a new field.
  - Street # is a new field.
  - Street # Suffix is a new field.
  - Street Name is a new field.
  - ROOM is a new field.
  - Floor is a new field.
  - BLDG is a new field.
  - City is a new field.
  - State is a new field.
  - Zip Code is a new field.
  - Select Supplemental is a new button.
- TN Request tab is a new feature.
  - Zip Code is a new field.
- Circuit ID Request tab is a new feature.
  - Circuit ID is a new field.
  - Local Service Office is a new field.
  - Zip Code is a new field.

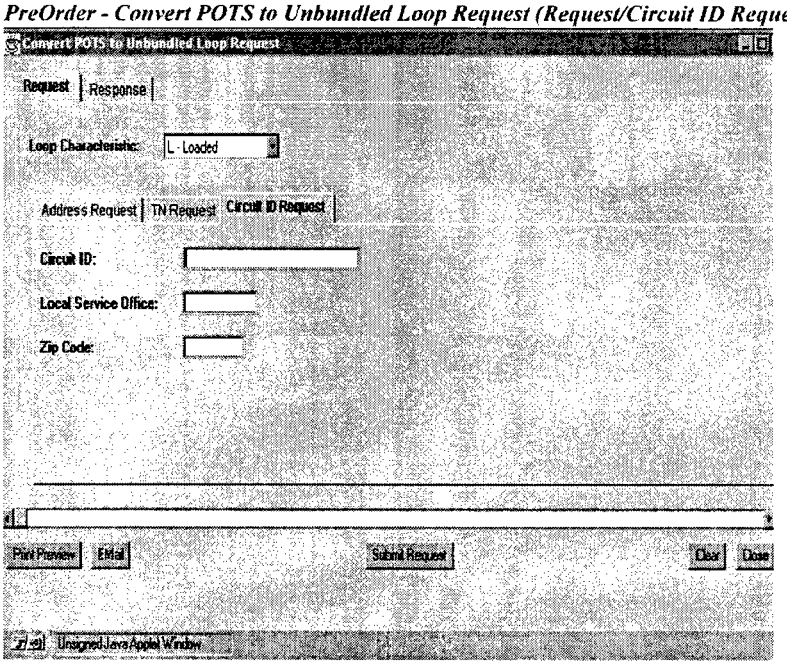
PreOrder - Convert POTS to Unbundled Loop Request (Request/Address Request tab)



PreOrder - Convert POTS to Unbundled Loop Request (Request/TN Request tab)



PreOrder - Convert POTS to Unbundled Loop Request (Request/Circuit ID Request tab)

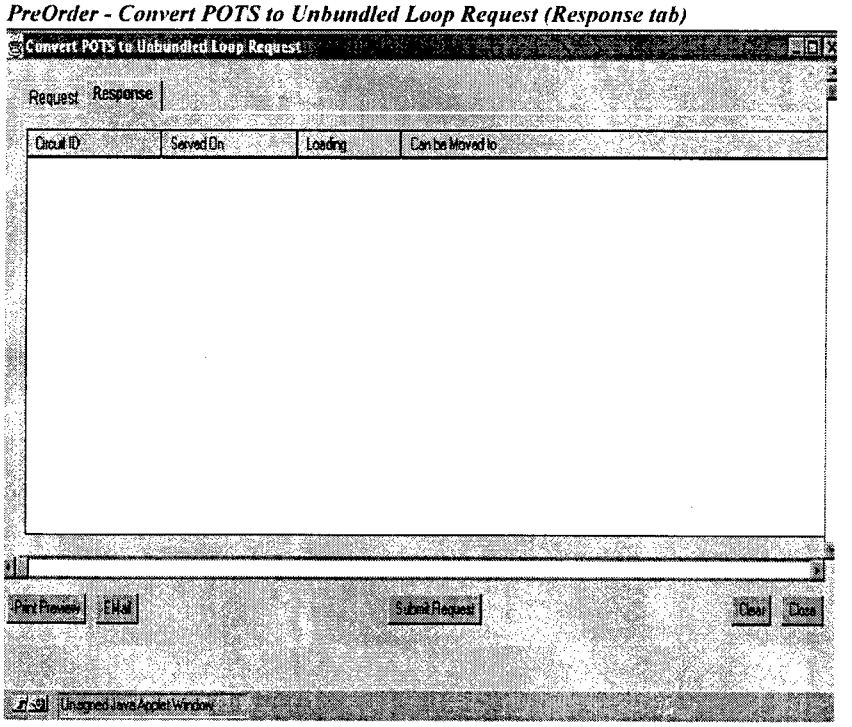


Convert POTS to Unbundled Loop Request - Response tab

This screen has been changed from a separate screen to a tab located on the Convert POTS to Unbundled Loop Request screen.The following change comprises the enhancement to the Convert POTS to Unbundled Loop Request - Response screen:

- The Telephone No column heading has been changed to Circuit ID.

PreOrder - Convert POTS to Unbundled Loop Request (Response tab)

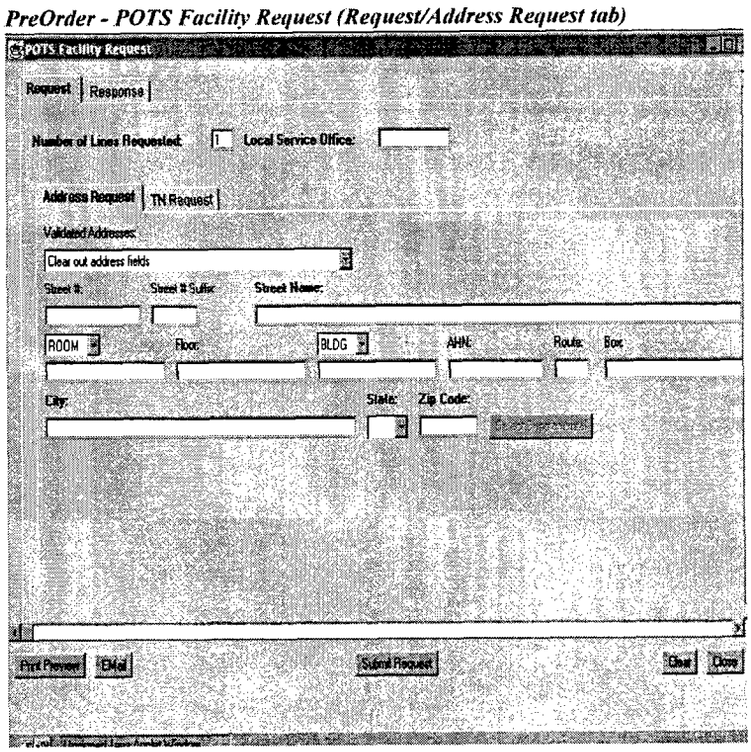


POTS Facility Request - Request tab

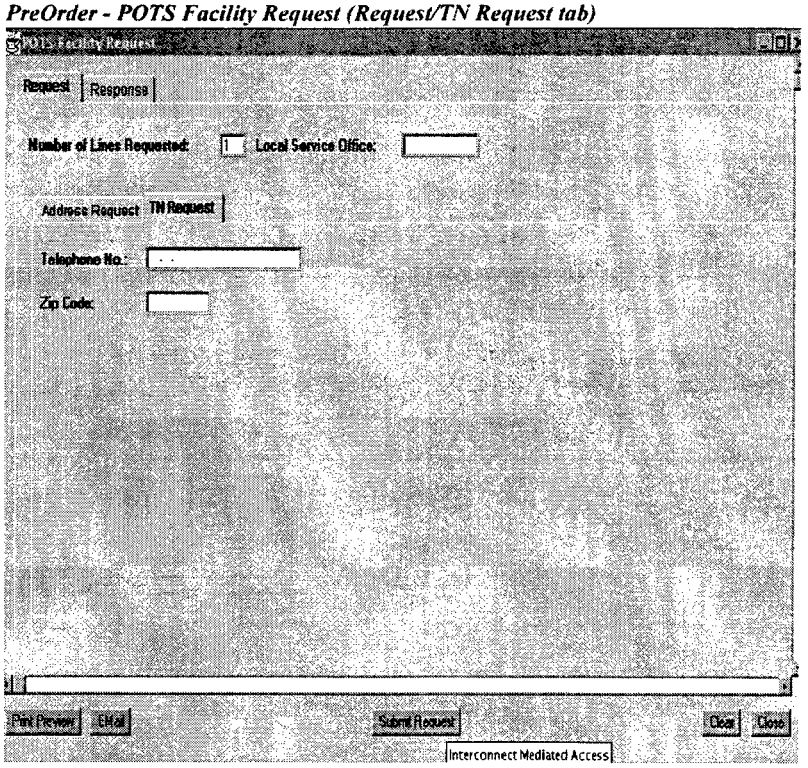
The following addition and deletion of fields comprise the enhancement to the POTS Facility Request screen:

- Request tab is a new feature.
  - Local Service Office is a field name change from LSO.
  - Address Request tab is a new feature.
  - TN Request tab is a new feature.
    - Telephone No is a new field.
    - Zip Code is a new field.

PreOrder - POTS Facility Request (Request/Address Request tab)



PreOrder - POTS Facility Request (Request/TN Request tab)

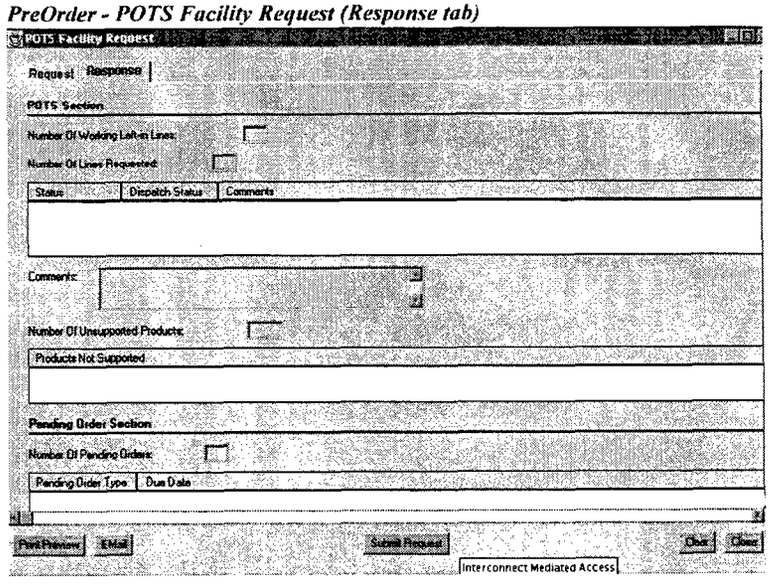


POTS Facility Request - Response tab

This screen has been changed from a separate screen to a tab located on the POTS Facility Request screen.The following addition and deletion of fields comprise the enhancement to the POTS Facility Request - Response screen:

- POTS Section is a new section.
  - Number Of Working Left-in Lines is a new field.
  - Number Of Lines Requested is a new field.
  - Status is a new column heading.
  - Dispatch Status is a new column heading.
  - Comments is a new column heading.
  - Comments is a new field.
  - Number Of Unsupported Products is a new field.
  - Products Not Supported is a new field.
- Pending Order Section is a new section.
  - Number Of Pending Orders is a new field.
  - Pending Order Type is a new column heading.
  - Due Date is a new column heading.

PreOrder - POTS Facility Request (Response tab)

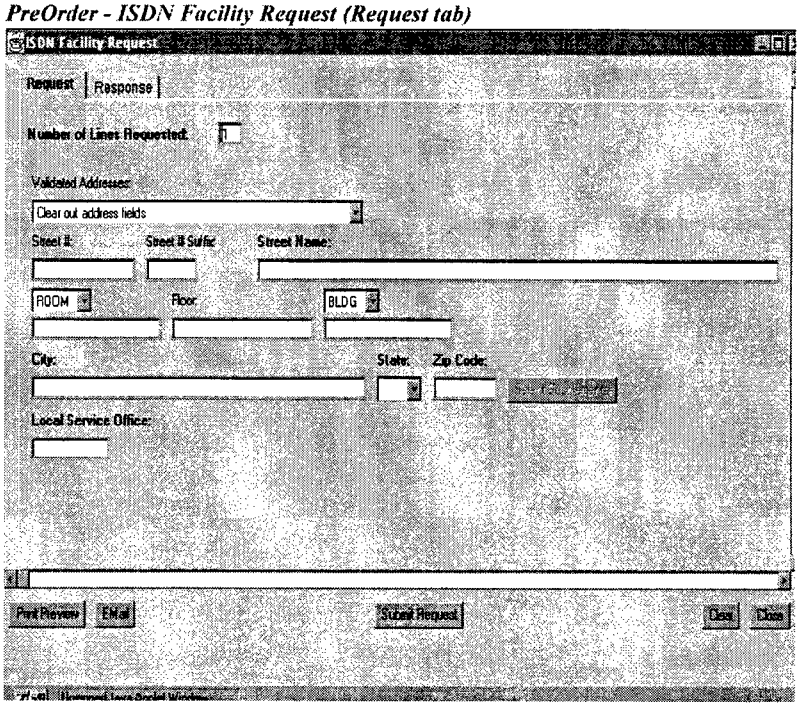


ISDN Facility Request - Request tab

The following addition and deletion of fields comprise the enhancement to the ISDN Facility Request screen:

- Request tab is a new feature.
  - Local Service Office is a new field.
  - AHN field has been deleted.
  - Route field has been deleted.
  - Box field has been deleted.
  - NPA NXX field has been deleted.

PreOrder - ISDN Facility Request (Request tab)

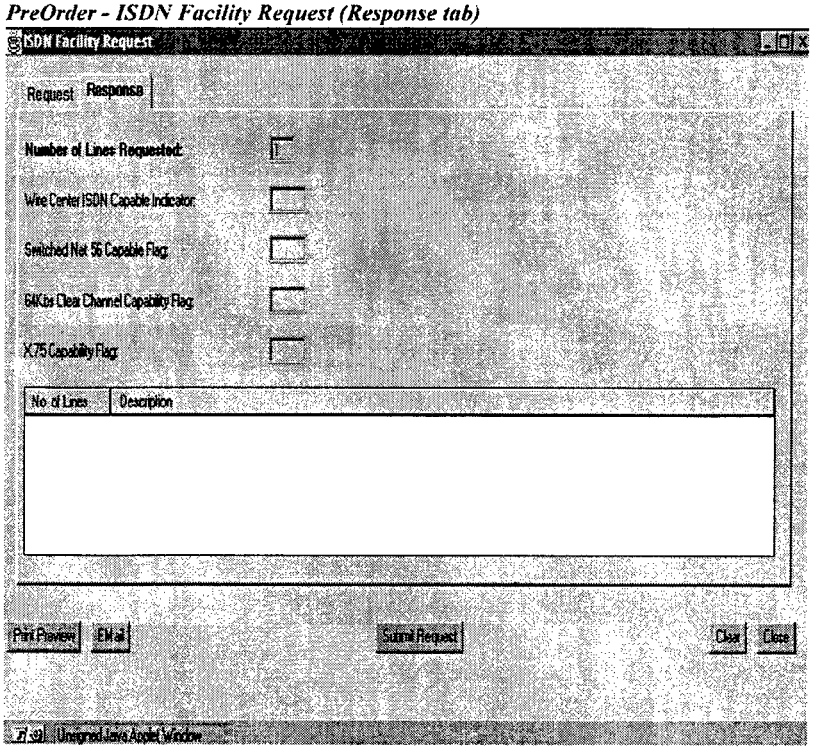


ISDN Facility Request - Response tab

This screen has been changed from a separate screen to a tab located on the ISDN Facility Request screen.The following additional fields comprise the enhancement to the ISDN Facility Request - Response screen:

- Response tab is a new feature.
  - Number of Lines Requested is a new field.

