BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

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

AT&T'S RESPONSE TO QWEST'S SUPPLEMENTATION OF THE RECORD ON CHECKLIST ITEM 11 – LOCAL NUMBER PORTABILITY

AT&T Communications of the Mountain States, Inc. and AT&T Local Services on behalf of TCG Phoenix, (collectively, "AT&T") submit the following Response to Qwest's Supplementation of the Record on Checklist Item 11 – Local Number Portability ("Supplementation").

1. It is premature to reach any conclusions regarding Qwest's provisioning of coordinated loop installations and cooperative testing.

In its Report, Staff expressed concerns regarding the absence of evidence in the record concerning whether Qwest's new disconnect delay process has actually been implemented and how it is working to resolve the CLEC's concerns.[1] Staff stated that it believes that such information is necessary in order for Staff to determine whether Qwest

[1] Report, p. 21.

complies with the requirements of Checklist Item 11.[2] In response, Qwest submitted evidence of the proposals it has submitted to the CMP process and performance data from July and August as evidence that its performance in providing LNP has improved.[3]

With respect to the process documents, as Qwest admits, the CLECs have not had an opportunity to fully address these process changes in the CMP process. Qwest claims that the LNP change process has been distributed to CLECs, discussed with CLECs and that PCAT documentation has been distributed to CLECs.[4] The CLECs received a Change Notification from Qwest in late May, after the purported CMP calls Qwest references. A further call on this change notification was held last Thursday. However, AT&T CMP representatives have not received the PCAT documentation Qwest attaches as Exhibit 2 to its Supplementation. The only PCAT information AT&T is aware of is that which currently resides on Qwest website relating to Local Number Portability.[5] It does not have the detail that is reflected in Exhibit 2. Thus, CMP discussions on this issue are still in progress and have not been finalized.

This highlights the difficulties the CLECs have encountered in dealing with Qwest's product documentation in CMP. Qwest conducts calls before the product information is fully available. It conducts separate calls on the change notifications, the technical publications and PCAT on the same subject, making it difficult to address the issues in a single forum. In addition, as noted by AT&T in response to certain CMP notifications filed by Qwest in Arizona on September 25, 2001, Qwest's technical publication and PCAT submissions to CMP do not conform to the Stipulation agreed to

---

[2] *Id.*
[3] Supplementation, pp. 2-4.
[4] Supplementation, p. 14.
[5] *See* Attachment A, PCAT on Local Number Portability from Qwest PCAT website.

by Qwest. Pursuant to that Stipulation, Qwest agreed to notify CLECs participating in the SGAT dockets of changes to Qwest technical publications, product catalogs and product documentation that resulted from the SGAT workshops. This notice was to be sent "when Qwest submits the documents to CICMP." In addition, Qwest agreed in the workshops that it would provide a "decoder ring" with these notices that would explain what has changed in the Qwest documents and the source of the change (the SGAT provision it relates to, the issue number it addresses, etc.). As relevant here, Qwest has not followed the terms of the Stipulation in circulating the documentation relating to the LNP disputed issues.

Because Qwest has not provided documentation according to the terms of the Stipulation, CLECs have not had a meaningful opportunity to review and respond to the changes Qwest has made to the documents distributed in CMP. Qwest agreed that such review was a condition for Qwest obtaining Section 271 approval for the relevant checklist item. Accordingly, until Qwest complies with the Stipulation and CLECs are assured that the technical publications, product catalogues and other documentation conforms to the commitments made by Qwest or the agreements reached in the workshop, Qwest is not in compliance with Checklist Item 11.

In addition, as with the loop performance issues raised by Qwest in its Supplementation on Checklist Item 4, it is likewise premature to reach any conclusions regarding Qwest's performance on LNP for several reasons.

First, Qwest's performance on provisioning LNP is an issue AT&T intends to raise in the data workshops scheduled in Arizona is this proceeding.

Second, as Qwest indicates in its Supplementation, PIDs have been developed in Arizona for the specific purpose of assessing Qwest's new disconnect process. However, AT&T notes that the PID will not fully measure the new disconnect process implemented by Qwest. In fact, OP-17 provides that the CLEC must notify Qwest by 8:00 p.m. on due date in order to be counted as a CLEC-requested delay, if not, that order is excluded from the PID measure. However, Qwest's change management notification indicates that CLECs have until noon of the day following the scheduled due date to notify Qwest to delay the disconnect. Thus, absent a notification by 8 p.m. of the due date, under the PID, Qwest will count that order as an exclusion and Qwest would not be measuring whether the disconnect was made on the day after the due date or not. Thus, the PID will not produce any evidence of whether Qwest's new process is working or not. AT&T is in the process of preparing a PID change request to address this concern.

In addition, as Qwest admits, these PIDs were agreed to in mid-July 2001. Qwest will not be producing data under the current LNP PIDs until November. Thereafter, data produced under these PID will be audited to determine whether Qwest is measuring what they say they are measuring and whether the mathematical calculations are being performed correctly. Then, the accuracy and reliability of Qwest's input data will need to be evaluated through the ROC OSS test and through commercial usage. Typically, the former is done through the OSS testing process. However, it does not appear that the new PIDs have been or will be tested as part of the Arizona test. Given the myriad of difficulties that have been uncovered during the audit of Qwest's processes to calculate other PID results and the discrepancies that exist between Qwest's performance data and

CLEC commercial usage data, this is a critical analysis that must be performed on Qwest's performance data before it can be relied upon.

In addition, Qwest presents results from its self-reported data for July and August, claiming that this data demonstrates that Qwest's new process is working. However, Qwest does not provide the data that supports these results, so there is no way to analyze this data to understand whether it is accurate and verifiable. Nor can it be determined whether this data even tests Qwest's new process. It is unclear how this data is being compiled and what it is measuring. It is unlikely to be PID-compliant since Qwest stated that it will not be reporting data under the PIDs until November. Nor can it be ascertained what input data was used for these results. Qwest's process for collecting input data must be tested, and the accuracy of the input data must be verified. It is only after this comparative evaluation is completed and Qwest has corrected any identified deficiencies, that Qwest's results can truly be considered to be audited and reliable.

Moreover, based upon the concerns raised above that the OP-17 PID is not accurately measuring Qwest's new process, Qwest's reported data for July and August must be analyzed to determine whether Qwest is properly measuring its new process and that orders that should be reviewed are not being improperly excluded.

In sum, Qwest's assertion that it has presented "powerful evidence" that its processes are adequate and working as promised cannot be substantiated. The processes have not been finalized in CMP, the results presented by Qwest are not supported by data that has been verified as accurately measuring Qwest's processes under its new LNP procedure. Accordingly, Qwest has failed to provide any accurate and verifiable supplemental evidence that can substantiate a change in the Staff's initial conclusion.

2. Qwest should be required to develop a fully automated solution.

In its Report, Staff states that Qwest should work on making available to CLECs a mechanized process to confirm that the port has occurred before disconnection takes place.[6] Staff further states that Qwest should be required to submit additional information on a proposed mechanized process to ensure that porting has occurred, and should give a timeframe with respect to its availability.[7]

In its Supplementation, Qwest opposes Staff recommendation. Qwest has presented no new evidence to support its contention that it should not be required to develop an automated solution. Instead, Qwest restates its worn arguments on this issue. As discussed in the workshop, BellSouth employs an automated process under which it removes the translations from its switch only after it receives a broadcast message from the number portability database (NPAC) that the port to the CLEC has occurred. This procedure has virtually eliminated any issues surrounding premature disconnection of the ILEC loop prior to the conversion of the customer to the CLEC-provided loop. This is the process that both AT&T and Cox employ when they port customers back to Qwest or to other CLECs and one which AT&T believes should ultimately be adopted by Qwest. Thus, in this region, Qwest would be the beneficiary of this automated process used by AT&T and Cox on port backs, while the CLECs would be forced to operate under Qwest's more manual process.

Qwest again throws up the red herring that this would be a very costly process, but they have yet to produce evidence of what that cost would be. They were asked last spring in the multistate 271 proceeding to produce a business plan and evidence of the

[6] Report, p. 21.
[7] *Id.*

cost to implement and they have yet to produce such a plan.[8] AT&T requested Qwest's cost estimates in the Colorado workshop.[9] Qwest took that as a take-back for the follow-up workshop and in the follow-up, Qwest stated they did not have any cost estimates to implement the Bell South solution.[10] Thus, Qwest's has presented no evidence to substantiate its claim that there is a significant cost associated with implementing this automated solution.

As AT&T stated in its Legal Brief, AT&T recommends that the mechanized process proposed by Qwest in Arizona should be implemented in Arizona on an interim basis. AT&T believes that the BellSouth/AT&T/Cox solution described above will ultimately be the best long-term solution to this concern. Qwest has presented no new evidence to show otherwise.

3. Qwest has failed to provide evidence that improper FOC rescissions and LSR rejections are not occurring.

In its Report, Staff proposes new language be added to Qwest's SGAT to provide CLEC assurance that Qwest will not reject CLEC LNP LSRs improperly.[11] In addition, Staff required Qwest to provide concrete evidence that improper FOC rescissions are not occurring and the CLEC LNP LSRs are only being rejected for reasons Qwest specifically specified by Qwest and agreed to by CLECs as legitimate reasons for the rejection of an LSR.[12]

AT&T agrees that Staff's proposed SGAT provision is reasonable and should be added to Qwest's SGAT. This language reflects the appropriate legal obligation. Qwest

---

[8] Multistate Workshop One Final Report, dated May 15, 2001, p. 10.
[9] CO Tr. (04/16/01), p. 127 (Attachment B).
[10] CO Tr. (05/22/01), p. 241 (Attachment C).
[11] Report, p. 23.
[12] Report, p. 23.

recently agreed to add a very similar addition to the Cox/Qwest Interconnection Agreement in Arizona.[13] Further, contrary to Qwest's assertion, it is only Qwest's performance under this legal obligation that will be tested in the OSS test. The test does not obviate the need for SGAT language to reflect its commitment.

