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BEFORE THE ARIZONA CORPORATION COMM

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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-00000A-97-0238

AT&T AND TCG PHOENIX'
COMMENTS REGARDING
TESTING STANDARDS
DOCUMENT VERSION 2.5

AT&T Communications of the Mountain States, Inc. and TCG Phoenix (collectively "AT&T") hereby submit their comments regarding the testing standards document version 2.5, dated May 8, 2000. See Attachment A.

RESPECTFULLY SUBMITTED this 15th day of May, 2000.

AT&T COMMUNICATIONS OF
THE MOUNTAIN STATES, INC.

By: [Signature]

Thomas C. Pelto
Richard S. Wolters
1875 Lawrence Street
Suite 1575
Denver, Colorado 80202
Telephone: 303-298-6471
Facsimile: 303-298-6301
E-mail: rwolters@att.com

1 OVERVIEW

1.1 Introduction

U S WEST Communications has filed notice with the Arizona Corporation Commission (ACC) of its intent to apply to the Federal Communications Commission (FCC) for approval to offer long-distance telecommunication services to its Arizona customers pursuant to the requirements of Section 271 of the Telecommunications Act of 1996 (The Act). The Act prescribes the terms and conditions under which U S WEST may offer such services within the boundaries of its home region. The Federal Communications Commission has rendered its interpretation of the language of Section 271 through its various orders and rules, which constitute the legal and practical standards which U S WEST must attain in order to be granted relief. One of the provisions of Section 271 requires that U S WEST provide non-discriminatory access to its Operations Support Systems (OSS) related to local service operations. OSS is defined to include systems for pre-ordering, ordering, provisioning, maintenance and repair and billing. Full-scale testing of the capacities, operational characteristics, and functional capabilities of such systems has been established as the method by which 271 compliance is demonstrated.

The ACC, on whom the FCC is required by law to consult to verify U S WEST's 271 compliance for the state of Arizona, has required U S WEST to submit its relevant systems to testing. The purpose of the testing is to determine the degree to which these systems adhere to the requirements of The Act, the FCC orders and rules such that the ACC may make a recommendation to the FCC.

The ACC has contracted Cap Gemini Telecommunications (CGT) to function in the capacity of Test Administrator (TA) in the evaluation of U S WEST's OSS. Hewlett-Packard Company (HP) has been contracted to assume the roles of Pseudo-CLEC and Test Transaction Generator. Both companies will prepare test reports for presentation to the ACC following the tests. The HP test report will be included in the CGT test report as an attachment. Doherty Company Incorporated (DCI), initially responsible for authoring the Master Test Plan (MTP) and performance measurements, now serves as Advisor to the ACC.

There are three major documents for the State of Arizona 271 compliance project: The Master Test Plan (MTP), which explains the generalized approach of five categories of tests and evaluations for 271 compliance (Functionality Test, Retail Parity Evaluation, Capacity Test, Performance Measurement Evaluation and Relationship Management Evaluation), the Test Standards Document (TSD), which describes "how" the 271 OSS tests and evaluations will be executed, and the Final Report, which documents the testing and evaluation of each of the five functional categories.

The Test Standards Document describes the testing details in the following eight sections. A brief description of each section follows:

- Section 1: Overview
- Section 2: End-User Friendlies
- Section 3: Functionality Test
- Section 4: Retail Parity Evaluation
- Section 5: Capacity Test
- Section 6: Relationship Management Evaluation
- Section 7: Performance Measurement Evaluation
- Section 8: Collocation and Interconnection

End-User Friendlies (Section 2) defines the term “Friendlies” and details their roles and responsibilities in the generation of usage and billing data, as well as verification of the U S WEST provisioning, maintenance and repair, and service ordering functions. A sample Letter of Authorization (LOA) is included in this section along with a sample of the Friendlies Information Packet for testing that will be distributed to each volunteer.