PreOrder - ISDN Facility Request (Response tab)



Order Enhancements

The Order process now enables Co-Providers to create and submit requests for PBX for POTS. The new enhancements under the Order menu include new menu item titles as well as a new option to choose from. The enhancements will be listed according to the screens within the Order process.

The following Order screens have been modified:

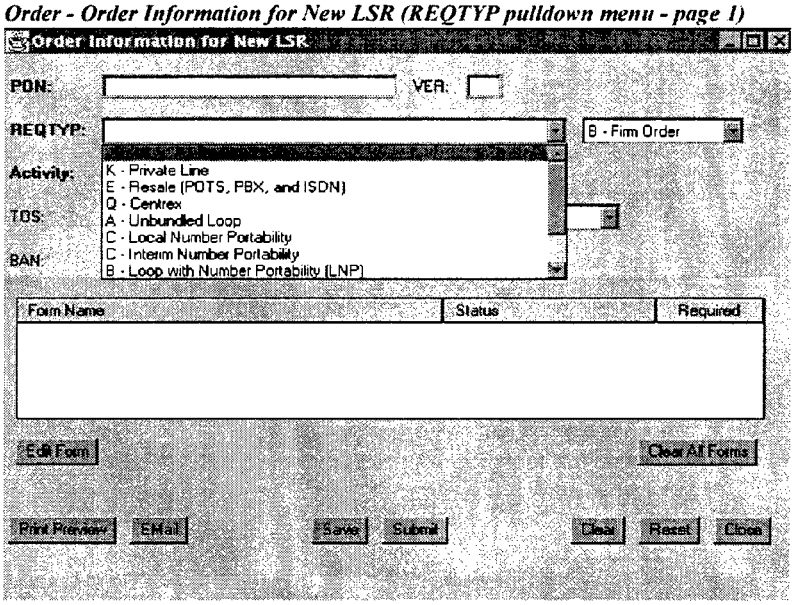
- Order Information for New LSR
- Resale Form
- Loop Service Form
- Number Portability
- Loop Service with Number Portability
- Port Service
- Resale Private Line
- Listings

Order Information

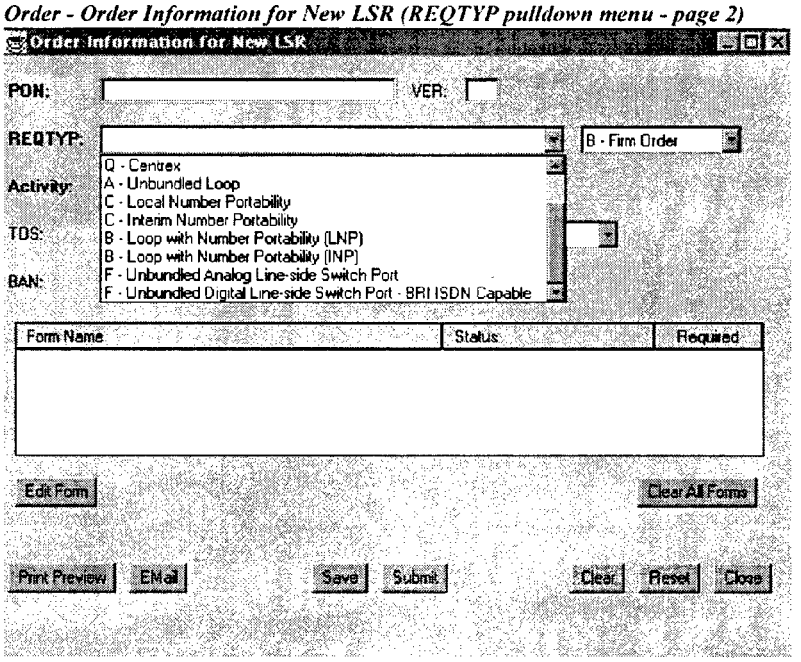
The process and functionality of the Order process has not changed. The following additions comprise the enhancements on the Order Information screen:

- Within the REQTYPE field pulldown list:
  - E - (Resale POTS and ISDN) has been changed to E - Resale (POTS, PBX, and ISDN).
  - F - Unbundled Digital Line-side Switch Port - BRI ISDN Capable is a new option.
- Within the TOS field pulldown list:
  - 1JM - Business, POTS PBX, Measured is a new option.
  - 1JF - Business, POTS PBX, Flat Rate is a new option.
  - 2JM - Residence, POTS PBX, Measured is a new option.
  - 2JF - Residence, POTS PBX, Flat Rate is a new option.
  - 3JM - Government, POTS PBX, Measured is a new option.
  - 3JF - Government, POTS PBX, Flat Rate is a new option.

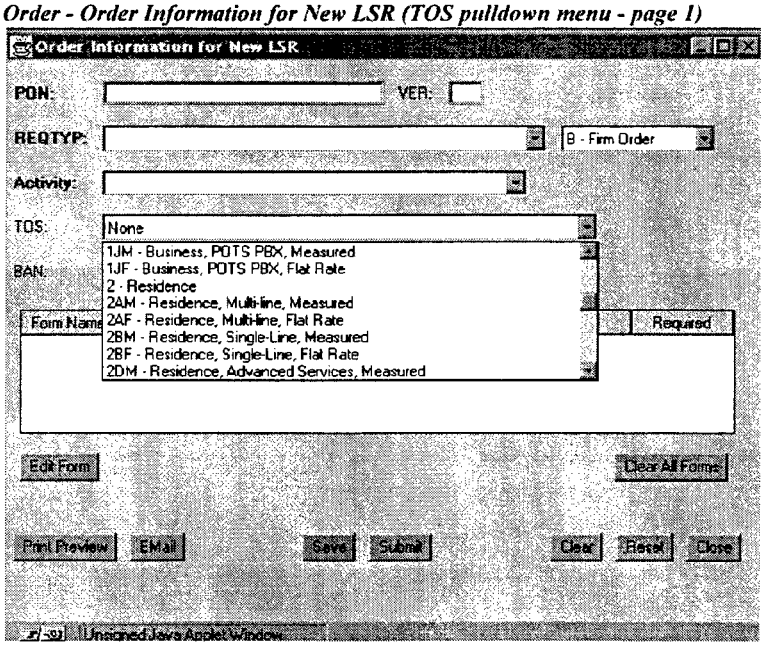
Order - Order Information for New LSR (REQTYP pulldown menu - page 1)



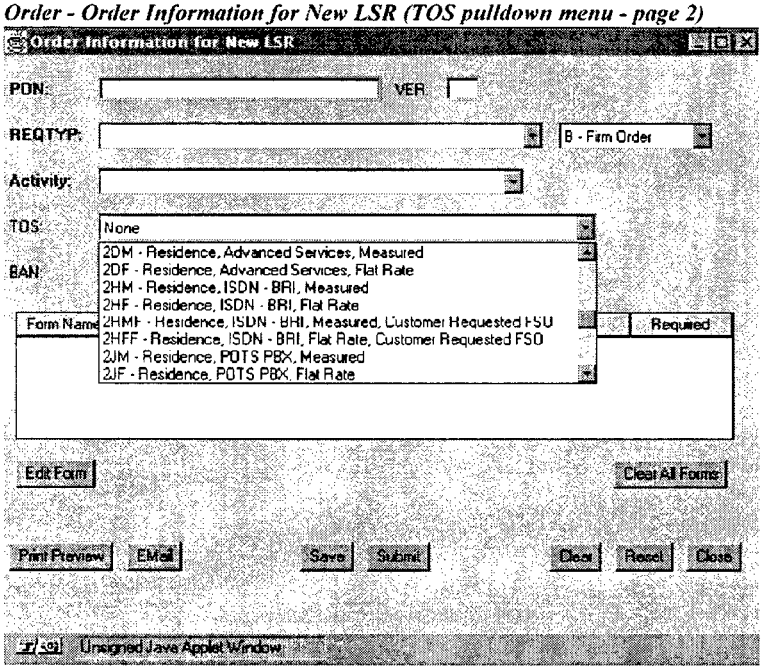
Order - Order Information for New LSR (REQTYP pulldown menu - page 2)



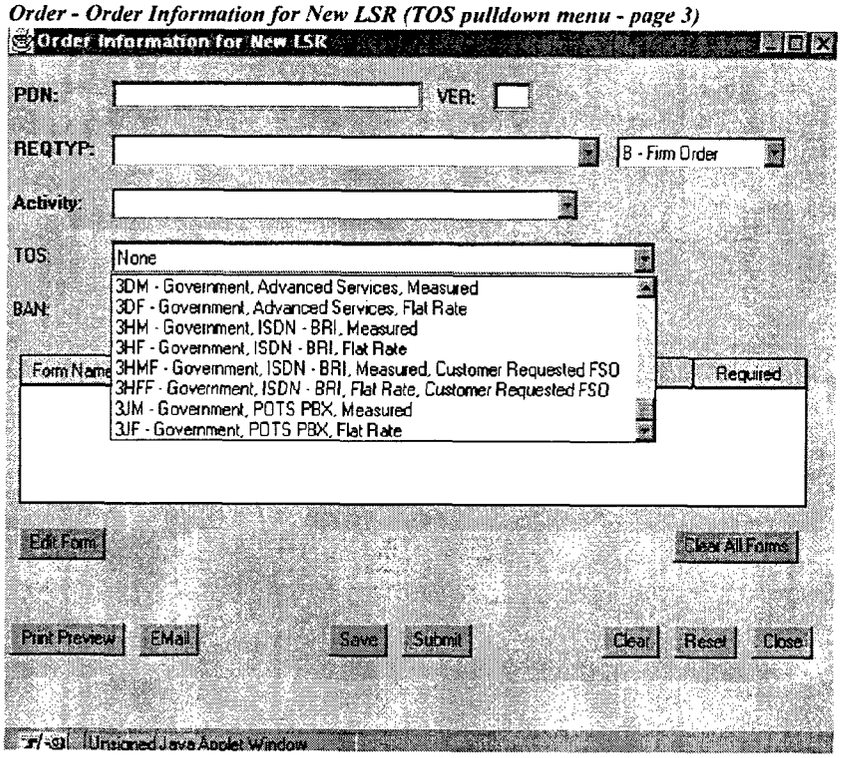
Order - Order Information for New LSR (TOS pulldown menu - page 1)



Order - Order Information for New LSR (TOS pulldown menu - page 2)



Order - Order Information for New LSR (TOS pulldown menu - page 3)

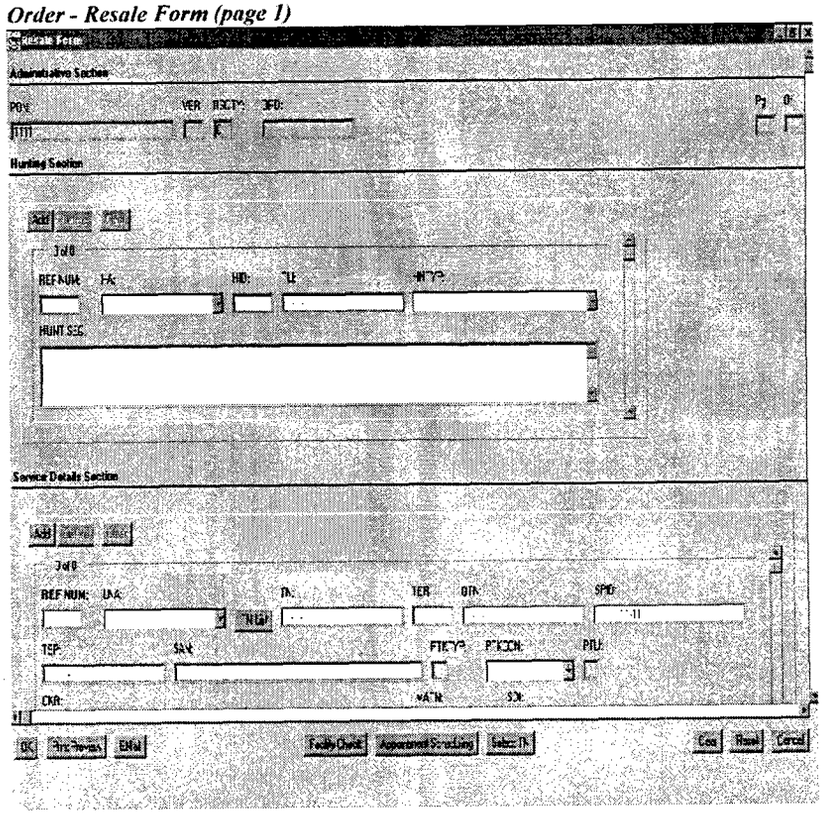


Resale Form

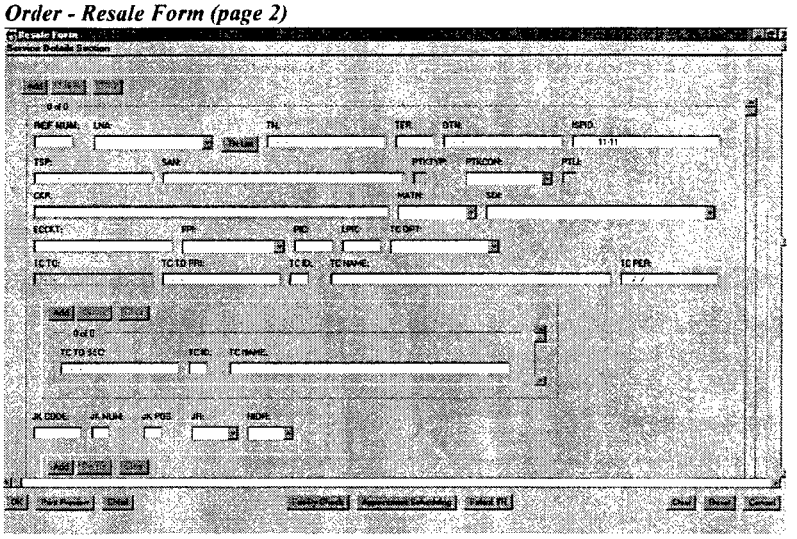
The following additional fields comprise the enhancements to the Resale Form screen:

- Inside Wire Jacks is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the Inside Wire Jacks section.
  - IWJK has been moved to the Inside Wire Jacks section.
  - IWJQ has been moved to the Inside Wire Jacks section.
- Feature Detail field has been expanded to accept up to 200 characters.