Qwest claims that the LNP change process documentation has been distributed to CLECs, discussed with CLECs and that PCAT documentation has been distributed to CLECs.[14] As noted above, the CLECs have only received some documentation from Qwest. The CMP discussions are not complete. In addition, Qwest has not distributed any PCATs or technical publications that address Qwest's new policies on this issue. When such information has been distributed Qwest has not conformed to the Stipulation on the document content and distribution. Thus, to date, CLECs have not had a meaningful opportunity to review and respond to the changes Qwest has made to any documents submitted in the CMP process. Until Qwest complies with the Stipulation and CLECs are assured that the technical publications, product catalogues and other documentation conform to the commitments made by Qwest or the agreements reached in the workshop, Qwest is not in compliance with Checklist Item 11.

Finally, Qwest has not produced any evidence to respond to Staff's request that Qwest produce concrete evidence that improper FOC rescissions are not occurring and that the CLEC LNP LSRs are only being rejected for reasons specifically identified by Qwest and agreed to by CLECs as legitimate reasons for the rejection of an LSR. Accordingly, there is no basis to alter the Staff's initial conclusion on this issue. Qwest

---

[13] *See* Amendment for Local Number Portability Modifications to the Interconnection Agreement between Cox Arizona Telecom. L.L.C. and Qwest Corporation in the State of Arizona filed with the Arizona Corporation Commission on September 13, 2001 (Attachment D).
[14] Supplementation, p. 14.

claims that this issue will be tested as part of the OSS test. That remains to be seen and it will ultimately be Qwest's burden to demonstrate that the Arizona OSS test actually tested Qwest's new commitment under this disputed issue.

4. Qwest should be required to restore a customer disconnected during the LNP process in 4 business hours.

In its Report, Staff recommends 4 business hours as the interval for Qwest to reconnect a residential account that was prematurely disconnected due to a delay in number porting.[15] AT&T believes this interval is fair and appropriate for several reasons. As Qwest concedes, its average mean time to restore residential service is running in a range from 3 hours to 7 hours. The work required to restore a prematurely disconnected customer should be much simpler than what would be required on many 1FR customer repair calls, e.g., testing, trouble isolation, etc. As the Staff notes in its Report, the work required of Qwest in a restoration situation is to simply restore the translations in the switch.[16] This is simply a software change. There would be no dispatch required, no lift and lay, no trouble isolation. Thus, Staff's proposed 4-hour interval is reasonable.

In addition, in the recently filed amendment to the Cox/Qwest interconnection agreement, Qwest agreed to restore Cox customers that are prematurely disconnected during the LNP process in 4 hours.[17] Clearly, Qwest is committing to provide such restoration of service to Cox. To refuse to provide the same level of service to other CLECs would be discriminatory.

[15] Report, p. 25.
[16] Report, p. 24.
[17] Attachment D, p. 2.

Accordingly, Staff's 4-hour interval is appropriate and should be adopted.

Respectfully submitted this 9th day of October 2001.

AT&T COMMUNICATIONS OF THE MOUNTAIN STATES, INC. AND AT&T LOCAL SERVICES ON BEHALF OF TCG PHOENIX

By: Rebecca B. DeCook

Mary B. Tribby
Rebecca B. DeCook
AT&T Law Department
1875 Lawrence Street, Suite 1575
Denver, CO 80202
(303) 298-6357

Attachment A

Product Listing

Local Number Portability (LNP)

Product Description

Local Number Portability (LNP) is defined by the Telecommunications Act of 1996 as: "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers, without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."

LNP is also referred to as Service Provider Portability, because LNP enables end-users to retain the same telephone number(s) when the end-users change from one local service provider to another. The North American Numbering Council (NANC) recommended industry standards to the Federal Communications Commission (FCC) which adopted a further definition of Service Provider Portability allowing end-users to move within a Rate Center and retain their telephone number.

Service Provider Portability differs from Location Portability, which is the ability to keep the same telephone number when moving to a new location outside the rate center. It also differs from Service Portability, which is the ability to keep the same telephone number when subscribing to new services, e.g., from Plain Old Telephone Service (POTS) to Integrated Services Digital Network (ISDN). Neither Location Portability nor Service Portability have been defined or deployed within the industry. However, LNP does sometimes allow end-users to subscribe to new services when they move from one local service provider to another or when their service is moved from one switch to another. LNP also allows geographic portability within a rate center.

LNP fundamentally changes call processing in the public switched network and has been deployed in compliance with FCC and industry guidelines. LNP impacts all telecommunications providers, including interexchange carriers and wireless carriers as well as wireline local service providers.

This LNP Product Catalog primarily addresses the interactions between Qwest and CLECs as end-users choose a new local service provider and also addresses the call processing impacts for other telecommunications providers in an LNP environment.

If terms and conditions for LNP are included in the CLEC's Interconnection Agreement (IA), and those terms differ from those set forth in this Product Catalog, then the terms of the IA will prevail.

This Product Description section provides information about the various aspects of LNP, including the following topics:

- Background
- LNP Network Architecture Overview
- LRN Assignment
- Single LRN per LATA
- Service Restrictions
- LNP Query Services
- NPA/NXX Migration or Reassignment
- LNP Administration
- Managed Cuts

Background
Congress recognized the inability of end-users to retain their telephone numbers when changing local service providers, a circumstance that would hamper the development of local competition. To address this concern, the U. S. Congress added Section 251 (b)(2) to the Telecommunications Act of 1996 that requires all Local Exchange Carriers (LECs) to provide, to the extent technically feasible, Local Number Portability.

The FCC's First Report & Order in the Telephone Number Portability docket (CC-95-116), dated June 27, 1996, required that all LECs complete the deployment of a long-term service provider Local Number Portability method in the 100 largest Metropolitan Statistical Areas (MSAs) by December 31, 1998. The Commission established a separate LNP implementation schedule for Commercial Mobile Radio Service (CMRS) providers. All cellular, broadband Personal Communication Service (PCS) and covered Specialized Mobile Radio (SMR) carriers were required to have the capability of querying the appropriate number portability database systems in order to deliver calls from their network to ported numbers anywhere in the country by December 31, 1998. On February 9, 1999, the FCC granted the Cellular Telephone Industry Association's (CTIA) request for forbearance from CMRS LNP requirements. The new deadline for wireless LNP is November 24, 2002. However, this extension does not relieve the CMRS carriers from the querying responsibilities that became effective on December 31, 1998.

Under the network architecture and the North American Numbering Plan (NANP) which was in effect before the implementation of LNP, a telephone number functioned like a switch address. Each number was associated with an individual switch that was operated by a particular local telephone company in a specific geographical area. The area code, also referred to as the Numbering Plan Area (NPA), identified the general geographical area within which the switch provided service. The next three digits of the telephone number, referred to as Numeric Numbering Plan (NXX), also known as the Central Office Code identified the switch serving the end-user. The last 4 digits identified the specific telephone line serving the end-user's location.

Without number portability, if an end-user changed local telephone companies and received service from a different telephone company providing service from a different switch, the new provider typically assigned the end-user a new seven-digit telephone number. That new telephone number was directly associated with the new switch and the new telephone line. Without LNP technology, end-users were not able to retain their telephone number(s) when they changed local service providers.

Click here for information about Acronyms.

LNP Network Architecture Overview
The industry solution for long-term number portability is a Location Routing Number (LRN) architecture. Under the LRN architecture, each switch is assigned a unique 10 digit LRN that identifies the location of that switch. The first 6 digits identify an NPA and NXX code that is assigned to that switch and the last 4 digits are in line number format. It is important to note that the LRN is not a telephone number; it is merely the identifier of the switch to which a telephone number is ported. However, because the NPA and NXX identify a particular switch, the four-(4) digit line number may be an assigned working telephone number in that switch.

Each ported end-user's telephone number is matched in a regional Number Portability Administration Center (NPAC) database with the LRN for the switch that currently serves that telephone number. If the telephone number is not ported, the telephone number does not appear in the Local Service Management System (LSMS) number portability database and the call is routed to the switch that was originally assigned the NPA-NXX.

In an LNP environment, it can no longer be assumed that the NPA-NXX code holder actually serves the end-user. During call setup, an LNP database in the Signaling System 7 (SS7) network is queried to determine which switch actually serves the dialed number. If the number is ported, the Called Party Number (CdPN) field is moved into the Generic

Address Parameter (GAP) field, and the LRN information is overlaid in the CdPN field so the call can be routed to the proper terminating switch. The terminating switch then completes the call to the end-user based on the data contained in the GAP.

LRN Assignment
In order to assign an LRN, you must obtain an NPA-NXX from the North American Numbering Plan Administrator (NANPA) for each LNP capable switch.

The industry LRN Assignment Practices were developed by the Industry Numbering Committee (INC) and issued by the Alliance for Telecommunications Industry Solutions (ATIS) on July 13, 1998, and Technical Requirements No. 2 prepared April, 1999 by the T1S1.6 Working Group on Number Portability and issued by ATIS.

Specifically, the INC practice states that an NXX will not be assigned to a service provider for the sole purpose of establishing an LRN unless that service provider's switch or Point of Interconnection (POI) does not yet have an LRN for the Local Access Transport Area (LATA) where they intend to provide service". The T1S1.6 technical requirement state: "only one NPA-NXX is needed for the first six digits of an LRN per LATA to identify the switch".

Qwest had previously recommended an LRN be assigned for each rate center that you intend to serve. However, all carriers, including Qwest, have concerns regarding number conservation and in some cases assignment of new NPA-NXXs at a rate center level may not be necessary.

Therefore, to ensure conservation of numbering resources, and to comply with the INC practice, Qwest allows the ability to use one LRN to serve multiple rate center locations.

If you have already established an LRN for a particular rate center, you may continue to use that established LRN. However, if you have no need for NPA-NXX codes that have been assigned at a rate center level, you may notify Qwest of your desire to change from the LRN(s) assigned at a per rate center level to LRN(s) assigned at a per switch, per LATA level or for some lesser geographic area. Qwest will make appropriate network rearrangements to accommodate such change(s) and you may return the unused NPA-NXX codes to the number administrator.

In those instances where you have not requested and have no need for an NPA-NXX for a particular rate center, you may notify Qwest of your desire to establish an LRN per LATA, or for some lesser geographic area. This notification must occur as soon as reasonably possible, but no later than at the time you first arrange for your POI, Local Interconnection Service (LIS) trunking, etc.