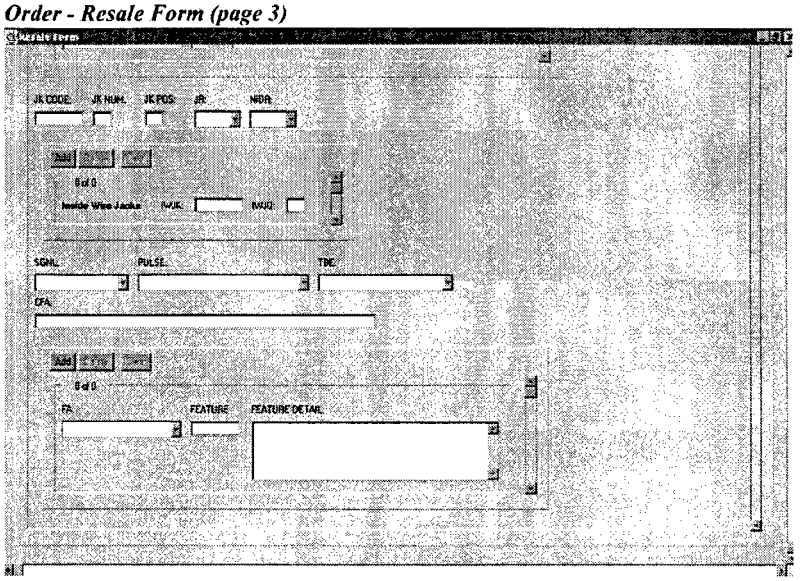
Order - Resale Form (page 1)



Order - Resale Form (page 2)



Order - Resale Form (page 3)

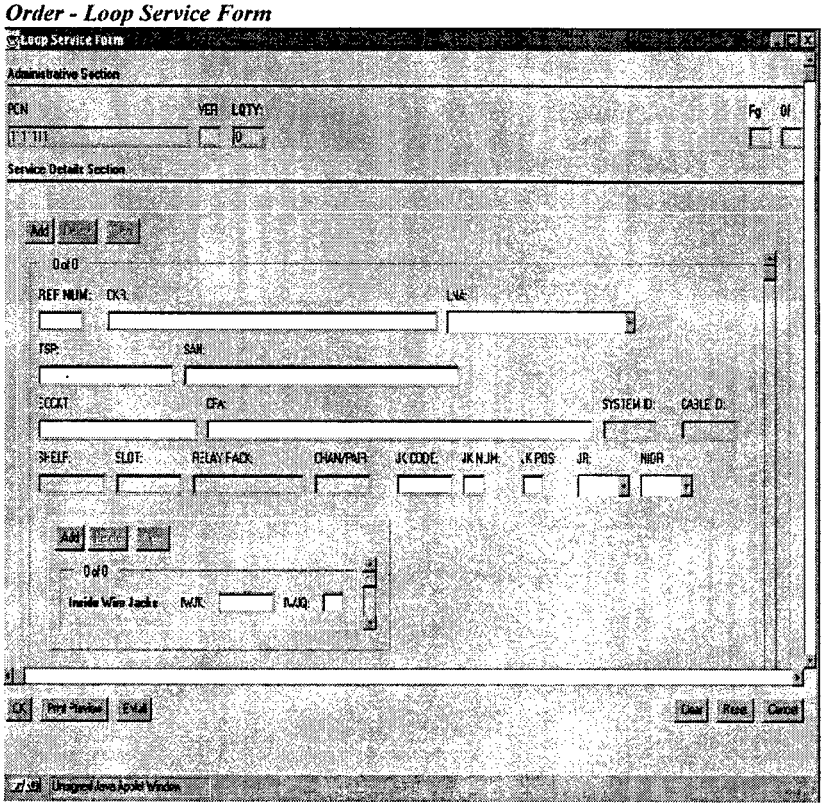


Loop Service Form

The following additional fields comprise the enhancements to the Loop Service screen:

- Inside Wire Jacks is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the Inside Wire Jacks section.
  - IWJK has been moved to the Inside Wire Jacks section.
  - IWJQ has been moved to the Inside Wire Jacks section.
- TCTO PRI is a new field.
- TC ID is a new field.
- TC NAME is a new field.
- TC TO SEC is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the TC TO SEC section.
  - TC TO SEC is a new field.
  - TC ID is a new field.
  - TC NAME is a new field.
  -

Order - Loop Service Form

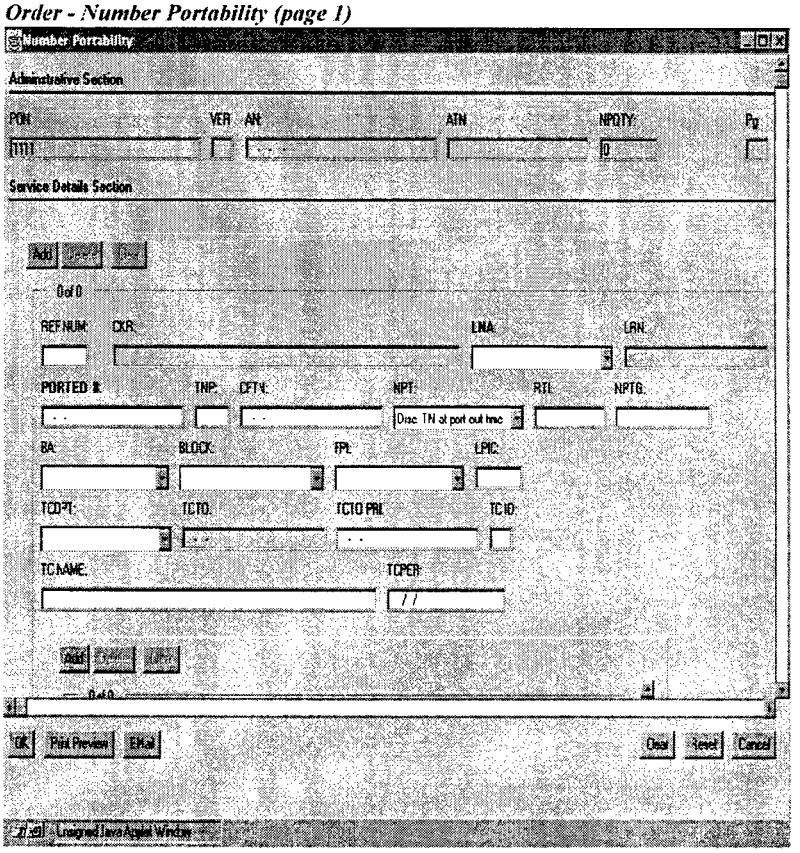


Number Portability

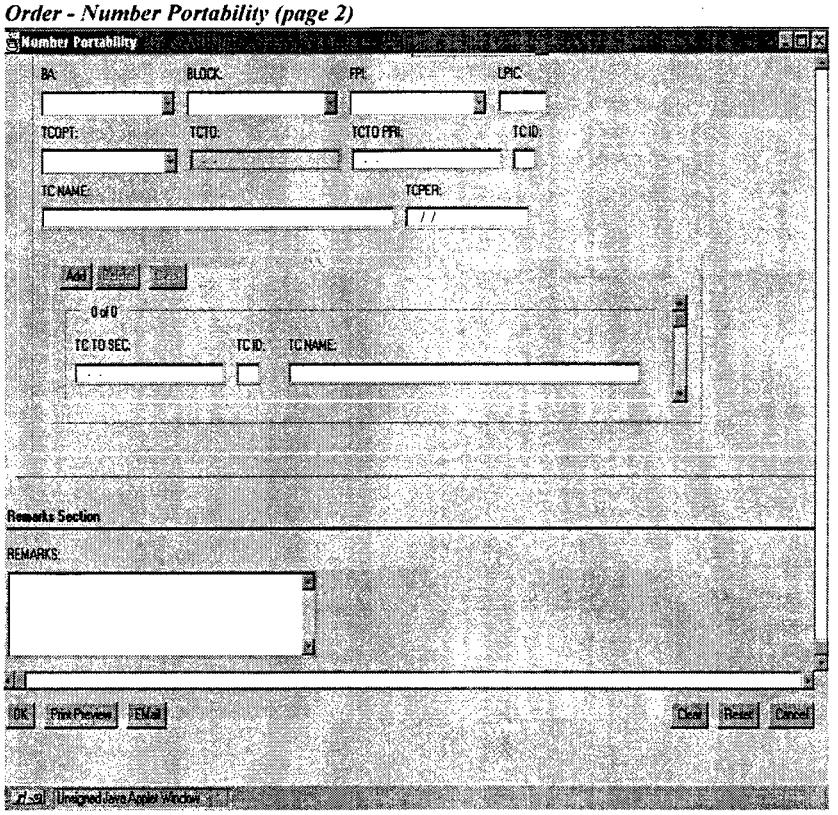
The following addition and deletion of fields comprise the enhancements to the Number Portability screen:

- TDT field has been deleted.
- TCTO PRI is a new field.
- TC ID is a new field.
- TC NAME is a new field.
- TC TO SEC is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the TC TO SEC section.
  - TC TO SEC is a new field.
  - TC ID is a new field.
  - TC NAME is a new field.

Order - Number Portability (page 1)



Order - Number Portability (page 2)

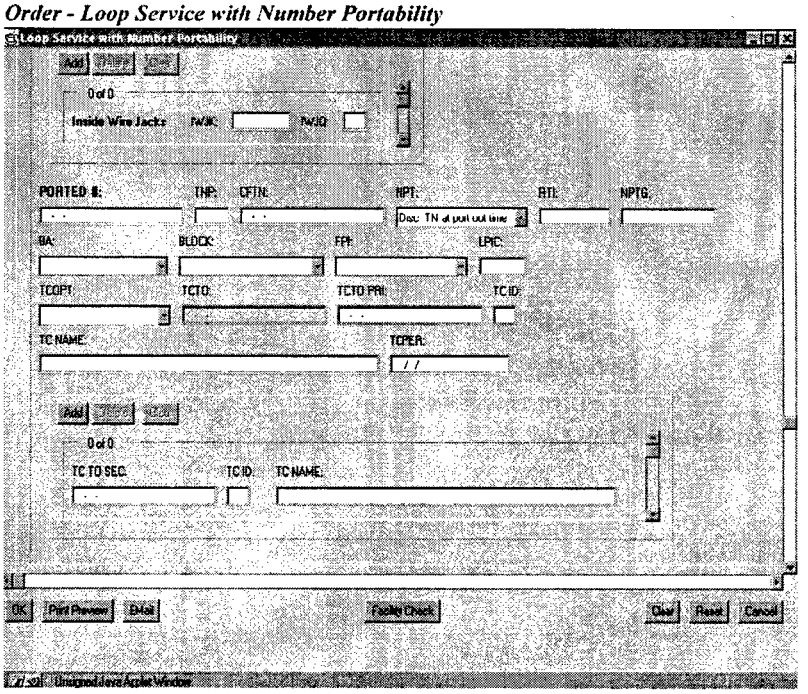


Loop Service with Number Portability

The following additional fields comprise the enhancements to the Loop Service with Number Portability screen:

- Inside Wire Jacks is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the Inside Wire Jacks section.
  - IWJK has been moved to the Inside Wire Jacks section.
  - IWJQ has been moved to the Inside Wire Jacks section.
- TCTO PRI is a new field.
- TC ID is a new field.
- TC NAME is a new field.
- TC TO SEC is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the TC TO SEC section.
  - TC TO SEC is a new field.
  - TC ID is a new field.
  - TC NAME is a new field.

Order - Loop Service with Number Portability

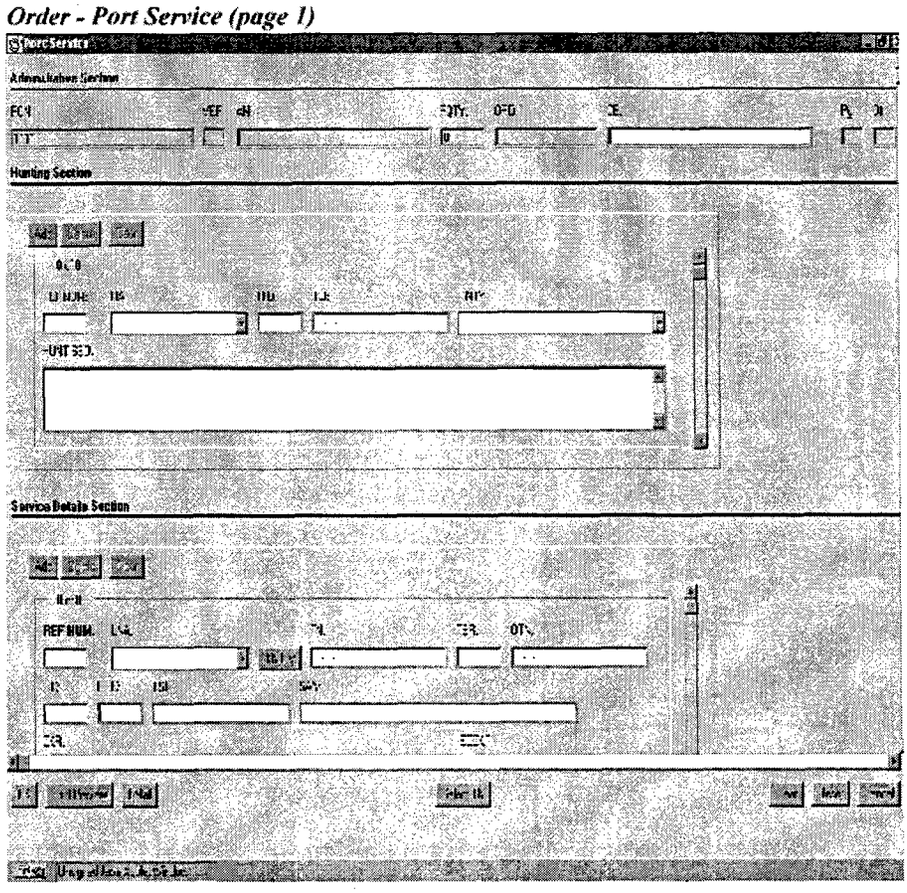


Port Service

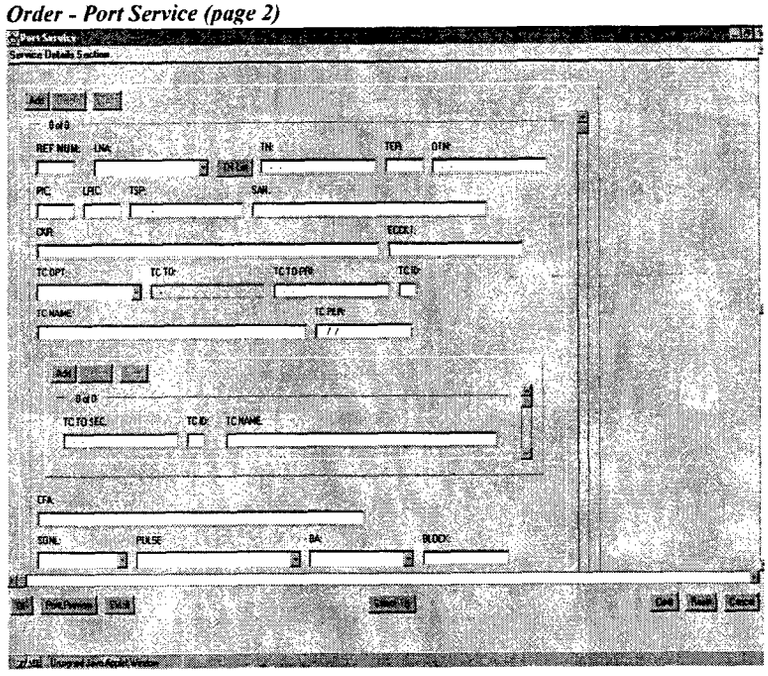
The addition and deletion of fields comprise the enhancements to the Port Service screen. Following is a list of enhanced fields:

- CB is a new field.
- PORTTYP field is now located on the LSR Form screen.
- TC TO PRI is a new field.
- TC ID is a new field.
- TC NAME is a new field.
- TC TO SEC is a new section.
  - Add, Delete, and Clear buttons have been added to the top of the TC TO SEC section.
  - TC TO SEC is a new field.
  - TC ID is a new field.
  - TC NAME is a new field.