Single LRN per Switch, per LATA
Single Location Routing Number (Single LRN) per switch, per LATA is an option that enables Qwest to route traffic to your network with a minimum of one LRN per switch, per LATA. This allows you to deploy one LRN per switch, per LATA or one LRN that serves multiple rate centers within the LATA. Qwest has provisions that support Single LRN per LATA. With these provisions, if the LRN is toll to the end office, the traffic will route over the access tandem to the CLEC. The routing of local traffic via the access tandem and toll trunks occurs even if you have direct LIS trunks in place.

Qwest also offers additional routing configurations that will route your toll LRN traffic to your existing local LIS trunks. In locations where LIS trunks are not available, your toll LRN traffic will be routed over the Qwest network via a tandem using existing interoffice facilities. Local LRN traffic can only be routed to a new or existing local LIS or SPOP trunk group. This solution will incorporate a 10-Digit routing scheme in Qwest switch translations. Your existing IA requirement for establishment of a POI and direct trunking to end offices remains in effect.

Single LRN can be deployed in the same network configuration with Single Point of Presence (SPOP) or LIS Jointly Provided Switched Access arrangements.

Service Restrictions
LNP Triggers are not expected to be placed on Service Codes or Service Access Codes (911, 411, 800, 866, 877, 888, 900, 500) so queries will not be performed on these call types. In addition, queries will not be performed in the originating switch for 0+, 0-, or 1+ calls routed to an InterExchange Carrier (IXC).

The porting of certain telephone numbers will not be provided when circumstances or services exist for the following:

- Across an NPA boundary in Minnesota only, based on Public Utilities Commission (PUC) mandate
- 555, 960 and 976 NXXs
- 500, 700, 800, 866, 877, 888, 900 services
- 911 service
- Other N11 codes, e.g., 411, 511, etc.
- Cellular/mobile numbers
- Qwest Public Coin or Semi-Public Coin
- Numbers used for mass calling events - Refer to North American Numbering Council (NANC). Once displayed, click on "LNPA Working Group", then select "Documents". When this page is displayed, click on "High Volume Call in Networks Report, 5/7/98".
- Reserved Numbers
    - Qwest's policy regarding the porting of reserved telephone numbers is to allow porting if the reserved numbers are identified on the end-user service record. Porting orders will not be taken on unassigned, previously owned, disconnected, disconnected following suspension for non-payment, or vacant telephone numbers.

LNP Query Services
Qwest provides Default Query Services whenever we receive unqueried calls from other telecommunications providers, including CLECs, Incumbent Local Exchange Carriers (ILECs), Interexchange Carriers (IXCs), or Wireless Service Providers (WSPs), which require a query in order to be terminated efficiently. Qwest also offers Direct Query access to the LNP database.

NPA/NXX Migration or Reassignment
When you plan to provide service for all assigned telephone numbers in a particular NPA/NXX, you should request reassignment of that NPA/NXX in the Local Exchange Routing Guide (LERG) in lieu of porting. In this situation NPA/NXX migration supports network efficiency and is the preferred industry method.

LNP Administration
There are seven regional databases that serve specific geographic areas. The Western Region database serves Qwest's 14-state local service area plus Alaska. A neutral third party, called the Local Number Portability Administrator (LNPA) administers these regional databases.

The FCC adopted the NANC recommendation that the administrative functions of the LNPA include all management tasks required to develop and administer the regional databases, called Number Portability Administration Centers (NPACs). NPAC responsibilities include:

- Administrative functions include all management tasks required to run the NPAC
- NPAC will work with the users to update data tables required to route calls for ported local numbers or required for administration
- NPAC is responsible for NPAC SMS log on administration, user access, data security, user notifications, and management and is the primary contact for users who encounter problems with NPAC system features
- The user support function should also provide the users with a central point of contact for reporting and resolution of NPAC problems
- The system support function will provide coordination/resolution of problems associated with system availability, communications and related capabilities

NPAC standard hours of business for LNP are 7:00 AM to 7:00 PM (CST / CDT), Monday through Friday
- NPAC personnel are available outside of the LNP hours of operation on a pager/call-out basis
- NPAC must meet the service level requirements as established by their respective LLCs
- NPAC will provide reports to regulatory bodies as required

Click here to refer to North American Numbering Council.

Managed Cuts
Managed Cuts are available for LNP in the following arrangements:

- Qwest Initiated Managed Cut
- CLEC Initiated Managed Cut
- LNP Coordinated Cut with Unbundled Loop

When a Qwest Initiated Managed Cut or CLEC Initiated Managed Cut is ordered, Qwest will initiate a telephone call and/or arrange a meeting with you to discuss detailed information regarding the Managed Cut.

Qwest Initiated Managed Cut
Qwest will initiate a Managed Cut when the 10-digit unconditional trigger or Line Side Attribute (LSA) cannot be set or when the port request for an account exceeds 2000 Telephone Numbers (TNs) or 200 trunks. Qwest Initiated Managed Cuts scheduled within the normal business hours are provided at no additional charge. If the CLEC requests a Frame Due Time (FDT) that is outside the normal business hours, the terms, conditions and prices of the LNP Managed Cut offering will apply.

CLEC Initiated Managed Cut
A CLEC Initiated Managed Cut is available under the "LNP Managed Cut offering. If the LNP Managed Cut offering is not included in your IA, contact your Service Manager to request an LNP Managed Cut amendment.

This offering allows you the ability to request coordination of a cut for LNP with a CLEC-provided loop (i.e., standalone LNP). LNP Managed Cuts are offered on a 24x7 basis. You may request any FDT when the mechanized 10-digit unconditional trigger can be set for the TNs being ported. However, if you request a coordinated cut for LNP with a CLEC-provided loop, even though the mechanized 10-digit unconditional trigger can be set, and/or if you request a coordinated cut outside normal business hours, the terms, conditions and prices of Qwest's LNP Managed Cut product offering will apply.

LNP Coordinated Cut with Unbundled Loop
A LNP Coordinated Cut with Unbundled Loop is available if you request to have your LNP cut coordinated with Qwest's Unbundled Loop product. LNP Coordinated Cuts with Unbundled Loop will follow the Unbundled Loop process and charges associated with the Unbundled Loop product will apply.

Technical Publications
Design requirements are specified in Technical Publication 77342.

Other technical publications can be found on NANC.

Availability
The FCC addressed specific requirements for providing number portability on an interim basis, known as Interim Number Portability (INP) as well as development and deployment of the long-term solution known as LNP. Qwest has deployed LNP in nearly every end office.

To determine LNP availability, refer to Network Disclosure.

Qwest has offered INP since 1996 utilizing Remote Call Forwarding, Direct Inward Dialing service and Directory Number Route Indexing. INP is only offered in those few locations where LNP is not deployed. You may continue to request INP in a non-LNP capable switch.

If you want LNP capability in a switch where Qwest has not deployed LNP, you may submit an LNP Bona Fide Request (BFR) letter to Qwest at any time. The LNP BFR process is separate from the BFR process for interconnect services, and no charges apply for the LNP BFR process.

Any certified CLEC with an approved IA may submit an LNP BFR letter to request LNP capability in a switch where LNP has not yet been deployed. The request must include the 11-digit CLLI code of each Qwest switch being requested to become LNP capable.

The following outlines what will take place upon Qwest's receipt of the LNP BFR letter:

- Confirm received letter within 10 business days
- Deployment dates communicated no later than 45 calendar days
- The timeline for conversion is within 180 days
- Qwest switches selected through the LNP BFR process will be posted on the network disclosure web site

When submitting an LNP BFR letter, please provide copies to:

- Lorna Dubose
  Qwest LNP Product Manager
  1801 California, Room 2360
  Denver, Co 80202
  Telephone Number 303-896-0227
  Fax number 303-896-9022
  ldubose@qwest.com
- A copy should also be sent to your Qwest Service Manager.

Back to Top

Pricing

Rates

Cost Recovery Charge
The FCC-approved charge for LNP cost recovery, contained in FCC Tariff 1, is to be assessed on Qwest end-user services including all resold lines and unbundled switch ports. The charge per line per month is $.43 with the following exceptions:

- The rate is applied five times per ISDN facility ($2.15 per month); and
- The rate is applied nine times per Private Branch Exchange (PBX) trunk ($3.87 per month)
- The rate will not be assessed on Lifeline Assistance Program end-users
- The rate will not be assessed on local loops that you purchase as UNEs under Section 251

Charges for the LNP Managed Cut Offering
LNP Managed Cuts are offered on a contract basis, and the prices are not included in FCC Tariff 1.

The charges you will incur for the LNP Managed Cut are dependent upon the FDT. The rates are based upon whether the request is within or outside Qwest's normal business hours. Qwest's normal business hours are 7:00 AM to 7:00 PM, local time Monday through Friday. The rate for LNP Managed Cuts requested during normal business hours is the standard rate. The rate for LNP Managed Cuts requested outside normal business hours, except for Sundays and Holidays, is the overtime rate, and the rate for Sundays and Holidays is the premium rate.

Charges for LNP Managed Cuts will be based upon the actual hours worked in ½ hour increments multiplied by the number of Qwest personnel actively participating in the cut.

In those situations where Qwest determines a need to manage a cut,

(e.g., the 10-digit unconditional trigger cannot be set) those LNP Managed Cuts would be scheduled during normal business hours and there would be no charge. The following matrix provides examples of when charges apply and when there is no charge.

Managed Cut Activity	**Mon-Fri 7 AM to 7 PM (During Normal Business Hours)**	**Mon-Fri 7 PM. to 7 AM., or Sat. Sun. & Holidays (Outside Normal Business Hours)**
CLEC requests an LNP Managed Cut	Charge	Charge
Qwest requires a Managed Cut for DID in the DMS10 and Ericsson switches	No Charge	Charge (CLEC requests the cut outside normal business hours)
Qwest recommends a Managed Cut for more than 2000 Telephone Numbers and/or more than 200 Trunks	No Charge	Charge (CLEC requests the cut outside normal business hours)

Qwest will schedule the appropriate number of employees for the cut, based upon information provided by you during the coordination meeting. If such information changes and requires modifications during the cut, and as a result, non-scheduled employees are required, you will be charged a three-hour minimum callout per each additional non-scheduled employee. If the cut is either cancelled, or a supplemental order is submitted within 24 hours of the negotiated FDT to change the Due Date (DD), you will be charged a three-hour minimum.