Order - Port Service (page 1)



Order - Port Service (page 2)



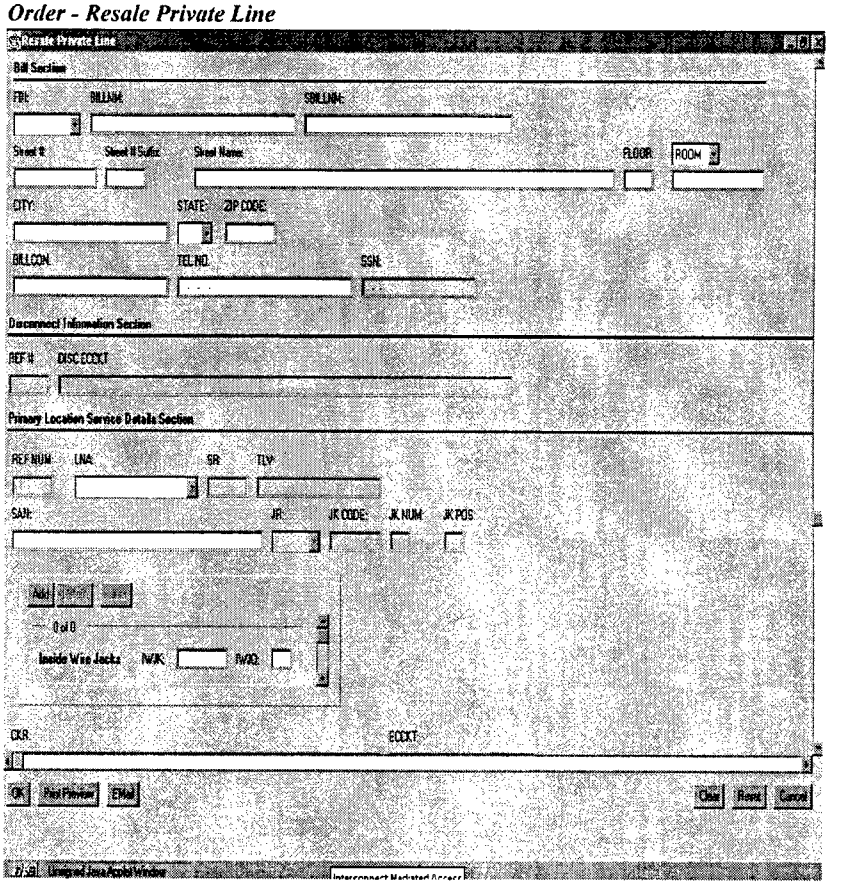
Resale Private Line

screen:

•

- Add, Delete, and Clear buttons have been added to the top of the Inside Wire
- IWJK has been moved to the Inside Wire Jacks section.
  IWJQ has been moved to the Inside Wire Jacks section.

Order - Resale Private Line

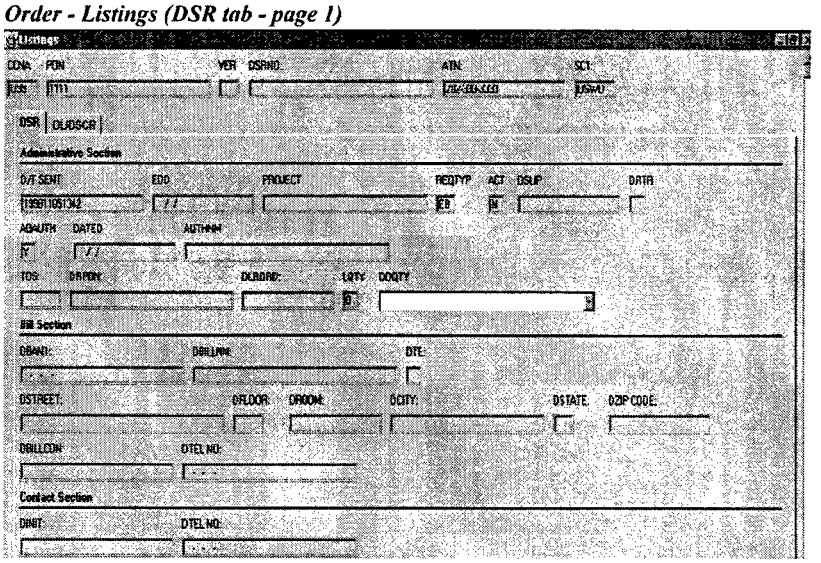


Listings

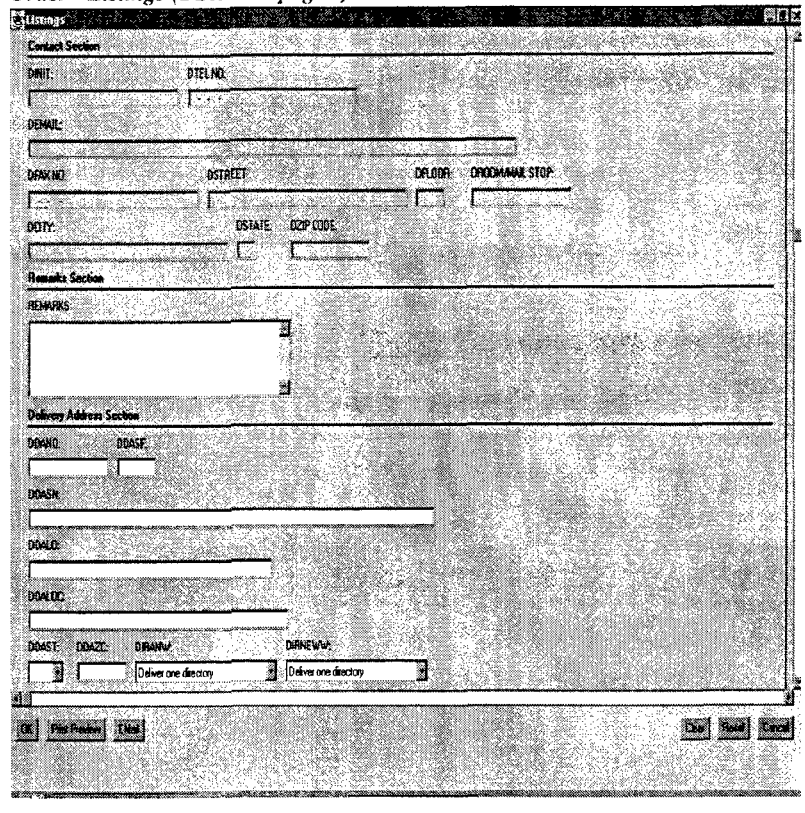
The following additional fields comprise the enhancements to the Listing screen:

- LALO is a new field.
- PROF is a new field.
- SEQADDR is a new field.
- HADDR is a new field.
- SEQADDR is a new field.
- INADDR is a new field.

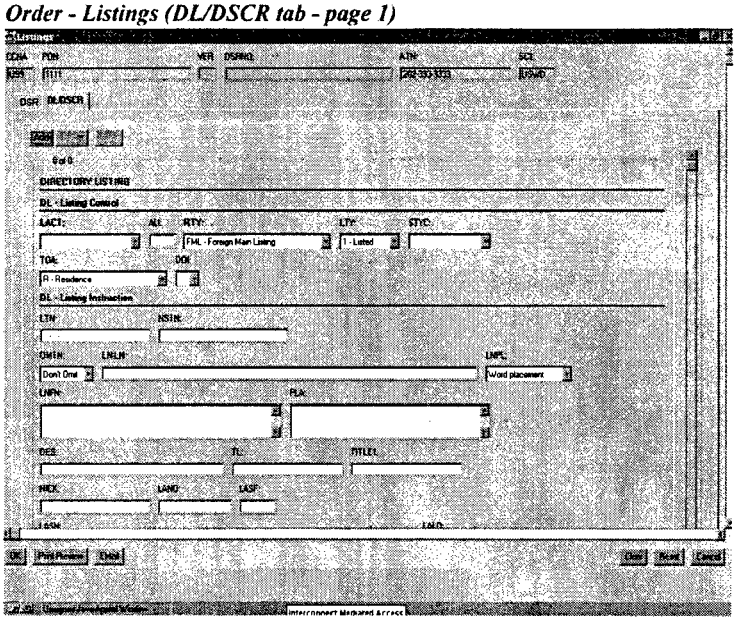
Order - Listings (DSR tab - page 1)



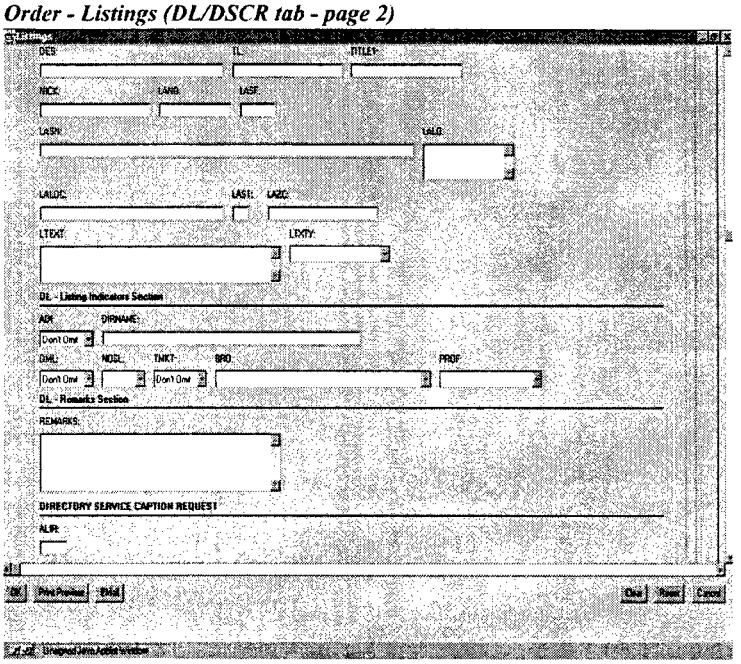
Order - Listings (DSR tab - page 2)



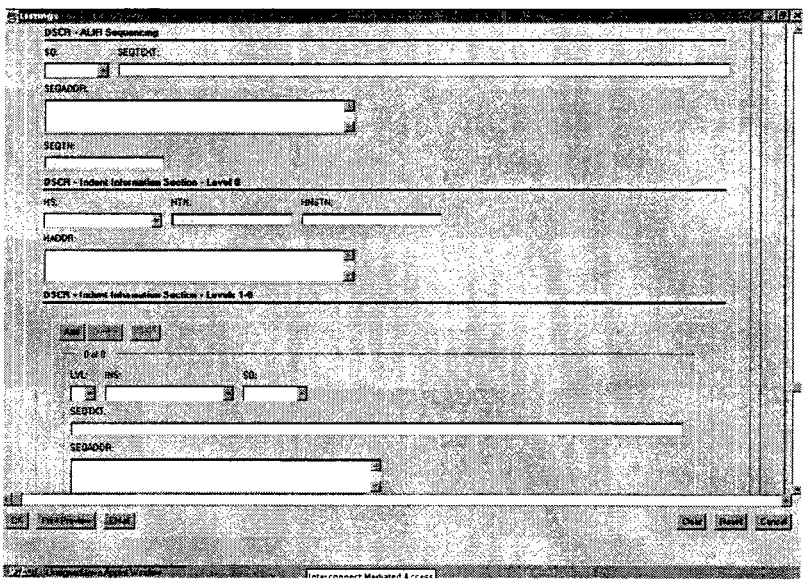
Order - Listings (DL/DSCR tab - page 1)



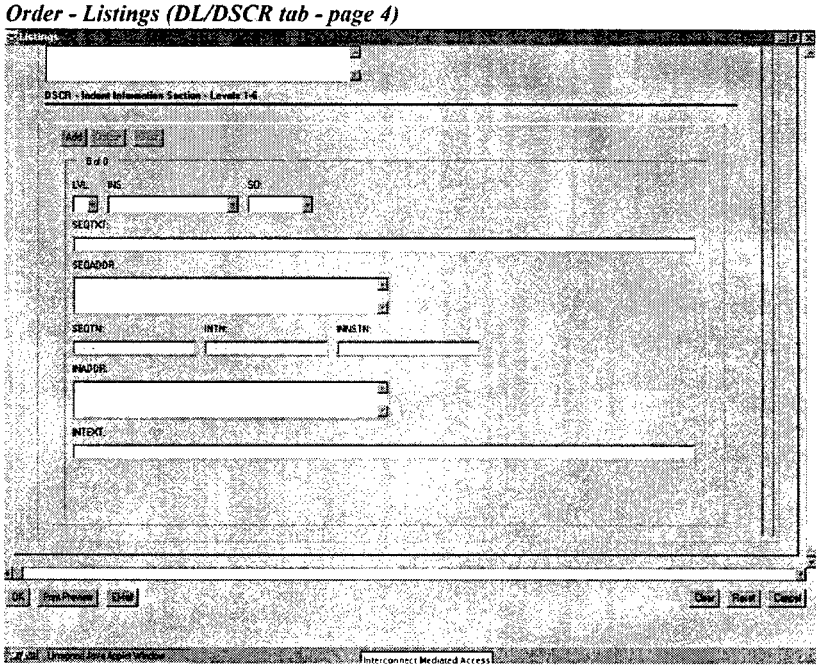
Order - Listings (DL/DSCR tab - page 2)



Order - Listings (DL/DSCR tab - page 3)



Order - Listings (DL/DSCR tab - page 4)



EDI Enhancements

The following enhancements have been added:

- Centrex Resale
  The Co-Provider will submit the LSR, EUI, Centrex, and optional directory listing forms.
- Unbundled Digital Line-side Switch Port - BRI ISDN Capable
  This capability provides similar ordering capabilities available through resale BRI ISDN using unbundling. The same features apply to the unbundled BRI ISDN product as apply to the resale product, only the switch port will be connected to a Single Point of Termination (SPOT) bay rather than a loop that goes to the end.
- In the Resale Form, the Feature Detail field has been expanded to accept up to 200 characters.
- CSR retrieval by Circuit ID can now be accommodated by EDI.
- All Facility checking capabilities available in the GUI are also available in EDI. The additions to EDI include:
  - Design Services Request
  - HICAP Request
  - Convert POTS to Unbundled Loop
  - ISDN Loop Qualification

US*WEST* IMA DEPLOYMENT/TRAINING TEAM
1005 17TH ST. RM 1690
DENVER, CO 80202

USWEST Communications

Fax

To:		**Company:**	
Fax:		**Pages:**	1
Phone:		**Date:**	December 4, 1998
Re:	3.3 release reminder	**From:**	IMA Training and Services

As we informed you on November 20 via fax, the implementation of Interconnect Mediated Access (IMA) release 3.3 will begin on Friday, December 11, 1998, at 8:00 p.m. (MST). Our goal is to have the implementation completed by Saturday, December 12 at 10:00 a.m. (MST). The system will be unavailable during this time period. On Saturday, December 12, if you require a status on the 3.3 implementation, you can page our Training Team Lead, Cory Hamilton at (800) 759-7243 PIN 321-2412.

Also, a reminder that the Release Notes reside in the LSP Information Website, a menu option within IMA. Just click on it and then choose "Release Notes". If you have any questions, please contact the Help Desk at (888) 796-9102.

And, as always, we thank you for your cooperation and patience during these exciting and very productive release weekends.

Barbara "Pete" Peterson
IMA Training & Services Manager
303/896-2705, bpeters@uswest.com

Summary of IMA Releases to Date

Date Deployed	IMA Release	Brief Description
1-Jan-97	1	Initial Deployment
15-Apr-97	1.5	Enhancements for Independent Pay-Phone Providers and Rebundled Products
27- Jun-97	1.6	July Waiver Requirements and Enhancements for Maintenance and Repair
3- Jul-97	1.6A	Enhancements to Maintenance and Repair for U S WEST Public Services
23- Aug-97	1.7	Add Flow Through for Central POTS "as is" with Enhanced Firm Order Manager, Administration, and Order Functions
26- Sep-97	1.7A	Broad Vision and Oracle Upgrades plus Service Availability Enhancements
4- Oct-97	1.7A1	Broad Vision Upgrade
15- Nov-97	2.0	Major Enhancements to Add Design Services and Improve Trouble Report Submission Process
9-Dec-97		Production Hardware Upgrade
26-Dec-97	2.1	Electronic Data Interface (EDI) Prototype with Enhanced Firm Order Manager for EDI
20-Feb-98	2.1.1	Integration of Firm Order Managers
6-Mar-98	2.1.1A	UNIX Configuration Modifications
3-Apr-98	3.0	EDI – TN Selection – TN Cancel – Appointment Selection – Appointment Cancel Maintenance and Repair Enhancements Firm Order Manager Enhancements for EDI EDI Conversion As Is Flow-Through TN and Appointment Return Design Services and EDI Change Requests CSR Enhancements

Date Deployed	IMA Release	Brief Description
26-June-98	3.1	EDI CSR – Facility Availability (FAQ) – Address Validation (AVQ) – Directory Listings – PBX using POTS – Loop – Loop with Number Portability – Number Portability (INP/LNP) – Service Availability Query (SAQ) – Service Order Inquires Flow-Through for Conversion As Specified for Central M&R Line Record Validation of RSID/MCN
25-Sept-98	3.2	EDI – Private Line GUI – Store and Retrieve LSR – Complete Order Summary Screen – Number Portability – Descriptive Address Enhancements (as implemented in EDI) – Supplemental Processing – Directory Listing Order Enhancements – TN Selection on Phase II GUI – Appointment Scheduling Phase II GUI – POTS Migration Phase II GUI (including SAQ) EDI/GUI – Unbundled Analog Line Side Switch Port – ISDN - BRI Non-Design – Performance Improvements – Y2K Compliance for IMA Code – SAQ Exceptions from Release 3.1 – AVQ Exceptions from Release 3.1 – Directory Advertising Check – Ties Between Pre-Order and Order – Enhance FOM Errors and Rejects – RMBK on Address Validation – CSR Management – Hunting – LSR Locking

Date Deployed	IMA Release	Brief Description
		Flow Through – Flow Through for Conversion as Specified for Eastern and Western – Flow Through Conversion As Is for Western Maintenance and Repair – Additional Trouble Information – Text Messaging
12-Dec-98	3.3	EDI – Centrex Analog Non-Design Line Order GUI – POTS PBX for GUI – Browser Compatibility EDI/GUI – Y2K Code Remediation – Changes/Rules DSR, DSCR, DL – Expand FID – Digital Switch Port Unbundled ISDN – Duplicate CSR Resolution – Private Line Retrieval of CSR by Circuit ID – Order Dates and Order Numbers on CSR – Product Table Integration – Multi Workgroup Status for FOM – Partial Migration Flag – FAQ – CFA Validation – Manual Jeopardy – Flag LSRs having pending SO in SOP – Reject LSR not Matching USW CSR – LSR Conf. Edit Fields – HID Field Needs to be Added to LSR – Reorganization of FOC I-Chart – Allow Ranges on Ported Numbers – AN Needs to Repeat on FOC Completion Flow Through – Flow Through Add/Delete Lines with Directory Listings for All Regions – Flow Through Conversion As Is to One Order for Central Maintenance and Repair – Feature Verification

Service Order Activation Request (SOAR)

An EDI Interface from U S WEST

Version 3.3 Disclosure Document

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Business Training Schedule
as of
March 25, 1998

Date	Where	Topic
04/13/99	Minneapolis	Facility Based Listing
04/14/99	Minneapolis	Facility Based Listing

Training Business Course Agendas

Included below are the course agendas currently posted on the IRRG.

Basic Exchange Services:

Basic Resale: Residence and Business Product Training Agenda

Business Training | IMA Training

I. Welcome to Training

- Housekeeping
- Expectations

II. Review Agenda

III. Tools for Resale

- Information Sources and Training Classes
- Helpful URL's and Telephone Numbers to Call
- SAG or FAM
- ICONN database and LERG
- Public DMP

IV. Network Neighborhood

V. Central Office Types and Regional Boundaries

VI. Products that are Resellable and Not Resellable

- Custom Calling Features
  Call Waiting
  Threeway Calling
  Speed Calling 8 & 30
  Call Transfer
  Intracall
  Custom Ringing
  Call Forward Variable
  Directed Call Pickup
  Hot Line Warm Line
- Class Features
  Caller ID
  Call Waiting ID
  Call Rejection
  Continuous Redial
  Prioity Call
  Call Trace
  Last Call Return
  Selective Call Fowarding
  Feature Interaction
  User Instructions
- Call Fowarding All Types
  Call Forward Busy
  Call Forward Don't Answer
  Intraoffice Overflow
  Call Forward Busy and Don't Answer
  Call Forward Variable
  Selective Call Forwarding
  Remote Access Forwarding
  Scheduled Forwarding

Basic Exchange Services (continued):

Scheduled Forwarding
- AIN Advanced Intelligent Network Features

Lab Description and Lab Hours
Non Standard Repair Process
Do Not Disturb
Scheduled Forwarding
Remote Access Forwarding
Call Curfew
Dial Lock
Continuous Redial Deluxe for 5ESS
I Called
No Soliciation Service
- Pay Per Use Features and Blocking Job Aid
- All Feature Interactions
- User Instructions

VII. Miscellaneous Products

- Feature Packages

Hunting
Intercept or Transfer of Calls
Dual Service
Toll Blocking
800/888 ServiceLine
Stand By Lines
Market Expansion Lines
Custom Number Service
Voice Messaging
Wire Maintenance
Telephone Assistance Plans
CPE Process
Annoyance Call Handling
Operator Services
Optional Calling Plans
Suspend and Restore (Vacation Service)

VIII. Ordering Process Overview

- Order Flow Diagram
- Escalation Process
- CSR Examples
- FOC example

IX. Repair Tools

- Telephone Numbers to Call
- Scripts to Telephone Numbers
- Troubleshooting Tips to Common Service Problems
- Trouble Codes for IMA
- Glossary of Telecommunications Terms

X. Wrap up

Last Update: January 18, 1999

Facility Based Listing

Listings- Facility Based
Listing Process Overview
Listing Definitions - Caption, Straight Line, Straight Line with Indents
Types of Listings, i.e. Cross Reference, Alternate Call, 800/888, etc.
Listing Rules, Formats, and Requirements
Interpreting CSR - Listing Section
OBF Directory Forms - DSR, DL, DSCR
Listing Scenarios

Last Update: February 23, 1999

USWEST
Carrier Division

POTS LSR Order Process

8:00 - 9:45	Review required fields for LSR Resale Forms
9:45 - 10:00	Break
10:00 - 12 :00	Complete LSR forms for specific Resale Scenarios

Last Update: February 23, 1999

USWEST
Carrier Division

Complex Business Services

Day 1:

Centrex Products (Centrex 21, Centrex Plus, Centrex Prime, CCMS)
Analog PBX Trunking (Includes DID services)

Day 2:

Designed Services
Point-to-Point Analog and Digital Services
Multipoint Analog and Digital Services
Switchnet 56
DS1/DS3
Contingency Services -(SHARP, SHNS and Command-A-Link)

Day 3:

DSS (Digital SwitchedServices)
Single Line ISDN
PRI (Primary Rate Interface - also known as PRS - Primary Rate Service)

Last Update: February 23, 1999

USWEST
Carrier Division

Listings for Resellers

Listing Process Overview
Listing Definitions - Caption, Straight Line, Straight Line with Indents
Types of Listings, i.e. Cross Reference, Alternate Call, 800/888, etc.
Listing Rules, Formats, and Requirements
Interpreting CSR - Listing Section
OBF Directory Forms - DSR, DL, DSCR
Listing Scenarios

Last Update: February 23, 1999

USWEST
Carrier Division

Training Business Attendance 1997

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
01-Jul-97	1	1		3		Denver	Residence Products
09-Jul-97	1				25	Denver + 5	Co-Carrier Forecasting, Unbundled Loop
10-Jul-97	1				21	Denver + 3	LIS Trunking
18-Jul-97	1				30	Denver + 4	Unbundled Switch, Rebundle, E911
25-Jul-97	1				37	Denver + 8	Number Portability
31-Jul-97	1				33	Denver + 10	BFR, LIS Billing
08-Aug-97	1				32	Denver + 9	Collocation, Joint Use, AQCB
12-Aug-97	3	22	60			Denver	CLEC & Reseller Conference
15-Aug-97	1				33	Denver + 8	Resale
20-Aug-97	3	1		8		Denver	Simple Business Products
22-Aug-97	1				25	Denver + 5	Web Site, Network 21, Interium Number Portability
28-Aug-97	1	1		1		audio	Directory Listings for Facilities Based Carriers - Mid-Rivers
03-Sep-97	1	1		2	2	audio	Directory Listings for Facilities Based Carriers - OCI
04-Sep-97	1				45	Denver + 10	SS7, Data Base Services
04-Sep-97	1	1		9		audio	Directory Listings for Facilities Based Carriers - MCI
05-Sep-97	1	1		7	1	audio	Directory Listings for Facilities Based Carriers - Brooks
11-Sep-97	1				30	Denver + 6	CMDS Hosting, In-Region Message Distribution
11-Sep-97	1	1		2	1	Vancouver	Directory Listings for Facilities Based Carriers - at ELI
16-Sep-97	1	1		7	2	Denver	Directory Listings for Facilities Based Carriers - at ICG
18-Sep-97	1				33	Denver + 8	Unbundled Loop Issues, Contract Hand Off
18-Sep-97	1	1		10	1	audio	Directory Listings for Facilities Based Carriers - WorldCom
22-Sep-97	1				17	Denver + 3	Project Templates, Executive Reporting
22-Sep-97	3	26	130			Denver	CLEC & Reseller Conference
24-Sep-97	1	1		3	1	audio	Directory Listings for Facilities Based Carriers - Brooks
02-Oct-97	1				43	Denver + 11	Wholesale Legal Issues, IntraLATA Toll Issues
09-Oct-97	1				38	Denver + 7	NECA Interconnection Overview

Training Business Attendance 1997

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
10-Oct-97	1	1		2	2	audio	Directory Listings for Facilities Based Carriers - Cox Comm
16-Oct-97	1				47	Denver + 11	New Collocation Process
20-Oct-97	1				53	Denver + 9	USWC Interconnect Agreement, Version 6
22-Oct-97	1				25	Denver + 4	Centrex
27-Oct-97	3	5		10		Denver	Basic Business
28-Oct-97	1				36	Denver + 8	NPA/NXX Process
30-Oct-97	1	4		10		Denver	Business Listings
04-Nov-97	3	4		6		Denver	Residence Products
06-Nov-97	1				48	Denver + 10	Wholesale Operator Services
07-Nov-97	1				59	Denver + 8	USWC Interconnect Agreement, Version 6
07-Nov-97	1	4		11		Denver	Residence Listings
07-Nov-97	1	1		1		Portland	Directory Listings for Facilities Based Carriers - at OGI Telecom
11-Nov-97	1				33	Denver + 8	Interim Number Portability, Technical Solutions
13-Nov-97	1				39	Denver + 8	Wholesale Directory Assistance
20-Nov-97	1				27	Denver + 7	Colorado and Oregon Tariffs
21-Nov-97	1				42	audio	Meet Point Billing Process, Common Collocation with combining elements
04-Dec-97	1				58	Denver + 10	Collocations, LIS, Unbundling
04-Dec-97	1	1		1	1	audio	Directory Listings for Facilities Based Carriers - GTE
09-Dec-97	3	6		9		Denver	Basic Business
10-Dec-97	1				22	Denver + 7	Sonet Ring Service, Frame Relay
18-Dec-97	1				38	Denver + 7	E911, Location, Routing Service
TOTAL	59	84	190	102	980		

Training Business Attendance 1998

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
06-Jan-98	4				300		30 topics - Acct Team Training
06-Jan-98	1				9	Denver	Basic Residence (demo for account teams)
06-Jan-98	1				28	Denver + 5	Collocation
07-Jan-98	1				6	Denver	Complex Business (demo for account teams)
08-Jan-98	1				4	Denver	Complex Business (demo for account teams)
08-Jan-98	1				18	Denver + 6	LIS Traffic Admin Group
14-Jan-98	1	1		11		audio	Directory Listings for Facilities Based Carriers - MCI
15-Jan-98	1				28	Denver + 6	Listings Process
19-Jan-98	1	1		1	1	audio	Directory Listings for Facilities Based Carriers - Cox Comm AZ
22-Jan-98	1				21	Denver + 7	Quality Measurements
27-Jan-98	2	5		11		Phoenix	Complex Business, ISDN, Frame Relay, DSS
27-Jan-98	1	1		5	1	Vancouver	Directory Listings for Facilities Based Carriers - GST
05-Feb-98	1				17	Denver + 5	Line Information Data Base (LIBD)
12-Feb-98	1				40	Denver + 10	Post Sale Collocation Process
18-Feb-98	1				10	Denver + 6	Wireless E911
19-Feb-98	1				32	Denver + 5	Center Issues & Escalations
20-Feb-98	1				45	audio	Interim Number Portability
24-Feb-98	1	1		1	2	audio	Directory Listings for Facilities Based Carriers - Rainier Cable
24-Feb-98	1	4		8		Denver	Residence & Business Directory Listings
25-Feb-98	2	7		9		Denver	Complex Business - ISDN, Frame Relay, DSS, Analog Trunk, Centrex, Private Single Line ISDN
26-Feb-98	1				50	Denver + 8	Collocation, LIS, Unbundling
26-Feb-98	1	1		8	7	Denver	Directory Listings for Facilities Based Carriers - at AT&T
03-Mar-98	1				28	Denver + 6	Wireless Customers - Paging Contract
05-Mar-98	1				18	Denver + 6	Frame Relay Ordering
10-Mar-98	3	4		8		Minneapolis	Basic Business
19-Mar-98	1				26	Denver + 8	Costs for Interconnect Pricing (TELRIC)