NOTE: Charges are rounded up. For example, if an LNP Managed Cut requires 2 hours and 10 minutes, the rates will apply for five ½ hour increments, per person.

Charges will be calculated based on actual ½ hours required for the cut, times the number of employees required for each ½ hour of the cut, multiplied by the appropriate rate based on the day and time of the cut. Managed Cuts during Qwest's normal business hours of 7:00 AM to 7:00 PM, Monday through Friday, will be charged at a Standard rate of $27.38 per ½ hour. If the FDT is outside Qwest's normal business hours on Monday through Saturday (excluding holidays), the charge will be at an Overtime rate of $35.43 per ½ hour. If the FDT is on a Sunday or a Holiday, the charge will be at a Premium rate of $43.49 per ½ hour.

Rates for LNP Managed Cuts

Managed Cut - Standard	$27.38 per ½ hour, per person
Managed Cut - Overtime	$35.43 per ½ hour, per person
Managed Cut - Premium	$43.49 per ½ hour, per person

Example: You and Qwest preplan a 10:00 PM cut on a Monday (outside normal business hours). The cut takes 1½ hours, and three Qwest employees participate. The applicable charges are as follows:

$35.43 times 3 (people) times 3 (1/2 hour increments) = $318.87

Tariffs, Regulations, and Policies
LNP cost recovery is in the federal jurisdiction. The end-user charge for LNP cost recovery and the rates for LNP Query Services were filed and approved under FCC Tariff 5, now FCC Tariff 1. LNP Managed Cuts are offered on an IA basis.

Qwest's LNP deployment and federal tariff filings were completed in compliance with orders resulting from CC Docket No. 95-116 and include,

but not limited to, the following:

- First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, RM 8535, *In the Matter of Telephone Number Portability*, FCC 96-286, released July 2, 1996, ("LNP Order")
- First Memorandum Opinion and Order on Reconsideration, CC Docket 95-116, RM 8535, *In the Matter of Telephone Number Portability*, FCC 97-74, released March 11, 1997 ("First Order")
- Second Report and Order, CC Docket No. 95-116, RM 8535, *In the Matter of Telephone Number Portability*, FCC 97-289, released August 18, 1997, ("Second Order")
- Third Report and Order, CC Docket No. 95-116, RM 8535, *In the Matter of Telephone Number Portability*, FCC 98-82, released May 12, 1998 ("Third Order")
- Common Carrier Bureau's Memorandum Opinion and Order, CC Docket No. 95-116, RM 8535, *In the Matter of Telephone Number Portability Cost Classification Proceeding*, DA 98-2534, released December 14, 1998, ("Cost Classification Order")
- Competitive Pricing Division's Order, CC Docket No. 95-116, RM 8535, *In the Matter of Telephone Number Portability Tariff Filings*, DA 99-128, released January 8, 1999, ("Filing Order")

Back to Top

Features/Benefits

Features	Benefits
End-users can retain their present telephone number	Easier to attract new end-users when they do not have to change their telephone number
Qwest has widespread deployment of LNP throughout its 14-state local service region	Widespread deployment gives CLECs more efficient market entry capabilities
Qwest's portability platform allows numbers to move from switch to switch within a rate center	Platform portability paves the way for future number conservation through number pooling

Back to Top

Applications

Please contact your Qwest Sales Executive for information.

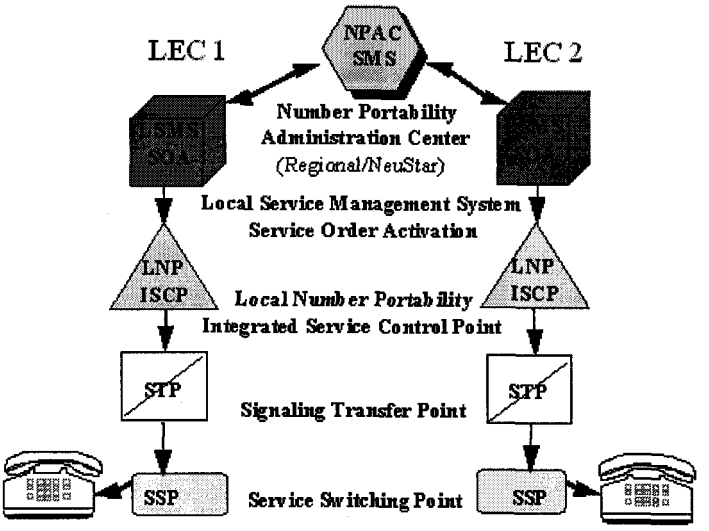
Back to Top

Implementation

Porting Process Overview
When an end-user changes from one LEC to another and wants to retain their telephone number(s), the CLEC who "wins" the end-user will "port" the end-user's number from the former CLEC. Coordinated order activity by the previous and new local service providers removes the end-user's telephone number from one provider's records and establishes it in the records of the other, establishing the new LRN for call routing purposes. This order activity is electronically transmitted (uploaded) communicating the new LRN to the administrator of the relevant regional database. This will pair the end-user's original telephone number with the LRN for the switch of the new CLEC, allowing the end-user to retain the original telephone number. The regional database administrator (NPAC) will then electronically transmit (download) LRN updates to CLEC-operated LSMS . Each CLEC will distribute this information to Service Control Points (SCPs) or Signal Transfer Points (STPs) that CLECs will use to store and process data for routing calls to ported numbers.

Following is a diagram of the basic network elements that are required for all LECs, including CLECs in an LNP environment:

LNP - Basic Network Element Diagram

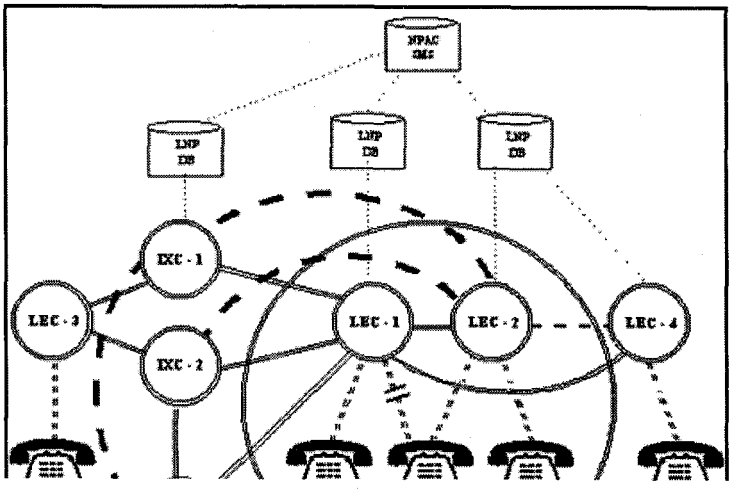


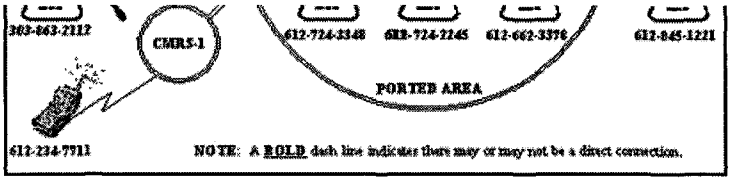
LNP Call Routing Descriptions
For you to route an interswitch telephone call to a location where number portability is available, you must determine the LRN for the switch that serves the terminating telephone number of the call. Once number portability is available for an NXX, you must "query" all interswitch calls to that NXX as appropriate, to determine whether the terminating end-user has ported the telephone number. You will accomplish this by sending a signal over the SS7 network to retrieve from a SCP or STP the LRN associated with the called telephone number.

The FCC has endorsed an "N minus one" (N-1) querying protocol. Under this protocol, if you are the N-1 CLEC, you will be responsible for the query, "where 'N" is the entity terminating the call to the end-user, or a network provider contracted by the entity to provide tandem access. Thus the N-1 CLEC (i.e. the last carrier before the terminating carrier) for a local call will usually be the billing owner of the call. The N-1 carrier for an interexchange call will usually be the calling end-user's IXC. If you are the N-1 CLEC you may perform your own querying, or you may arrange for other CLECs or third parties, or for Qwest to provide querying services on your behalf.

To better understand when queries are performed, download LNP Call *Flow Diagram.*

Following is a simplified trunking and SS7 diagram for connections within a ported area:





Click here to refer to NANC.

LRN Trunking, Signaling and Dialing Plans
An LRN looks just like a telephone number to a switch that is using the LRN for call routing purposes. It is very important to understand your signaling requirements and the result of the LERG inputs to set up your networks appropriately for LNP.

An LRN definition was provided to the industry via the NANC LNP Architecture and Administrative Plan (Issue 2, Revision 0, April 14, 1998):

> "LRNs are 10-Digit numbers that are assigned to the network switching elements (Central Office - Host and Remotes as required) for routing of calls in the network. The first six digits of the LRN will be one of the assigned NPA NXX of the switching element. The purpose and functionality of the last four digits of the LRN have not yet been defined but are passed across the network to the terminating switch."

This definition can potentially create some confusion regarding whether a 7 or 10-Digit LRN is to be transmitted between Service Providers for LNP calls. A 7, 10 and 7 or 10-Digit LRN transmit option will work based on how the participating Service Providers have set up their trunking and signaling network. It is vital that Service Providers on both ends of a Trunk Group understand what is being sent and received. It is also important to understand that the 7 or 10-Digits are counted from right to left.

Technically, an LRN in a signaling message looks just like a telephone number. The switch uses the LRN for routing purposes, and handles the LRN just like a called party telephone number. Therefore, the switch determines where to route a call by the NPA NXX included in the LRN. This routing information provided in Section 4.6 of the LERG determines where and how (signaling) that the NPA NXX should be routed. The LERG input includes the number of digits signaled, whether SS7 or Multi-Frequency (MF), on trunk groups that are used by the complex translations routing group to complete the translations for a particular switch.