Training Business Attendance 1998

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
24-Mar-98	1	1		1	2	audio	Directory Listings for Facilities Based Carriers - MTI
26-Mar-98	1				26	Denver + 7	CMDS Hosting/Non-ICS Settlements
26-Mar-98	1	1		1	1	audio	Directory Listings for Facilities Based Carriers - Frontier
01-Apr-98	3	58		125	25	Denver	CLEC & Reseller Conference
01-Apr-98	1	1		2	1	Portland	Directory Listings for Facilities Based Carriers - at ELI
07-Apr-98	1				15	Denver + 3	E911 Wireless
09-Apr-98	1				10	Denver + 5	LSR Ordering Guide & Tools Overview
14-Apr-98	1				12	Denver + 5	Type 2 Charge Applications for Wireless Customers
16-Apr-98	1	1		3	1	Spokane	Directory Listings for Facilities Based Carriers - Nextlink WA
23-Apr-98	1				20	Denver + 7	Customer Service Records
30-Apr-98	1				24	Denver + 7	Tools Overview
04-May-98	2	5		12		Seattle	Complex Business
07-May-98	1				35	Denver + 9	IMA CD ROM Demo
18-May-98	1	1		12	1	audio	Directory Listings for Facilities Based Carriers - Nextlink UT
21-May-98	1				52	Denver + 7	Local Number Portability
28-May-98	1				53	Denver + 11	NPS Split of 612/651 Numbering Plan
02-Jun-98	1	1		4		Minneapolis	ATI On-site Centrex Training
4-Jun-98	1				44	Denver + 8	CLEC Service Quality Measurements
11-Jun-98	1				9	Denver + 1	CLEC Service Quality Measurements
15-Jun-98	3			10		Denver	Basic Exchange Services for Resellers
17-Jun-98	1	4		5	3	Denver	Directory Listings for Facilities Based Carriers
18-Jun-98	1				18	Denver + 7	Centrex Plus: Description and AQCB
18-Jun-98	1	4		7	2	Denver	Directory Listings for Resellers - Business & Residence
23-Jun-98	1				20	audio	CLEC Service Quality Measurements
25-Jun-98	1				51	Denver + 10	Interconnect Matrix Web Site
1-Jul-98	1				32	audio	Major Network Outages Notifications

Training Business Attendance 1998

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
2-Jul-98	1				11	Denver + 5	Centrex Plus: Ordering with RG forms
7-Jul-98	1				16	Denver + 5	Wireless Customers - Paging Contract
8-Jul-98	1				12	audio	CTAS Customer Pilot Training
9-Jul-98	1				27	Denver	Overview of Poles, Ducts, Right-of-Ways, and Co-Location
10-Jul-98	1				45	Denver	Year 2000
14-Jul-98	2			7		Denver	Complex Business - DSO, Private Line, DS1, DS3
16-Jul-98	1	2		3	1	Denver	Directory Listings for Resellers - Business & Residence
16-Jul-98	1				34	Denver +	Year 2000
22-Jul-98	3				12	Denver	CTAS Account Team Training
22-Jul-98	1				4	Portland	Directory Listings for Resellers - Business & Residence
23-Jul-98	2	5		8	5	Portland	Directory Listings for Facilities Based Carriers
28-Jul-98	3				23	Denver	Customer Information Check
3-Aug-98	3				75	Denver	Basic Exchange Services for Resellers
4-Aug-98	2	6		15	1	Denver	Directory Listings for Facilities Based Carriers
6-Aug-98	1	3		5	2	Denver	Directory Listings for Resellers - Business & Residence
1-Sep-98							No classes held in September due to work stoppage
12-Oct-98	1	1		12	1	Denver +	Directory Listings for Facilities Based Carriers
20-Oct-98	2	1		6		Denver +	Directory Listings for Facilities Based Carriers
27-Oct-98	3					Denver +	CLEC/Reseller Training Seminar - IMA User Group Meeting - High Level Training Overview
18-Nov-98	1	11		14	1	Phoenix	Directory Listings for Resellers - Business & Residence
19-Nov-98	2	6		10	1	Phoenix	Directory Listings for Facilities Based Carriers
1-Dec-98	2	3		3		Denver	Directory Listings for Facilities Based Carriers
TOTAL	99	140	0	327	1419		

Training Business Attendance 1999

Date	Number of Days	LSP Staff				Location	
		LSPs	Demo	Training	Others		
4-Jan-99	1	2		2		Phoenix	Conference call on contracts and DS1/Resale
5-Jan-99	1				6	Denver	CTAS (Customer Terminal Access System)
11-Jan-99	1	2		2		Phoenix	Conference call on Private Line/Resale
19-Jan-99	1				65	Phoenix	Wholesale Experience
21-Jan-99	1	3		3	1	DNV/Phnx	Conference call on analog trunking, Basic Service
25-Jan-99	1	2		4		Denver	Conference call on DS1,Basic Service/Resale
26-Jan-99	1				30	Denver	Centrex Products training/ Resale
28-Jan-99	1	1		2		Denver	Conference call on DS1, Frame Relay/Resale
29-Jan-99	1	1		2		Phoenix	Conference call DMP, Private Line/Resale
1-Feb-99	1	3		3		Phoenix	Conference call on DS1, analog private line
3-Feb-99	1				40	Seattle	Wholesale Experience
5-Feb-99	1	3		4		Phoenix	Conference call on PBX trunking, Cntrx 21, CSR
9-Feb-99	1	3		3		Phoenix	Conference call on LSR information
9-Feb-99	2	9		15	3	Minneapolis	Directory Listings for Facilities-Based Carriers
11-Feb-99	1				14	DNV/other	Video conf call on Interconnection Compliance
12-Feb-99	1				6	Denver	Basic Service training
17-Feb-99	2				10	Minneapolis	Frame Relay training
24-Feb-99	1	3		5		Phoenix	Conference call on Cntrx 21, Public DMP, PBX trnks
26-Feb-99	1				7	Denver	Basic Service training
TOTAL	21	32	0	45	182		

Training Business Attendance

Notes:

A location of "Denver + #" indicates a video conference originating from Denver, and including a number of additional locations.

A location of audio indicates a telephone conference. Generally class materials have been sent to all participants prior to the conference call.

Product Database Index File as of 02-02-1999

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5. Record Order (IFE) - IA MN NE ND SD Bus Sys
6. CO - Overlay Res Bus
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8. Centrex 21 New Connect (IFE) - IA MN NE ND SD Bus Sys
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12. Mailbox Out Call Authorization - MBOA (BVMS) - All States Bus
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185. Business / Residence Qualifiers - All States Bus Res
186. TAS - Telephone Answering Service - PLT Intra CO Bus
187. Greetings (BVMS) - All States Bus
188. Community Interest (Calling Plans) - ND Bus Res
189. DS1 Intrastate EU to IC POT New Connect (IFE) - ID-N OR WA Bus Sys
190. CRIS Edits W - Z - IA MN NE ND SD Res Bus SOEC
191. SIC Assignment Federal Only - All States Bus
192. Business Daytime Connection - CO,ID-N,IA,MN,NE,ND,OR,SD Bus Res
193. DS1 Intrastate EU PT to PT New Connect (IFE) - ID-N OR WA Bus Sys
194. Computer Port Access Fax Lines - CO,ID,MT,NM,UT Bus
195. PLT Intra Telephone Answering Service - CO,NM P&S
196. Call Routing To Number (BVMS) - All States Bus
197. Grandparented Products (CCMS) - All States Bus
198. Additional Message Capacity-50-Service Order Examples-DID-SOPS (BVMS) - All States Bus
199. PLTInterstate Synchronous Service Transport - All States P&S
200. DSS Trunk Advanced (IFE) - ID-N OR WA Bus Sys
201. Term Loop Methods - ID-N P&S
202. Centrex Plus - Optional Features - All States PNS
203. Additional Message Capacity-50-Service Order Examples-MDS-SOPS (BVMS) All States Bus
204. Network Forwarding Features (BVMS) - All States Bus
205. DSS Trunk Basic (IFE) - ID-N OR WA Bus Sys
206. Attachment 5 - BGS/FED, Characters 6 Thru 11
207. Exchange Line New Connect (IFE) - ID-N OR WA Bus Sys

208. Additional Message Capacity-100-Service Order Examples-MDS-SOPS (BVMS) - All States Bus
209. Access and Navigation (PACT) - All States Res Bus
210. Public Response Calling Service - MN,NE Bus
211. Prime Saver/Contract Toll - CO OR SD UT WA P&S
212. CRIS Edits S - V - IA MN NE ND SD Res Bus SOEC
213. Attachment 1 - Mechanized Account Assignment
214. CallCurfew (CCS) - All States Res
215. Exchange Line Change Order Add Line (IFE) - ID-N OR WA Bus Sys
216. Dial Lock (CCS) - All States Bus Res
217. Priority Installation - IA Bus
218. State & Local Gov't SIC Codes - All States Bus
219. Centrex 21 DMS100 ISDN - AZ CO ID MN ND NE OR UT WY P&S
220. Attachment 10 - Edits
221. Attachment 11 - Market Unit ID Function Matrix
222. Standard Features (CCMS) - All States Bus
223. Exchange Line Change Order Change PIC Code (IFE) - ID-N OR WA Bus Sys
224. Centrex-Other Centron New Connect (IFE) - AZ CO ID MT NM UT WY Bus Sys
225. Listen Only Mailbox (BVMS) - AZ,CO,IA,MN,NE,NM,OR,UT,WA Bus
226. Centrex Prime ISDN 5ESS - All States P&S
227. Appendix A Job Aids (IFE) - All States Bus Sys
228. Exchange Line T Order (IFE) - ID-N OR WA Bus Sys
229. Centrex-Other Centron Change Order (IFE) - AZ CO ID MT NM UT WY Bus Sys
230. U S WEST Toll Stimulation Radio Advertisement (Promotion) - CO IA ID-S MT SD OR WA Res
231. Centron Product Grandparenting - All States P&S
232. Exchange Line F Order (IFE) - ID-N OR WA Bus Sys
233. Appendix B CPC Processed Order FIDs Job Aids (IFE) - All States Bus Sys
234. Attachment 9 - ICS Characters 6 - 11 MCN Identifiers
235. TYA & CSG Assignment - IA MN NE ND SD Bus
236. Call Manager Connection - All States Bus
237. Centrex-Other Centron T Order (IFE) - AZ CO ID MT NM UT WY Bus Sys
238. U S WEST Toll Stimulation TV Advertisement (Promotion) - All States Res
239. Route-A-Call Package - All States Except ID-N Bus
240. Route to Other Number (BVMS) - All States Bus
241. Exchange Line Disconnect (IFE) - ID-N OR WA Bus Sys
242. Attachment 7 - BGS/FED Alphabetical Listings
243. SIC Federal Agencies List - All States Bus
244. Stand-By Line - All States Bus
245. Watsaver (Calling Plans) - OR Res Bus
246. Message Notification Res-Bus Comparison (BVMS/VMS) - All States Res Bus
247. Centrex-Other Centron F Order (IFE) - AZ CO ID MT NM UT WY Bus Sys
248. AQCB User Guide - All States Bus
249. Hunting Arrangements (IFE) - ID-N OR WA Bus Sys
250. Center for Customer Service (Telephone Numbers) - All States Bus Coll

251. Product Description (CCMS) - All States Bus
252. Itemization of Billed Services - All States Res Bus
253. Intracall / Home Intercom (CCS) - All States Res Bus
254. Centrex-Other Centron Disconnect (IFE) - AZ CO ID MT NM UT WY Bus Sys
255. Rates and Charges (LLD-USW) - All States Bus Res
256. Disconnect Service - All States Bus Coll
257. MEL Interstate New Connect (IFE) - ID-N OR WA Bus Sys
258. Dial Tone Line - UT Res
259. Centrex Plus Change Order Install Line (IFE) - AZ CO ID MT NM UT WY Bus Sys
260. Rates (Line) - MN Bus
261. Call Waiting (CCS) - All States Res Bus
262. Local Usage Option Svc - ID,OR,WA Res
263. MEL Local New Connect (IFE) - ID-N OR WA Bus Sys
264. Attachment 8 - BGS/FED Numerical Listing
265. Centrex Plus Change Order Install Line and Add Location (IFE) - AZ CO ID MT NM UT WY Bus Sys
266. 800 Call Transfer (CCMS) - All States Bus
267. MEL Local Change CFN# (IFE) - ID-N OR WA Bus Sys
268. Hot Line / Warm Line (CCS) - All States Res Bus
269. Charge Application - IA,MN,NE,ND,SD Res
270. Held Bills - All States Bus Coll
271. Centrex 21 New Connect (IFE) - AZ CO ID MT NM UT WY Bus Sys
272. Service Station Lines - AZ, CO, MT, UT, WY Bus
273. Optional Features (CCMS) - All States Bus
274. Parent Teacher Exchange (BVMS) - AZ,CO,NE,OR,UT,WA Bus
275. Attachment 4 - FCC Reporting Characters 1 - 3
276. PLT-Intrast VG33 - IA,MN P&S
277. Private Line Interstate New Connect (IFE) - ID-N OR WA Bus Sys
278. Reports - Individual (PACT) - All States Res Bus
279. Centrex Plus - Standard Features - All States PNS
280. Centrex 21 Change Order Convert to Centrex 21 (IFE) - AZ CO ID MT NM UT WY Bus Sys
281. PACT Security Level Request Form Job Aid (PACT) - All States Res Bus
282. Centrex-Other Centron New Connect (IFE) - ID-N OR WA Bus Sys
283. National Expansion Expedite Charges - All States P&S
284. Private Line Intrastate New Connect (IFE) - ID-N OR WA Bus Sys
285. Call Routing (BVMS) - All States Bus
286. Voice Messaging (VMS) - All States Res
287. DID Trunk Designed New Connect (IFE) - AZ CO ID MT NM UT WY Bus Sys
288. Reports - Organizational (PACT) - All States Res Bus
289. Orders (Orders/FIDS) - IA MN NE ND SD Bus
290. Centrex-Other Centron Change Order Add Line (IFE) - ID-N OR WA Bus Sys
291. Availability (CCMS) - All States Bus
292. Private Line Intrastate Change Order Add CKL (IFE) - ID-N OR WA Bus Sys