Timing and Coordination of Changes in the LERG and Switch
Changes that are entered into the LERG, intended for the network, have the potential to affect the end-user's telephone service. Therefore when signaling changes are required, it is critical that the timing considerations for LERG changes be fully understood and adhered to, including the Maintenance Window Policy.

These timing considerations are identified in the Central Office Code Assignment Guidelines. These guidelines also discuss minimum timing requirements for LERG changes. In viewing these guidelines, you will be able to locate INC Document Number 95-0407-008, Title CO Code (NXX) Assignment Request & Confirmation Form, Part 3. Upon consideration of the timing guidelines, complete this form and submit your LERG changes.

Changes to LRNs also require this same type of planning and coordination, as well as coordination with the NPAC to perform routing changes and mass updates. Changes to LRNs may be caused by various reasons, such as switch replacement, reassignment of NPA-NXX codes from one service provider to another and/or NPA splits.

For CLECs, the interfacing company's Service Manager must be notified of the LERG updates, including 7 to 10-digit, LRN or other types of changes so they can be scheduled and coordinated with the Routing Translations

groups in both companies. As a result of this coordination and planning for the minimum elapsed time, as prescribed in the Industry Guidelines, the involved Service Providers will be able to make the necessary changes to their respective networks on the "EFF DTE" shown in the LERG without disruption of end-user telephone services.

Dialing Plans
The information in the previous section addresses 7-Digit vs. 10-Digit LRN Trunk Signaling in the signaling network. A signaling plan differs from a dialing plan for a local calling area. Signaling plans are determined by the individual service provider, whereas dialing plans are determined by the state utilities commission.

Signaling changes may be required as a result of state-ordered dialing plan changes. Changes to a signaling network resulting from dialing plan changes may require coordination between CLECs, and this coordination is addressed in the ATIS Guideline referenced above.

Click here to review Dialing Plans within Qwest territory.

Following are examples of some specific Dialing Plans:

Minneapolis, MN	**Seattle, WA**	**Denver, CO**
- Multiple NPAs in the Minneapolis Metropolitan Statistical Area (MSA); NPAs are geographically assigned to a particular municipality and there may be multiple NPAs within a rate center. - Commission ordered TN porting cannot occur between NPAs. - If dialing outside of your own NPA, 10-Digit dialing is mandatory but not necessarily a toll call.	- Multiple NPAs, not overlaid. - If dialing within your own NPA, 7 or 10-Digit dialing is permissive. - If dialing outside of your own NPA, 10-Digit dialing is mandatory but not necessarily a toll call.	- Multiple NPAs; this is an overlay network. - Porting between NPAs is permitted. - 10-Digit local dialing is mandatory in all cases.

Implementation Plan for Single LRN
When you are ready to deploy Single LRN, contact your Qwest Service Manager. The Qwest Service Manager will send you the NPA NXX Code Request Routing Form for completion. This form asks you to identify the appropriate trunk groups (using 2-6 codes) for Single LRN traffic.

Your Qwest Service Manager will schedule a Single LRN planning meeting to clarify where and how the Single LRN will be applied within a Local Calling Area (LCA) or LATA. If you have an existing LIS network, your current network configuration will be shared at this meeting. In this meeting, both you and Qwest personnel will jointly establish the intervals and implementation date for deployment.

Back to Top

Prerequisites
If you are a new CLEC and are ready to enter the interconnection business with Qwest or an existing CLEC wishing to amend your IA, you can find additional information in the Getting Started web page.

The following are actions that must be completed by you prior to submitting a Local Service Request (LSR) to port a telephone number:

- Provide after hours contact personnel, who will be responsible for general problem resolution
- Provide a valid FAX number that is operational Monday-Friday, 5 AM to 10 PM, Central Time Zone
- Test LSMS and the Service Order Administration (SOA) functions

Establish SS7 Requirements
Your SS7 network must adhere to the industry standards established for

LNP. Additionally, there are impacts to the Line Information Data Base (LIDB), Calling Name (CNAM), Custom Local Area Signaling Service (CLASS), and Inter-Switched Voice Messaging services as a result of the industry standards. It is critical that each company's SS7 technical experts review the requirements and your specific deployment plans as related to SS7 message queries. The use of an independent SS7 network and/or SS7 hub provider could introduce additional requirements. If there is another provider of SS7 service involved, they should be a part of the requirements review.

Establish E911 Requirements
All Carriers are required by state or municipality to connect to the E911 network. This includes specific trunking arrangements, default routing and data generation. The state or municipality should be contacted by the CLEC to determine the requirements for the metro area or state.

All carriers must adhere to the National Emergency Number Association (NENA) requirements for LNP. This requires that the Company ID be passed to the E911 database, along with the Service Provider Company ID and other data elements from the service order. There is a particular data structure that is to be followed along with specific function indicators (Unlock, Modify, etc.) that are to be used.

Determine Testing Requirements
If you wish to perform testing to ensure that your signaling, switching, databases, systems and processes are functioning properly prior to submitting LNP orders, you may want to contact your Qwest Sales or Service Manager.

When contacting Qwest, please provide information about your testing requirements:

- The serving area you plan to test within
- The switch(es) involved in the testing
- How many test numbers you need Qwest to establish and in what locations
- The timeframe you prefer to do the testing

Also, please provide as much information as possible about the type of testing you intend to perform. For example, are you planning to:

- Perform call processing tests only, to ensure that your network and signaling databases are capable of delivering calls to ported and/or non-ported numbers? (This type of testing may be applicable to wireless carriers and Interexchange Carriers (IXCs), as well as wireline Local Exchange Carriers (LECs.)
- Perform intra-company tests only, to ensure your switching, signaling and databases meet the LNP operational requirements and that you have the systems and processes in place to accommodate the porting of TNs?
- Perform end-to-end, inter-company testing that includes submitting LSRs to port test numbers between Qwest and your company?

Once you have provided your initial testing information to Qwest, your Sales or Service Manager will establish a meeting with you to further define your testing requirements, to identify the key personnel for conducting the test, from both your company and from Qwest, and to establish the testing a timeline. Additional meetings may need to occur prior to the testing, and may include identification of test scripts, if appropriate.

Qwest will initiate service orders to establish test accounts, based on your testing requirements, and will provide information about the test accounts, including the account name(s), telephone number(s), and due date of the new connect service order(s). If inter-company testing is required, critical dates will be jointly established and may include dates for:

- LSR exchange
- FOC exchange
- Porting of the TN(s)
- Disconnecting test account(s)

During inter-company testing, you will be responsible for:

- Ensuring the subscription is sent to the NPAC
- Verifying activity on subscriptions at the NPAC (i.e. T1 and T2 timers)
- Completing the provisioning on your switch for the test account (s)
- Sending the activation to the NPAC to port the TN(s) on the requested due date

Upon completion of intra-company testing, you will notify Qwest that the test accounts may be disconnected. For inter-company testing, you will need to disconnect the Qwest numbers from your switch and return them to Qwest, the original code holder. If test numbers have also been ported from your switch to Qwest, Qwest will need to disconnect the numbers and return them to you.

Provisioning - Single LRN per LATA
The provisioning process for Single LRN per LATA is outlined in the following steps:

- Contact your Qwest Service Manager with Single LRN request
- The Qwest Service Manager will explain the process and will supply the NPA/NXX Code Request Routing Form to you
- Provide the completed the NPA/NXX Code Request Routing Form to your Qwest Service Manager for distribution prior to the meeting
- The Qwest Service Manager will schedule and chair Qwest/CLEC meeting (including Qwest Routing Technical Managers) to review the proposed network configuration, gain clarification and establish jointly negotiated due dates
- Qwest internal groups will perform necessary internal work
- Translations are completed for your trunk groups (2-6 code) by an established jointly negotiated due date

Back to Top

Pre Ordering

The following actions must be completed prior to submitting a LSR to port a telephone number:

- Obtain Letter of Authorization (LOA) from the end-user to act as their agent to transition and provide ported number service.
- Review the end-user's Customer Service Record (CSR) verifying all numbers to be ported, including any numbers for alarm services, custom ring numbers or off premise extensions. Your request for port activity only addresses porting of telephone numbers.

Single LRN per Switch, per LATA
If you are establishing a new LIS network in a given LCA, you may order Local Interconnection Service trunking any time before the establishment of Single LRN per switch, per LATA functionality. Once all the new LIS trunking has been ordered and you have a confirmed DD, you will need to fill out the NPA/NXX Code Request Routing Form to identify the appropriate trunk groups (2-6 Codes) that Single LRN per switch per LATA traffic will be pointed to.

Click here for general information about Pre Ordering.

Back to Top

Ordering

Ordering standards are developed at the national Ordering and Billing Forum (OBF).

Complete LSR along with the following forms:

- EUI - End User Information
- NP - Number Portability Service or
- LSNP - Loop Service with Number Portability
- DSR - Directory Service Request

LNP orders are placed using a LSR.

To obtain these forms contact Telcordia.

The Interconnect Mediated Access (IMA) Reference Guide specifically details the information available for ordering functions.

Provisioning interval guidelines are found in the Service Interval Guide (SIG).

For information on completing forms, refer to Manual Ordering/Process Forms General Information.

Additional ordering guidelines can be found in the general Ordering information.

Hours of Operation
NPAC has defined their standard hours of business for LNP as 7:00 AM. to 7:00 PM, (CST/CDT), Monday through Friday. Non-business hours/days are defined as 7:01 PM to 6:59 AM Monday through Friday, and all day Saturday and Sunday. NPAC holidays include New Years Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Eve Day and Christmas Day.

Qwest's normal hours of business coincide with the established NPAC's standard hours of business. Normal hours of operation for activating subscription DD and Frame Due Time (DD/FDT), submitting orders to the NPAC, error resolution, cancellation, conflict setting, and resolution will be Monday through Friday during the NPAC standard hours of business. *Qwest's standard hours of operation for LNP are:*

Hours	States
7:00 AM to 7:00 PM Central Time	Iowa, Minnesota, Nebraska, North Dakota, South Dakota
7:00 AM to 7:00 PM Mountain Time	Arizona (during MST), Colorado, Idaho, Montana, New Mexico, Utah, Wyoming
7:00 AM to 7:00 PM Pacific Time	Arizona (during MDT), Oregon, Washington

Based on the above chart, by time zone, Qwest's hours of operation for the Interconnect Service Center (ISC) are 6 AM to 8 PM Mountain Time, Monday-Friday. Qwest also has staff available from 7 AM to 5 PM Mountain Time on Saturday to support the following functions:

Name/Group/Title	Telephone Number	Functions
Call Center Representatives	888-796-9087	• LSR/Order Status, Inquiries on Completion, Due Dates, FOCs, • Assisting with LSR Preparation • Resend FOCs/Rejects • Missed FOC Intervals, Due Date Expedites, Cut Overs, Out of Service, Emergency Cancels or Due Date Changes • Missed Due Dates • Feature Discrepancies

If you require any additional assistance, please contact your Service Manager directly. If you do not have the number of your Service Manager, the Call Center will contact them for you.

Directory Listings
You are responsible for contacting a listing service and establishing listings for your end-users.

Qwest has implemented unique non-OBF entries in the LSR ACT field. To ensure end-user listings are either retained or discontinued one of the following entries is required:

- An ACT entry of "Z" will retain the current listing(s)
- An ACT entry of "V" will discontinue listings associated with the port activity (all listings are removed)

If you wish to have Qwest listings retained, then the Directory Service Request (DSR) form should be forwarded to Qwest as follows:

- Qwest Listing Service System (LSS) FAX Number 503-242-1653
- Qwest LSS Contact Number 503-242-7822
- Qwest LSS Alternate Number 503-242-7856 or 503-242-7873

The DSR form is required and must be forwarded to the Qwest LSS if the ACT field on the LSR has an entry of "Z" and the listing(s) of the ported telephone number(s) is to be retained.

Supplemental Input
Supplemental input to an LSR to add number(s) will not be accepted. You will need to issue a new LSR for the additional number to be ported.

Supplemental input to change the NSP ID or the OSP ID will not be accepted. You will need to cancel the incorrect activity and issue a new LSR.

Due Date Changes
You must notify Qwest via LSR supplement or a call to the ISC if you require a DD change for your port activity. Notifications of DD changes should be made as soon as possible on the DD and prior to 8:00 PM Mountain Time. Late notification of DD changes will require that you call the ISC prior to 12:00 noon on the day after the DD (in the end-users' time zone) and issue a LSR supplement via IMA or IIS to confirm the request. Late DD change notifications after 12:00 noon the day after the DD, will require you to contact the Call Center Representative at 888-796-9087 to initiate an escalation ticket for these late changes.

Cancels
You must notify Qwest via LSR supplement or a call to the ISC if you require a cancel of the port activity. Notifications of DD cancels should be made as soon as possible on the DD and prior to 8:00 PM Mountain Time. Late notification of DD cancels will require that you call the ISC prior to 12:00 noon on the day after the DD (in the end-users time zone) and issue a LSR supplement via IMA or IIS to confirm the request. Late cancel notifications after 12:00 noon the day after the DD will require you to contact the Call Center Representative at 888-796-9087 to initiate an escalation ticket for these late cancels.

Managed Cuts

- **LNP Managed Cut Scheduling**
  Up-front planning and coordination with Qwest is required to establish the date and time for an LNP Managed Cut. All requests will be processed on a first come, first served basis and are subject to Qwest's ability to meet a reasonable demand. Qwest will coordinate with you for an agreed upon FDT and Firm Order Confirmation (FOC) prior to issuing the FOC. Generally the FOC date will not exceed the standard interval.

- **LSR Entries for LNP Managed Cuts**
  You may request an LNP Managed Cut by submitting an LSR and designating the order as a "Managed Cut" in the Remarks section of the LSR form. Specifically, LNP Managed Cuts require a notation in the Remarks and DFDT sections of the LSR, e.g.:

  Remarks = Managed Cut
  DFDT = Anytime 24x7

  When submitting an LSR in the IMA GUI or EDI, you must populate the Manual indicator field with the letter "Y".

  All negotiated requests must be scheduled on the LNP Operations schedule in 30-minute time slots.

- **CLEC Responsibilities** You will need to schedule the appropriate personnel for the negotiated FDT for the LNP Managed Cut. You are also responsible for NPAC coordination if a Managed Cut is scheduled outside the NPAC's normal business hours.

Ordering Process (Single LRN per Switch, per LATA)
For new LIS trunking arrangements, Qwest Service Delivery Coordinators (SDCs) receive an Access Service Request (ASR) from you. There are some changes in the ASR entries for Single LRN. The current ASR process normally requires a local NPA-NXX for a trunk group order, however for Single LRN per Switch, per LATA this is not required. You will submit the ASR with the following two entries:

- In the ASR the Remarks field will contain "Single LRN Routed Only - See NPA-NXX Code Request Routing Form".
- *On the Translations Questionnaire (TQ), the Remark will contain* "Single LRN and the NPA-NXX-XXXX (10-Digit LRN)" and the NPA NXX Field will remain blank.

Back to Top

Provisioning

General Reject Reasons are found in the general Ordering information.

There are some additional specific reasons why the LSR request for LNP may be rejected. To view those reasons, download LNP LSR Reject Reasons.

Standard Intervals for LNP Service Intervals for LNP are described below. These intervals include the time for FOC. Orders received after 7:00 PM (Mountain Time) are considered the next business day. The following service intervals have been established for LNP:

Product Type	Quantity of Telephone Numbers to Port	Interval (Intervals for LNP without unbundled loops)
Simple (1FR/1FB)	1 -5	3 Business days (includes FOC 24 hr. interval)
	6-50	4 Business days (includes FOC 24 hr. interval)
	51 or more	Project Basis
Complex (PBX trunks, ISDN, Centrex)	1-25	5 Business days (includes FOC 24 hr. interval)
	26 or more	Project Basis

For the Standard Interval Guide, please see the guidelines on the Qwest Wholesale Markets web site.

Listed below is an example of the steps taken in the port out process for 1-5 lines, simple, standard DD request. The steps for 6 or more lines or complex services will be the same, however the timing intervals will be based on standard intervals for the specific product type.

Step	Process	Result
1	CLEC completes sale to new customer, validates CSR and completes LSR forms	CLEC sends LSR to Qwest (Day 0)
2	Qwest receives LSR and processes request	Qwest provides FOC to CLEC and sends order. Subscription is created at NPAC. (Day 1)
3	CLEC receives FOC and sends create message to NPAC to match subscription activity	Qwest Proactive group calls CLEC if finds missing subscription activity, conflict or errors
4	Qwest sets 10 digit unconditional trigger no later than 11:59 PM the day before the DD. (Day 2)	10 digit trigger set (Day 2)
5	CLEC sends activation to NPAC to port number on DD/FDT. NPAC broadcast sent to all Service Providers. (Day 3)	Broadcast received, number is ported to CLEC. Qwest service order is completed. (Day 3)
6	Service Order completed	Data transmitted to E911 in daily batch file after service order completion
7	Disconnect and removal of switch translations is completed in Qwest switch no earlier than 11:59 PM the day after the DD	

LNP Proactive and Escalation Process for Failed Port
Qwest will place a call to you on LNP order activity if we find missing subscription activity, an error or conflict situation. This call will be placed up to 24 hours prior to the due date.

If you require manual concurrence of your subscription, contact the ISC prior to the scheduled port activity. You may contact the ISC up to 48 business hours prior to the scheduled DD/FDT to request a manual concurrence.

Failed Port Activities
If you have any problems during your port activity and determine the need to have the end-user restored on Qwest facilities, you must contact the Qwest ISC immediately and open an escalation ticket.

Any requests to cancel or withdraw a "port process" that are in progress will need to be addressed on an individual case basis. The New Service Provider (NSP) controls the port activation. Once the broadcast has been sent from the NPAC to all Service Providers and the subscription is "active"; the number has been ported to the NSP. At this point, Qwest, as the Old Service Provider (OSP), does not have control of the ported number and cannot change any part of the subscription in the NPAC. If you are having problems with the broadcast, Qwest will work cooperatively to assure the routing information is correct.

Qwest will require a supplemental LSR or a new LSR on all requests to restore service for the end-user in the Qwest Switch. If a new LSR is required then add a "WB" to the end of the original LSR PON number and submit the new LSR request.

You must contact the ISC in the event that the end-user's service has been disconnected, and you are requesting restoration of the service on Qwest facilities. The escalation representative in the ISC will request that you send an LSR indicating in the Remarks section, "Restore End-User

Service, cancel or change port DD", whichever is appropriate. Additionally, when submitting the LSR in IMA GUI or EDI, you must populate the manual indicator field with the letter "Y". Qwest will begin the restoration process for the end-user's service upon receipt of the LSR.

Timeframes to Contact the Interconnect Service Center or Repair Center:

- Up to 48 hours Prior to the Due Date:
  - Service Affecting Problems - Contact Retail Repair 800-954-1211
  - Any order changes (e.g., due date changes, change in order content) - Send a supplement
- Within 48 Hours of the Due Date (Before or After):
  - Service Affecting Problems - Contact ISC 1-888-796-9087
- Beyond 48 hours after the Due Date
  - Service Affecting Problems (after number(s) has been ported by you) - Contact Account Maintenance Support Center (AMSC) (Repair Service) 1-800-223-7881

Qwest's Interconnection Service Center Hours are 6 AM to 8 PM, Monday-Friday; and 7 AM to 5 PM, Saturday, Mountain Time. Please contact a Call Center Representative or a Customer Service Inquiry and Education Group Representative based on the following escalation steps:

Steps of Escalation	**Name/Group/Title**	***Telephone* Number**	**Function**
1st Step of Escalation	Call Center Representatives	888-796-9087	-LSR/Order Status, Inquiries on Completion, Due Dates, FOCs -Assisting with LSR Preparation -Resend FOCs/Rejects -Missed FOC Intervals, Due Date Expedites, Cut Overs, Out of Service, Emergency Cancels or Due Date Changes, -Missed Due Dates -Feature Discrepancies
2nd Step of Escalation	Customer Service Inquiry and Education Group Representative	See product sheet for your support team list and TN's	-Any Missed Commitments of Escalation Reps, Assist Team with issues and Escalations

If you require any additional assistance, please contact your Service Manager directly. If you do not have the number of your Service Manager, the Call Center will contact them for you.