293. CustomChoice - NE, WA Bus
294. Cost Recovery (LNP) - All States Bus Res BGS
295. Adjustments (PACT) - All States Res Bus
296. Due Dates (CCMS) - All States Bus
297. Scheduled Greetings-Service Order Examples-MDS-SOPS (BVMS) - All States Bus
298. Costs & USOCs (CCMS) - All States Bus
299. Gold Line (Calling Plans) - SD Bus Res
300. DID Trunk Designed Change Order Add Lines (IFE) - AZ CO ID MT NM UT WY Bus Sys
301. Extension Mailbox (VMS) - All States Res
302. Centrex Plus Change Order Add Line (IFE) - ID-N OR WA Bus Sys
303. Private Line Intrastate Disconnect (IFE) - ID-N OR WA Bus Sys
304. Message Notification (BVMS) - All States Bus
305. DID Trunk Designed Disconnect (IFE) - AZ CO ID MT NM UT WY Bus Sys
306. Scheduled Greetings-Service Order Examples-DID-SOPS (BVMS) - All States Bus
307. DS3 Restructured Pricing - PLT Intra WY Bus
308. Message Notification (VMS) - All States Res
309. Speed Calling (CCS) - All States Bus Res
310. International Blocking (LD-USW) - All States Bus Res
311. Job Aid - MCN Character Data Assignment Chart
312. Centrex 21 New Connect (IFE) - ID-N OR WA Bus Sys
313. Billing - All States Bus
314. Calling Card Services - U S WEST - All States Bus Res
315. Volume Calling Connection - All States Bus Res
316. Market Unit Identification - All States Bus
317. Attachment 3 - RG21-0002 Process
318. Home Business Line - AZ,CO,MN,NE,NM,OR,WA Bus
319. DS1 Interstate EU to IC POT New Connect (IFE) - AZ CO ID MT NM UT WY Bus Sys
320. Attachment 6 - BGS/FED Customer ID Request Form
321. Guestline - All States Bus
322. Extension Mailbox (BVMS) - All States Bus
323. Centrex 21 Convert to Centrex 21 (IFE) - ID-N OR WA Bus Sys
324. DS1 Interstate EU PT to PT New Connect (IFE) - AZ CO ID MT NM UT WY Bus Sys
325. Business Daytime Connection Plus - All States Except UT Bus Res
326. 12 FOR 10 PROMOTION
327. Transfer Mailbox (VMS) - All States Res
328. LADS - Local Area Data Service - PLT Intra ND Bus
329. DID Trunk New Connect (IFE) - ID-N OR WA Bus Sys
330. Product Interactions (CCMS) - All States Bus
331. Remote Access Forwarding & Scheduled Forwarding - ALL STATES - Bus
332. Start-Up Solutions - All States Bus

333. Provisioning w/Addl Line (VMS) - All States Res
334. Guaranteed Rate Calling Connection - All States Except OR, WA - P&S
335. Attachment 2 - Account Assignment Phases
336. DID Trunk Change Order Add Line (IFE) - ID-N OR WA Bus Sys
337. Three Way Calling (CCS) - All States Res Bus
338. Type of Account (TYA) - AZ,CO,ID-S,MT,NM,UT,WY Bus
339. Voice Mail Mailbox (BVMS) - All States Bus
340. Provisioning w/Custom Ring (VMS) - All States Res
341. AQCB Job Aids - All States Bus
342. DID Trunk Disconnect (IFE) - ID-N OR WA Bus Sys
343. Measured Service - All States Res Bus
344. DS1 Interstate EU to IC POT New Connect (IFE) - ID-N OR WA Bus Sys
345. Residential Buildings (Tenant Solutions) - All States Bus Res
346. Call Forwarding IntraOffice (CCS) - All States Res/Bus
347. Routing (Orders/FIDS) - IA MN NE ND SD Bus
348. Sunshine State Calling Plan - SD Res Bus
349. Class of Service - All States Res Bus
350. DS1 Interstate EU PT to PT New Connect (IFE) - ID-N OR WA Bus Sys
351. Glossary (BVMS) - All States Bus

Total Number of Documents: 351

U S WEST Tariff Directory

Netscape - [U S WEST Tariffs]

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Location: http://tariffs.uswest.com/

USWEST Tariff Directory

U S WEST | Carrier | Public Policy | Help

Welcome to the U S WEST Tariff Directory

This site provides access to U S WEST's pending and effective tariff documents. The word "tariff", as used on this site, is a generic term that applies to all tariff and tariff-like documents, e.g., tariffs, catalogs, and price schedules.

Tariff Activity Bulletin Board

Contains the individual filed and effective filings. Effective filings will remain on this Bulletin Board for approximately 45 days after they become effective.

Effective Tariff Library

Contains the effective tariff books for U S WEST's state and federal jurisdictions.

Adobe's "Acrobat Reader" is required for viewing tariffs. A free copy of the utility is available from Adobe.	If you have any questions concerning any of the products or services on this site, please contact your U S WEST customer sales and service representative.	If you have problems accessing the documents on this site, please send email.

Disclaimer

Due to the wide availability and use of diverse hardware and software applications, the formatting of tariff documents viewed on this site may vary from paper copies on file with state and federal commissions. In those cases, the tariffs on file with the respective commissions prevail.

Bulletin Board | Effective Tariffs | U S WEST | Carrier Services | Public Policy | Help

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Document Done

IMA Training Schedule
as of
March 25, 1999

Date	Where
04/09/99	Minneapolis
04/16/99	Denver
04/23/99	Phoenix

Training IMA Attendance - 1999

	CLEC Staff				
Date	**CLECs**	**Demo**	**Training**	**Others**	**Location**
18-Jan-99				11	Denver
21-Jan-99	1			8	Washington
26-Jan-99	8		18	7	Denver
1-Feb-99	1		13		Denver
3-Feb-99				10	Denver
Total	10		31	36	

Training IMA Attendance - 1998

	CLEC Staff				
Date	CLECs	Demo	Training	Others	Location
06-Jan-98	4		6		Denver
08-Jan-98		1		7	Denver
15-Jan-98		2			Minneapolis
20-Jan-98		15			Denver
26-Jan-98		8			Denver
30-Jan-98		8			Columbia, MD
05-Feb-98	4		12		Minneapolis
06-Feb-98	4		10	2	Minneapolis
13-Feb-98	2		2	1	Denver
16-Feb-98	1		6		Sioux Falls, SD
18-Feb-98		7			Helena, MT
19-Feb-98	1		6		Portland, OR
27-Feb-98	3		3	9	Denver
09-Mar-98				12	Denver
17-Mar-98	1	8			Denver
18-Mar-98	1		10		Denver
19-Mar-98	1		2		Portland, OR
20-Mar-98	6		10		Portland, OR
27-Mar-98	1		10		Denver
23-Apr-98		15			Bismarck, ND
25-Mar-98	1		2		Denver
02-Apr-98	5	11		10	Denver
03-Apr-98	15		23		Denver
10-Apr-98	1		13		Bend, OR
15-Apr-98				11	Minneapolis
28-Apr-98		15			Colorado Springs
29-Apr-98		15			Colorado Springs
01-May-98					Cedar Rapids, IA
07-May-98				3	Denver
08-May-98	2		7		Denver
11-May-98	4		4	1	Seattle
14-May-98	6		13		Minneapolis
15-May-98	4		8		Minneapolis
15-Jun-98	1		6		Sioux Falls, SD
18-Jun-98	3		3	3	Denver +
19-Jun-98	7		12	1	Denver
22-Jun-98	6		12	2	Denver +
23-Jun-98	4		18		Denver +
09-Jul-98	6		9		Helena, MT

Training IMA Attendance - 1998

	CLEC Staff				
Date	CLECs	Demo	Training	Others	Location
13-Jul-98	3		4	5	Denver
20-Jul-98				10	Denver
21-Jul-98				14	Denver
31-Jul-98	6		12	3	Phoenix, AZ
07-Aug-98	4		7		Denver
11-Aug-98	1		12	4	San Antonio
14-Aug-98				18	Denver
19-Aug-98	1		14		Lincoln, NE
24-Aug-98	4		8		Dallas, TX
26-Aug-98	1		8		Baltimore
01-Sep-98	1		10		Denver
15-Sep-98	2		2		Denver
16-Sep-98	4		13		Minneapolis
17-Sep-98	1		2		Minneapolis
18-Sep-98	4		10		Denver
21-Sep-98	4		14		Denver+
04-Oct-98		47			Denver
08-Oct-98	4		5		Denver
13-Oct-98				2	Denver
15-Oct-98	5		10		Des Moines
16-Oct-98	1		9		Sioux Falls, SD
16-Oct-98	3		4		Denver
29-Oct-98	15		26		Denver
04-Nov-98	9		19		Minneapolis
10-Nov-98	5		12		Seattle
20-Nov-98	8		12	3	Phoenix
33	67	105	147	56	

Training IMA Attendance - 1997

	CLEC Staff				
Date	CLECs	Demo	Training	Others	Location
16-May-97	1	2		1	Denver
20-May-97				17	Denver
21-May-97	1		19	4	Denver
30-May-97	1		6	2	MCI - Denver
06-Jun-97	2	8		10	Denver
17-Jun-97	1	5			Denver
18-Jun-97	1		8	3	Denver
23-Jun-97	1		16	1	Denver
24-Jun-97	1		9		Portland
25-Jun-97					Portland
26-Jun-97					Portland
27-Jun-97	1	10			Cedar Rapids
04-Jul-97		2			Phoenix
09-Jul-97		3			Denver
23-Jul-97	2		4	8	Denver
07-Aug-97				18	Denver
12-Aug-97	3		13	12	Denver
13-Aug-97	1	5		25	Denver
14-Aug-97					Denver
14-Aug-97	22	60			Denver
27-Aug-97				7	Denver
02-Sep-97		8			Denver
15-Sep-97				7	Denver
17-Sep-97				19	Denver
22-Sep-97	4		11	5	Denver
23-Sep-97	26	30		6	Denver
24-Sep-97		4			Denver
25-Sep-97	2		3		Denver
08-Oct-97		20			Denver
21-Oct-97	1	13		4	Denver
24-Oct-97				11	Denver
28-Oct-97				6	Denver
31-Oct-97	4		10	2	Denver
03-Nov-97	1		7	2	Denver
19-Nov-97		10			Boulder
21-Nov-97	3		6	1	Denver
02-Dec-97	1		1		Green Bay
03-Dec-97			5		Green Bay
04-Dec-97			12		Minneapolis

Training IMA Attendance - 1997

	CLEC Staff				
Date	CLECs	Demo	Training	Others	Location
08-Dec-97		15		2	Denver
08-Dec-97	3		10	1	Denver
15-Dec-97				7	SLC
16-Dec-97					SLC
18-Dec-97				8	Denver
Total	83	195	140	189	

IMA Announcements Pop-up Window

Netscape - [IMA Announcements]

Welcome to the new "IMA pop-up window"

This will be used to communicate system availability, IMA release implementation updates & schedules, and other periodic NEWS for our customers.

If you have any questions about this, please contact the IMA Help Desk at 1-888-796-9102

Message Announcing IMA Repair Hours

Effective immediately IMA Maintenance and Repair routine downtime has been aligned with normally scheduled Maintenance and Repair Legacy system downtime. This will provide maximum availability for IMA Maintenance and Repair users. Please refer to the schedule below for system availability. All times listed are in Mountain Standard Time unless otherwise stated. IMA pre-order and order supported hours are not affected by this change.

IMA is currently available during normally scheduled hours. Please refer to the schedule below.

	Monday - Friday	Saturday	Sunday
*IMA Maintenance and Repair Hours	2:15 - 23:15	2:15 - 22:00	7:00 - 23:15

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: Arizona LSP Inputs and Outputs

Confidential/Proprietary Designation Rationale:

This document contains breakdown of the number of CLECs in Arizona by CLEC. This information is considered proprietary because the number of LSRs issued by one CLEC would be of considerable value to other CLECs targeting the Arizona market.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

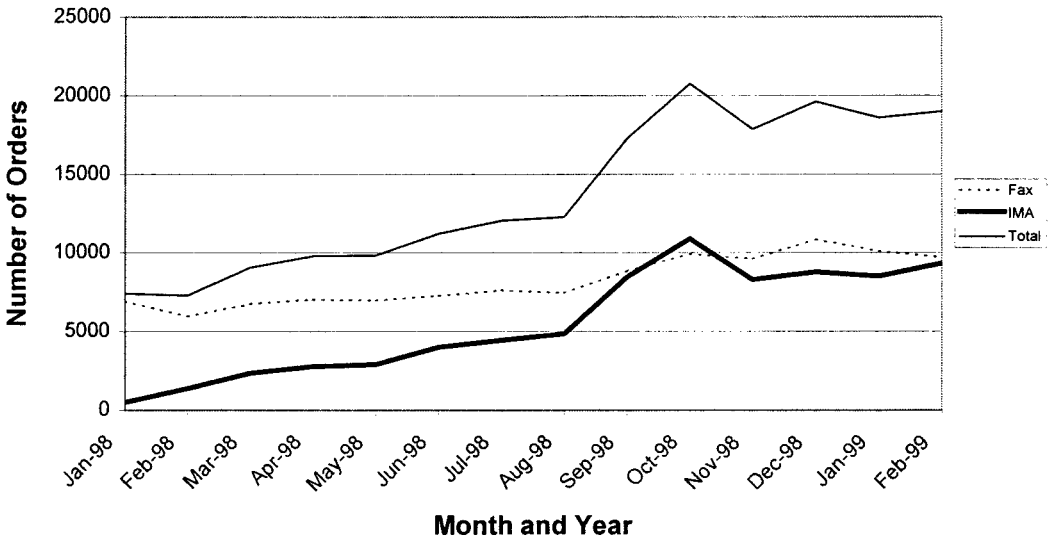
Docket: T-00000B-97-0238

Description/Title of Information: EXACT ASR Count by CLEC

Confidential/Proprietary Designation Rationale:

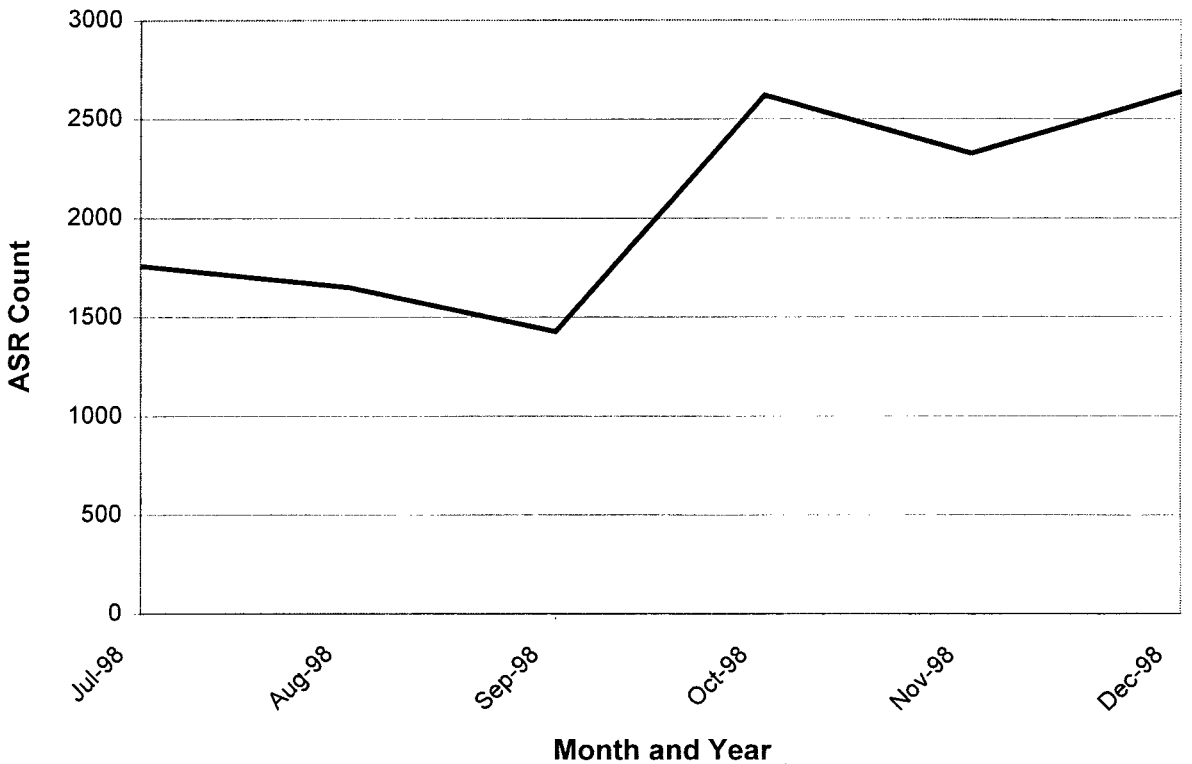
This Exhibit contains a breakdown of the number of Access Service Requests (ASRs) issued in Arizona, by CLEC. This information is considered proprietary because the number of ASRs issued by one CLEC would be of considerable value to other CLECs targeting the Arizona Market.