Return of Disconnected Ported Numbers
When a ported number is completely disconnected, you must return the number to its original code holder or block holder. Qwest numbers will return to Qwest on the effective release date. You shall age ported telephone numbers that have been disconnected based on the FCC's requirements, prior to returning them to Qwest. These requirements can be found in CC Docket No. 99-200 "Numbering Resource Optimization" orders.

Back to Top

Maintenance

More information is available in the Maintenance and Repair Overview web page.

Trouble Reporting
You are responsible for resolving trouble reports from your own end-users. Misdirected repair and Customer Service calls from the end-user to Qwest will be referred to you as the new service provider.

Qwest will work cooperatively with you to resolve trouble reports when a trouble condition has been isolated and determined to be within the Qwest network.

If your end-user calls the Qwest Repair Center or Customer Service because they have experienced trouble on their line, they will be referred to you, as the provider serving their account.

The AMSC is open 24 hours a day and can be reached at 1-800-223-7881.

Refer/Open Customer Trouble Report (CTR)

- You will call the AMSC @ **1-800-223-7881**
- You will provide the **Ported Telephone Number** in trouble, including the old and new service provider
- Qwest Repair Service Attendant (RSA) will verify ported TN
- You must test and isolate the trouble to the Qwest network

  Following is the type of detailed information you will be asked to provide:
  - State the **full trouble description**. If there are "can't call" or "can't be called" reports, be sure and state the full ten (10) digit telephone numbers (originating and terminating numbers) experiencing problems.
  - State the name and number of the **person to be contacted** for cooperative testing, closing the ticket, etc
  - State your **test call results**
  - If trunking is involved, state the **identifying trunk code or trunk routing**
  - Identify the SS7 provider and provide SS7 trapped messages from your testing including if you have a SS7 hub provider
  - State the **home tandem** (as identified in the Local Exchange Routing Guide (LERG)
  - State whether **office translations** have been **verified**
  - Validate and provide the **Location Routing Number (LRN)**
  - If the trouble involves Customer Local Area Signaling Service (CLASS), Line Information Data Base (LIDB) and/or Caller ID with Name (CNAM) you should know who the Service Provider is and if you have an Interconnection (Signaling) Agreement
  - State the **Destination Point Codes (DPCs) for the switch, CLASS/LIDB/CNAM**
  - If the problem is pointing to Long Distance (LD), indicate the Long Distance carrier that testing shows is having the problem of terminating calls in the Qwest network. Also provide the name and number of the person in the LD company with whom you worked on the LD trouble.
  - If you are receiving a recording, please state exactly what the recording says and the specific trailer, if applicable
  - If the problem is in an area involving a NPA split, you need to state **NPA split data** that needs to be checked
- Qwest RSA needs to know of any recent order activity. You should include the any Qwest order number and due date.
- Qwest representative will give commitment time based on standard intervals
- Test results are not given by the RSA at this time
- RSA will advise you of the ticket number for tracking

NOTE: If the TN reported is not found in a Qwest database, the RSA will generate a message ticket on the TN reported. Once the TN is

determined, a new repair ticket will be opened and you will be notified.

Modify Existing Customer Trouble Report (CTR)

- You will call the AMSC @ **1-800-223-7881**
- You will refer to CTR with ported TN
- Qwest RSA will add or change information provided by you

Qwest will only accept information for CTRs that are in an open status and depending on the information, may lead to a new commitment time

Customer Trouble Report (CTR) Status

- You will call the AMSC @ **1-800-223-7881**
- You will refer to CTR with ported TN
- Qwest representative can provide immediate status (IST)

AMSC will not proactively status your CTR

Customer Trouble Report (CTR) Jeopardy

- Qwest can determine a jeopardy at any point in the CTR process when it becomes quite likely that the CTR commitment will be missed
- Qwest will keep working on the CTR until finished
- Whatever Qwest center has the CTR at the time a jeopardy is determined will attempt to contact your contact number. The Qwest center will attempt to renegotiate another commitment with you.

Escalation

- You will call the AMSC @ **1-800-223-7881**
- You will refer to CTR with ported TN
- You will provide new CTR information or customer requirements
- Should the Qwest RSA need help to resolve the issue, the center escalation desk (Request for Center Assistance - (RCA)) will be asked to assist
- The RCA may need to call various Qwest centers for additional assistance
- You will not be given any Qwest internal telephone numbers to enable you to call directly into the Qwest centers
- If you are not satisfied with the progress of the CTR, you may escalate to the appropriate Qwest account representative

Cancel Customer Trouble Report (CTR)

- You will call the AMSC @ **1-800-223-7881**
- You will refer to CTR with ported TN
- You will provide the name and contact number of the person who is canceling the CTR should future questions arise. You will be asked why the ticket is being cancelled for tracking purposes.
- The Qwest RSA will enter the appropriate information to cancel the CTR

Close Customer Trouble Report (CTR)
The Qwest group completing the repair report will call your contact shortly after completion. The call will include disposition and cause code information

Back to Top

Billing

Rates for LNP Cost Recovery are billed via a CRIS end-user or Summary Bill.

Rates for LNP Managed Cuts are billed via a BART Bill.

Back to Top

Training

Qwest 101 "Doing Business With Qwest"

- This introductory course is designed to teach the CLEC and Reseller how to do business with Qwest. It will provide a general overview of products and services, Qwest systems, ASR/LSR, reports, and web resource access information. Click here for Course detail and registration information.

Local Number Portability (LNP) Product
Click here to learn more about this course.

Local Number Portability (LNP) Process and Systems
Click here to learn more about this course.

View additional Qwest courses by clicking on Course Catalog.

Back to Top

Contacts

General contact information is identified in the Contact List web page.

Sales Manager
Service Manager

For additional information regarding the NPAC, NANC, FCC and Industry requirements for LNP implementation and administration, please refer to the following public web sites:

NeuStar - Number Portability Administration Center (NPAC)

FCC

North American Numbering Council (NANC)

Industry

Alliance for Telecommunications Industry Solutions (ATIS)

Back to Top

Frequently Asked Questions (FAQs)

This section is currently being compiled based on your feedback.

Back to Top

Last Update: August 17, 2001

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF COLORADO

Docket No. 97I-198T - Workshop 5

* * *

IN THE MATTER OF THE INVESTIGATION OF US WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH SS 271(c) OF THE TELECOMMUNICATIONS ACT OF 1996.

Pursuant to notice to all parties of interest, the Technical Workshop was held at 1:05 p.m., April 16, 2001, at 3898 S. Wadsworth, Lakewood, Colorado, before Facalitators Hagood Bellinger and Martin Skeer.

APPEARANCES

(As noted in the transcript.)

is not something with the size and complexity that could be achieved in a short period of time. So we don't believe that it's required.

We believe that there are processes that can be used. We believe that the CLEC has an equal responsibility in the provisioning process about notification to us when they are delayed and need to cancel an order.

So we believe that we've implemented LNP in a manner that allows us to provide the service and that we're willing to work with the CLECs. But there is no mechanized solution available to us right now. And we believe that the solution that we have in place is the best.

MR. BELLINGER: Do you have cost estimate of what it would be?

MS. BAUMGARNER: No, I do not.

MS. DeCOOK: Well, and that was going to be my comment. It's really frustrating to have an issue and to present solutions and to just have them reject it; and the Bell South solution, obviously they have implemented it.

Qwest hasn't even investigated whether it's feasible, what it would take, how much it would cost; and, you know, it's a -- it's like a roadblock.

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF COLORADO

Docket No. 97I-198T - Workshop

* * *

IN THE MATTER OF THE INVESTIGATION OF US WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH SS 271(c) OF THE TELECOMMUNICATIONS ACT OF 1996.

Technical Workshop 5 was held at 8:40 a.m., May 22, 2001, at 3898 Wadsworth Boulevard, Lakewood, Colorado, before Facilitators Hagood Bellinger and John Schultz.

APPEARANCES

(As noted in the transcript.)

but I think the numbers are larger than 600 -- than 630 out of 97,000.

Be that as it may, we think that even a few disconnects are a problem because they will give the CLECs a bad reputation. And the amount of disconnects are causing the CLECs to rearrange schedules and try and do their ports early in the day so that this doesn't happen.

So I think we are at impasse on this issue.

MR. STEESE: Let me ask you two questions.

MR. BELLINGER: Becky had questions.

MS. QUINTANA: If I may.

MR. STEESE: I'm sorry.

MS. QUINTANA: One of Qwest's take-backs for LNP 1 was to get us estimates on the cost estimates to implement the Bell South type of solution. Did you get that information together?

MS. BUMGARNER: No, I don't have an answer on that. We have been looking at a solution for the Washington order. Well, continue looking at further enhancements, but we don't have answers back. I do know what systems that are involved that I have listed somewhere. Our internal systems that would need

LAW OFFICES
FENNEMORE
CRAIG
A PROFESSIONAL CORPORATION

DARCY RENFRO

Direct Phone: (602) 916-5345
Direct Fax: (602) 916-5545
drenfro@fclaw.com

OFFICES IN,
PHOENIX, TUCSON AND NOGALES

3003 NORTH CENTRAL AVENUE
SUITE 2600
PHOENIX, ARIZONA 85012-2913
PHONE: (602) 916-5000
FAX: (602) 916-5999

September 12, 2001

BY HAND DELIVERY

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Re: In the Matter of the Application of Qwest Corporation for Approval of a Local Number Portability Modifications Amendment to the Interconnection Agreement with Cox Arizona Telecom, L.L.C.

Dear Madam or Sir:

Please find enclosed an original and ten (10) copies of the Local Number Portability ("LNP") Modifications Amendment to the Interconnection Agreement between Qwest Corporation ("Qwest") and Cox Arizona Telecom, L.L.C. ("Cox").