IMA vs. Fax LSRs Processed in ISC



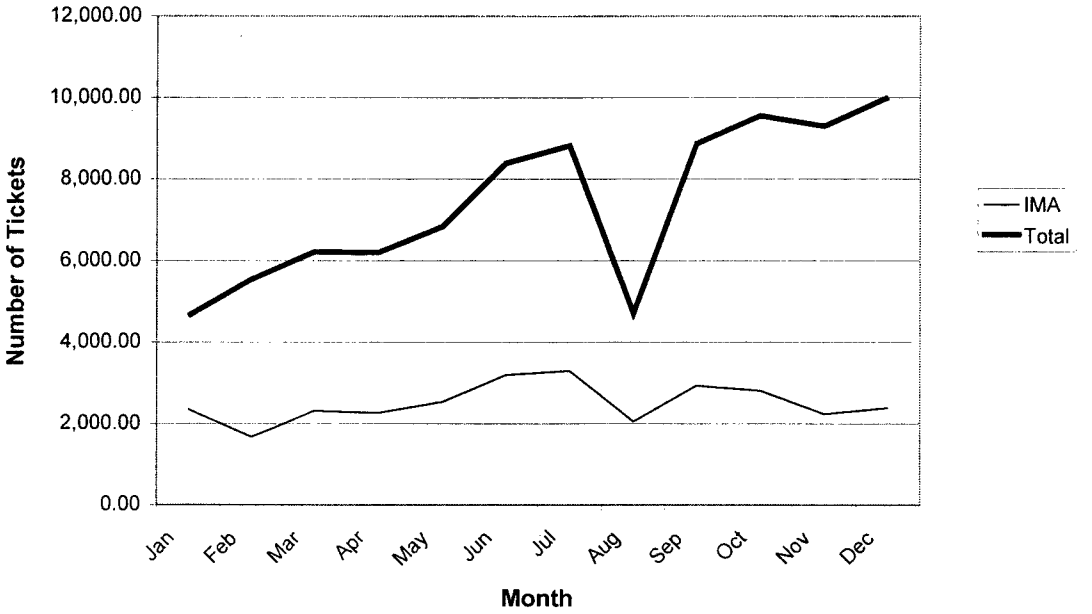
Month	Fax	IMA	Total
Jan-98	6903	486	7389
Feb-98	5932	1352	7284
Mar-98	6732	2319	9051
Apr-98	7024	2760	9784
May-98	6948	2876	9824
Jun-98	7244	3968	11212
Jul-98	7599	4436	12035
Aug-98	7420	4840	12260
Sep-98	8822	8438	17260
Oct-98	9889	10865	20754
Nov-98	9573	8264	17837
Dec-98	10819	8770	19589
Jan-99	10076	8482	18558
Feb-99	9675	9308	18983

CLEC ASR Count via EXACT for All States



Month	Repair
July-98	1758
August-98	1651
September-9	1426
October-98	2620
November-98	2326
December-98	2634

1998 Total Repair Count vs. IMA Repair Count by Month



Month	IMA	Total
Jan	2,352	4,645
Feb	1,672	5,539
Mar	2,310	6,210
Apr	2,262	6,197
May	2,534	6,830
Jun	3,199	8,386
Jul	3,300	8,815
Aug	2,048	4,709
Sep	2,939	8,862
Oct	2,811	9,557
Nov	2,238	9,297
Dec	2,390	9,997

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: IMA Repair Count USW Public Services by Month

Confidential/Proprietary Designation Rationale:

This exhibit contains a breakdown of the number of repair transactions issued by U S WEST Public Services. This information is considered proprietary because the number of payphone stations can be identified from the number of payphone repair transactions and that data would be a considerable value to CLECs targeting the Arizona market.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: BIT Tests-LIS Trunking

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: BIT Tests-Unbundled Switch

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: BIT Tests-Unbundled Switch Test

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: Unbundled Loop POI Only

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State:	Arizona
Docket:	T-00000B-97-0238
Description/Title of Information:	BIT Tests-Customer Service Record Management

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

CONFIDENTIAL/PROPRIETARY INFORMATION CLASSIFICATION RATIONALE

State: Arizona

Docket: T-00000B-97-0238

Description/Title of Information: BIT Tests-INP Tests

Confidential/Proprietary Designation Rationale:

These documents contain sensitive technical information that can be used by outside parties to damage U S WEST's network or operational support systems. These documents also contain competitive intellectual property that could unfairly disadvantage U S WEST and must be protected.

Acronym Glossary

AAQ	Appointment Availability Query
AAR	Appointment Availability Response
AASQ	Appointment Availability Selection Query
AASR	Appointment Availability Selection Response
ACCTS	Accounts
ACNA	Access Customer Name Abbreviation
AFT	APPTEXT Forward Translation
AFTS	A File Transfer System
AIN	Advanced Intelligent Network
ALOC	Access Location
AMA	Automatic Message Accounting
AMSC	Account Maintenance Support Center
ANA	Automatic Number Announcement
ANSI	American National Standards Institute
AOS	Automated Office Systems
API	Application Programm(er) Interface
APRIL	Automated Provisioning Infrastructure Layer
ASOG	Access Service Ordering Guideline
ASR	Access Service Request
ATIS	Alliance for Telecommunications Industry Solutions
ATM	Automatic Teller Machine
B&C	Billing & Collections
BAN	Billing Account Number
BIT	Business Integration Testing
BOC	Bell Operating Company
BOS	Billing Output Specification
BOSS	Business Operations Support System
BRI ISDN	Basic Rate ISDN
BTN	Billing Telephone Number
BVMS	Business Voice Messaging Service

CABS	Carrier Access Billing System
CARS	Customer Account Record System
CCMS	Customized Call Management Services
CCP	Certified Computing Professional
CCT-1	Customer Communications Technician - Level 1
CCT-D	Customer Communications Technician - Level D
CIC	Carrier Identification Code
CLASS	Custom Local Area Signaling Services
CLEC	Competitive Local Exchange Carrier
CLLI	Common Location Language Identifier
CMATE	A Workflow Management System
CMDS	Centralized Message Distribution System
CMIP	Common Management Information Protocol
CMISE	Common Management Information Service Element
CNUM	Customer Number Database
CO	Central Office
COACCT	A service order processor located in Colorado which serves Colorado and Wyoming
COM	Output Communications Device
Comet	Communication Exchange and Transmissions
CORAC	Central Office Resource Administration Center
COSMOS	Computer System for Mainframe Operations
COT	Coin Operated Telephone
CPS	Capacity Planning System
CPU	Central Processing Unit
CRA	Customer Routing Activity
CRIS	Customer Record Information System
CRT	Customized Routing Traffic
CSR	Customer Service Record
CST	Central Standard Time
CTQ	Cancel Transaction Query
CTR	Cancel Transaction Response

DA	Directory Assistance
DELIVER	A platform which enables users to access LMOS and WFA-C
DFC	Demand Forecast Center
DL	Digital Loopback
DMP	Directory of Methods and Procedures
DPE	Drop Port Equipment
DS	Data Specialist
DS0	Digital Signal Level 0
DSCR	Directory Service Caption Request
DSN	Dataset Name
DSR	Directory Service Request
DSS	Digital Switched Services
DUF	Daily Usage Feed
E911	Extended 911
EAS	Extended Area Service
EB	Electronic Bonding
EB-TA	Electronic Bonding-Trouble Administration
ECIC	Electronic Communications Implementation Committee
EDI	Electronic Data Interchange or Electronic Data Interface
EMI	Exchange Message Interface
EMR	Expanded Message Record
ET	Event Tracker
EXACT	Exchange Access Control Tracking
FACS	Facility Assignment and Control System
FAM	Feature Availability Matrix
FCC	Federal Communications Commission
FEPS	Facility and Equipment Planning System
FID	Field IDentifier
FMM	Flat/Measured/Message
FnS	Fetch 'n' Stuff
FOC	Firm Order Commitment

FOM	Firm Order Management
FOMS	Frames Operation Management System
FTP	File Transfer Protocol
GUI	Graphical User Interface
HTML	HyperText Markup Language
IA	Interactive Agent
IABS	Integrated (or Interactive) Access Billing System
ICB	Individual Case Basis
ICCP	Institute for Certification of Computing Professionals
ICONN	Interconnection Database
IFE	Integrated Front End
IMA	Interconnect Mediated Access
IMA D&T	IMA Deployment and Training
IMABS	IMA Business Server Repair
IMS	Information Management System
INP	Interim Number Portability
IRRG	Interconnect and Resale Resource Guide
IRTM	IMA Response Time Measurement
ISC	Interconnect Service Center
ISDN	Integrated Services Digital Networks
ISO	International Standards Organization
IT	Information Technology
IXC	IntereXchange Carrier
JIA	Joint Implementation Agreement
KB	Kilobytes
LCC	Line Class Code
LEC	Local Exchange Carrier
LERG	Local Exchange Routing Guide
LFACS	Loop (or Line) Facility Assignment Control System
LIDB	Line Information Data Base
LIS	Local Interconnection Service

LMOS	Loop Maintenance Operations System
LNO	Local Network Operation
LNP	Local Number Portability
LRAC	Load and Resource Administration Center
LSMS	Local Service Management System
LSNP	Loop Service with Number Portability
LSOG	Local Service Ordering Guideline
LSP	Local Service Provider
LSP I&D	LSP Implementation and Deployment
LSPP	Local Service Provider
LSR	Local Service Request
LSRC	Local Service Request Confirmation
LSS	Listing Services System
MB	Megabytes
MCR	Master Change Request
MEDIACC	MEDIated ACCess
MICS	MVS Integrated Control Facility
MIHR	Mechanized Installation History Reports
MLT	Mechanized Loop Testing
MPB	Meet Point Billing
MSA	Metropolitan Statistical Area
MTS	Mobile Telephone Switching
MVS	Mobile Virtual Storage
NC	Network Channel
NCI	Network Channel Interface
NDM	Network Data Mover
NMA	Network Maintenance Administration
NMACCT	New Mexico SOPs System
NPA	Number Plan Area
NPAC	Number Portability Administration Center
NXX	First three digits of a 7 digit telephone number

OBF	Ordering and Billing Forum
OCN	Optical Carrier Network
OCN	Operating Company Number
OIS	Operator Information Services
OSCAR	Optical Storage Communication Application Replacement
OSI	Open Systems Interconnectiom
OSS	Operations Support System(s)
PACT	Performance Analysis Compensation & Tracking
PBX	Private Branch eXchange
PCRM	Problem Change Request Management
PDF	Portable Document Format
PIC	Primary Interexchange Carrier
POI	Point of Interconnection
POTS	Plain Old Telephone Service
PPI	Planning/Provisioning Interface
PREMIS	PREMises Information System
PRI	Primary Rate ISDN
PRS	Primary Rate Service
PRV	Production Readiness Verification
PSP	Public Service Provider
PWS	Planning Workstation
RAO	Regional Accounting Office
RBOC	Regional Bell Operating Company
RCARS	Regional CARS System
RCHC	Repair Call Handling Center
RCID/ZCID	Reseller Customer ID
RCMAC	Recent Change Memory Administration Center
REACT	REACT Digital Access System
RMF	Resource Measurement Facility
ROMS	Regional Operation Management System
RSA	Repair Service Attendant

RSID	Reseller Identification Number
RSOLAR	Regional Service Order Logistics and Reference
RSS	Regional Subscription System
SAGA	Street Address Guide Area
SARTS	Switched Access Remote Testing System
SAT	Service Assurance Technician
SCS	Scheduling and Coordination System
SDC	Service Delivery Center
SGAT	Statement of Generally Available Terms
SHARP	Self-Healing Alternate Route Protection
SHNS	Self-Healing Network Service
SMF	System Management Facility
SML	Single/Multi-line
SMS	Service Management System
SOA	Service Order Administrator
SOAC	Service Order Analysis and Control
SOLAR	Service Order Logistics and Reference
SONAR	Service Order Negotiation And Retrieval
SOP	Service Order Processor
SOPAD	Service Order Processing And Distribution
SS7	Signaling System 7
SSL	Secure Socket Layer
STS	Synchronous Transport Signal
SWITCH	Switch Assignment and Inventory
SYAD	SYstem ADministrator
SYSJ	NDM Node
SYSK	NDM Node
T1M1	Operations Administration and Maintenance Sub-committee (M1) under the Technical Committee (T1)
TAG	Telephone Address Guide
TAXI	Terminal Access for IntereXchange Inquiry
TCP	Transmission Control Protocol

TCP/IP	Transmission Control Protocol / Internet Protocol (other wordings can be found)
TELIS/UNIX	TELecommunication Information System
TIRKS	Trunk Inventory Record Keeping System
TN	Telephone Number
TNAQ	Telephone Number Availability Query
TNAR	Telephone Number Availability Response
TNSQ	Telephone Number Availability Selection Query
TNSR	Telephone Number Availability Selection Response
TPM	Terminating Point Master
TR	Trouble Report
TUF	Translator of USOCS and FIDs
TUF	Translator of USOCs and FIDs
UDIT	Unbundled Dedicated Interoffice Transport
UHD	Unified Help Desk
UL	Unbundled Loop
UNE	Unbundled Network Element
URL	Universal Resource Locator
USO	Universal Service Order
USOC	Universal Service Order Code
USWC	U S WEST Communications
UTACCT	Utah SOPs System
VAN	Value Added Network
WATS	Wide Area Telephone Service
WFA	Work Force Administration
WFA/C	Work Force Administration/Control
WFA-DI	Work Force Administration – Dispatch In
WFA-DO	Work Force Administration - Dispatch Out
WTN	Working Telephone Number
WWW	World Wide Web
ZCID	CLEC Identification Number