The Amendment is made in order to add terms and conditions for Local Number Portability Modifications regarding LNP issues: (1) the Process for Expedited Reconnection; (2) Rescission of FOCs/Rejection of LSRs; and (3) Changing of Disconnect Time. The Arizona Corporation Commission approved the underlying Agreement between Qwest and Cox on July 2, 1997 in Docket No. T-01051B-97-0017, Decision No. 60295. Enclosed is a service list for these dockets.

Please contact me at (602) 916-5345 if you have any questions concerning the enclosed. Thank you for your assistance in this matter.

Sincerely,

FENNEMORE CRAIG

Darcy Renfro

Enclosures

cc: Mr. Marval Vigil, Cox Arizona Telecom, Inc.
Deborah Scott, Director, ACC Utilities Division
Chris Kempley, Chief Counsel, ACC Legal Division

PHX/1223676.1/67817.179

Amendment for
Local Number Portability Modifications
to the Interconnection Agreement
between
Cox Arizona Telcom L.L.C.
and
Qwest Corporation
for the State of Arizona

This Amendment ("Amendment") is made and entered into by and between Cox Arizona Telcom L.L.C. ("Cox") and Qwest Corporation ("Qwest").

RECITALS

WHEREAS, Cox and Qwest entered into an Interconnection Agreement for service in the state of Arizona that was approved by the Arizona Corporation Commission on July 2, 1997 (the "Agreement"); and

WHEREAS, Cox and Qwest desire to amend the Agreement by adding the terms and conditions contained herein.

AGREEMENT

NOW THEREFORE, in consideration of the mutual terms, covenants and conditions contained in this Amendment and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Amendment Terms.**

This Amendment is made in order to add the following terms and conditions to the Agreement.

Section 9.2.3.8 is hereby added to the Agreement:

Qwest shall assure that business processes are in place to ensure that: a) Cox LNP LSRs are rejected only for reasons previously specified by Qwest as proper reasons for rejection; and, b) FOCs for Cox LNP orders are not rescinded, unless mutually agreed to by the Parties or if Cox is unable to respond within four (4) business hours to Qwest's notification to Cox regarding a specific LSR. For such notifications, Qwest shall follow Cox's defined escalation procedures within that four hour period.

Section 9.2.3.9 is hereby added to the Agreement:

Qwest will set the ten (10) digit unconditional trigger for numbers to be ported, unless technically infeasible, by 11:59 p.m. (local time) on the business day preceding the scheduled port date. (A 10-digit unconditional trigger cannot be set for DID services in 1AESS, AXE10, and DMS10 switches thus managed cuts are required, at no charge.) The ten (10) digit unconditional trigger and switch translations associated with the end user customer's telephone number will not be removed, nor will Qwest disconnect the customer's billing and account

information, until 11:59 p.m. (local time) of the next business day after the due date.

Section 9.2.3.10 is hereby added to the Agreement:

If a telephone number has been inadvertently disconnected in the Qwest switch prior to the port being activated by Cox on the due date or the next business day after the due date, Qwest shall take expeditious action to restore the switch translations and the ten (10) digit unconditional trigger for the end user customer's telephone number. For LSRs involving LNP-only (i.e., LNP with a Cox-provided loop), Qwest shall restore the switch translations and the ten (10) digit unconditional trigger for a telephone number that has been inadvertently disconnected within four hours of notification by Cox of the disconnection when such notification is received by Qwest prior to the end of the next business day after the due date.

2. **Effective Date.**

This Amendment shall be deemed effective upon Commission approval; however, the Parties may agree to implement the provisions of this Amendment upon execution.

3. **Further Amendments.**

Except as modified herein, the provisions of the Agreement shall remain in full force and effect. Neither the Agreement nor this Amendment may be further amended or altered except by written instrument executed by an authorized representative of both Parties.

The Parties intending to be legally bound have executed this Amendment as of the dates set forth below, in multiple counterparts, each of which is deemed an original, but all of which shall constitute one and the same instrument.

Cox Arizona Telcom L.L.C.	**Qwest Corporation**
Authorized Signature	Authorized Signature
Carrington Phillip	L. T. Christensen
Name Printed/Typed	Name Printed/Typed
Vice President Regulatory Affairs	Director – Business Policy
Title	Title
8/29/01	9/4/01
Date	Date

SERVICE LIST FOR: Qwest Communications
Docket No. T-01051B-97-0017

Mr. Timothy Berg
Fennemore Craig
3003 N. Central Avenue, Suite 2600
Phoenix, Arizona 85012

Michael Patten, Esq.
Roshka Heyman & DeWulf, PLC
Two Arizona Center
400 North 5th Street, Suite 1000
Phoenix, AZ 85004
Attorneys for Cox Arizona Telecom

Lyn A. Farmer, Esq.
Chief Administrative Law Judge
Hearing Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

Maureen Scott, Esq.
Legal Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

Mark DiNunzio
Utilities Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

Matt Rowell
Utilities Division
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

CERTIFICATE OF SERVICE

I certify that the original and 10 copies of AT&T's Response to Qwest's Supplementation of the Record on Checklist Item 11 – Local Number Portability in Docket No. T-00000A-97-0238 were sent by overnight delivery on October 9, 2001 to:

Arizona Corporation Commission
Docket Control – Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and a true and correct copy was sent by overnight delivery on October 9, 2001 to:

Maureen Scott
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Mark A. DiNunzio
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Deborah Scott
Director - Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Christopher Kempley
Arizona Corporation Commission
Legal Division
1200 West Washington Street
Phoenix, AZ 85007

Jane Rodda
Administrative Law Judge
Arizona Corporation Commission
400 West Congress
Tucson, AZ 85701-1347

and a true and correct copy was sent by U. S. Mail on October 9, 2001 to:

Thomas F. Dixon
WorldCom, Inc.
707 – 17th Street, #3900
Denver, CO 80202

Terry Tan
WorldCom, Inc.
201 Spear Street, 9th Floor
San Francisco, CA 94015

Douglas Hsiao
Rhythms Links, Inc.
9100 E. Mineral Circle
Englewood, CO 80112

Bradley Carroll
Cox Arizona Telcom, L.L.C.
1550 West Deer Valley Road
Phoenix, AZ 85027

Michael M. Grant
Gallagher and Kennedy
2575 East Camelback Road
Phoenix, AZ 85016-9225

Gena Doyscher
Global Crossing Local Services, Inc.
1221 Nicollet Mall, Suite 300
Minneapolis MN 55403

Traci Kirkpatrick
Davis Wright Tremaine LLP
1300 S.W. Fifth Avenue
Portland, OR 97201

Michael W. Patten
Roshka Heyman & DeWulf, PLC
400 North Fifth Street, Suite 1000
Phoenix, AZ 85004-3906

Joyce Hundley
United States Dept. of Justice
Antitrust Division
1401 H Street NW, Suite 8000
Washington, DC 20530

Daniel Pozefsky
Residential Utility Consumer Office
2828 North Central Ave., #1200
Phoenix, AZ 85004

Mark N. Rogers
Excell Agent Services, L.L.C.
2175 W. 14th Street
Tempe, AZ 85281

Mark P. Trinchero
Davis Wright Tremaine
1300 SW Fifth Ave., Suite 2300
Portland OR 97201-5682

Penny Bewick
New Edge Networks
3000 Columbia House Blvd., Suite 106
Vancouver, WA 98661

Thomas H. Campbell
Lewis & Roca LLP
40 N. Central Avenue
Phoenix, AZ 85004

Karen L. Clauson
Eschelon Telecom, Inc.
730 2nd Avenue South, Suite 1200
Minneapolis, MN 55402

Joan S. Burke
Osborn Maledon, P.A.
2929 N. Central Avenue, 21st Floor
Phoenix, AZ 85067-6379

Eric S. Heath
Sprint Communications Company L.P.
100 Spear Street, Suite 930
San Francisco, CA 94105

Charles Kallenbach
American Communications Services, Inc.
131 National Business Parkway
Annapolis Junction, MD 20701

Jeffrey W. Crockett
Snell & Wilmer, LLP
One Arizona Center
Phoenix, AZ 85004-0001

Todd C. Wiley
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, AZ 85016-9225

Michael B. Hazzard
Kelley, Drye & Warren, LLP
1200 19th Street, NW, Fifth Floor
Washington, DC 20036

Daniel Waggoner
Davis Wright Tremaine
2600 Century Square
1501 Fourth Avenue
Seattle, WA 98101-1688

Timothy Berg
Fennemore Craig, P.C.
3003 North Central Ave., #2600
Phoenix, AZ 85012

Raymond S. Heyman
Randall H. Warner
Roshka Heyman & DeWulf
Two Arizona Center
400 N. Fifth Street, Suite 1000
Phoenix, AZ 85004

Diane Bacon, Legislative Director
Communications Workers of America
Arizona State Council
District 7 AFL-CIO, CLC
5818 N. 7th Street, Suite 206
Phoenix, AZ 85014-5811

Andrea P. Harris
Senior Manager, Regulatory
Allegiance Telecom, Inc.
2101 Webster, Suite 1580
Oakland, CA 94612

K. Megan Doberneck
Covad Communications Company
7901 Lowry Blvd.
Denver, CO 80230

Andrew Crain
Qwest Corporation
1801 California Street, Suite 4900
Denver, CO 80202

Janet Livengood
Regional Vice President
Z-Tel Communications, Inc.
601 S. Harbour Island Blvd., Suite 220
Tampa, FL 33602

Charles W. Steese
Qwest Corporation
1801 California Street, Suite 4900
Denver, CO 80202

Bill Haas
Richard Lipman
McLeodUSA Telecommunications
Services, Inc.
6400 C Street SW
Cedar Rapids, IA 54206-3177

Mark Dioguardi
Tiffany and Bosco, P.A.
500 Dial Tower
1850 North Central Ave.
Phoenix, AZ 85004

Brian Thomas
Vice President – Regulatory
Time Warner Telecom, Inc.
520 S.W. 6th Avenue, Suite 300
Portland, OR 97204

Lisa Crowley
Regional Counsel
Covad Communications Company
7901 Lowry Boulevard
Denver, Colorado 80230