Functionality Test (Section 3) is designed to emulate the current CLEC activity profile and will be performed in the U S WEST production environment. The functionality test will include transaction steps covering pre-ordering, ordering and provisioning, maintenance and repair, and billing. Preordering, ordering and provisioning order completion and billing steps will include scripted test cases providing step by step transaction definitions. In addition, Access Service Requests (ASR) and scripted tests from CLEC sites will be submitted using volunteer CLEC order entry personnel to be observed by the TA. Maintenance and repair transactions will be created by the Pseudo-CLEC and sent to U S WEST using the Interconnect Mediated Access-Graphical User Interface (IMA-GUI). Additionally, maintenance and repair transactions will be created and sent to U S WEST using MCIWorldcom’s (MCIW) existing Electronic Bonding Trouble Administration (EB-TA) interface.

Retail Parity Evaluation (Section 4) will compare the experience of the U S WEST Service Order Representative with that of the Pseudo-CLEC’s Service Order Representative. In this evaluation, a series of carefully scripted and controlled test cases will be run in both the U S WEST and Pseudo-CLEC environments. The comparison will include both qualitative and quantitative evaluations.

Capacity Test (Section 5) is designed to simulate a repeatable, controlled workload. The workload will simulate forecasted CLEC activity at a point one year from the start of the capacity test. The workload will include both normal and stress volumes. The total workload presented to U S WEST’s OSS during the execution phases of the test will include test transactions from the Pseudo-CLEC, as well as the normal production activities of the CLECs, and U S WEST.

Relationship Management Evaluation (Section 6) will include assessments of process documentation, adherence to processes, and the management of business relationships involving U S WEST and the CLECs in a competitive market. The Relationship Management Evaluation will review the following processes:

- U S WEST CLEC account initiation process
- Account Management process

- Co-provider Industry Change Management Process (CICMP)
- Interface development processes
- U S WEST's CLEC Training

Performance Measurement Evaluation (Section 7) will assess the processes in place at U S WEST for collecting and computing the Performance Measures outlined in the Service Performance Indicator Definitions (PID). The assessment will include a review of the processes for wholesale and retail services. Additionally, the TA will audit, collect and compute the Performance Indicators using the three most consecutive months of historical data.

Collocation and Interconnection (Section 8) will assess the interaction between U S WEST and its CLEC wholesale customers. It will focus on qualitative evaluations obtained from interviews with participating CLECs and U S WEST. The measures demonstrating fulfillment performance will be evaluated based on historical data collected.

Testing of the five tests/evaluations will proceed in three phases: Planning and Preparation, Execution, and Reporting. Each phase is further broken down into three parts: Entrance Criteria, Activities, and Exit Criteria.

Testing will include on-site monitoring of U S WEST Service Centers, Maintenance and Repair (M&R) processing, and a Scalability Analysis. Additionally, evaluation of the quality of U S WEST training, reference material, support from U S WEST account management team and other U S WEST resources will be documented.

There are several checkpoints involved in this test including daily reports, regularly scheduled meetings with the Test Advisory Group (TAG), formal meetings with the ACC, and formal milestone checkpoints. After testing has been completed, the TA will assure that the test environment has been cleaned up and returned to its pre-test condition as detailed in Appendix L of this document.

1.2 Test Approach

The TA's approach to all test-related activities, including the establishment of the working environment, shall be designed and carried out by fostering a high level of cooperative collaboration between all test participants. The participants include the ACC, the Pseudo-CLEC, the TAG, specific CLECs, U S WEST, and DCI.

The Work Breakdown Structures (WBS) from all test participants have been integrated and incorporated into a Master Project Control Schedule that is managed by the TA Project Manager. Detailed activity plans and schedules are monitored to measure milestone achievement and percent completion of each task. The Schedule Performance Index (SPI) gives a weighted value of the Budgeted Cost of Work Performed (BCWP) against the Budgeted Cost of Work Scheduled (BCWS). Measuring each task using SPI, the TA can determine whether the Project is ahead of schedule, behind schedule, or

running on time. This calculation is performed weekly using a Weekly Status Report (WSR) tool and reported to the TAG.

The TA's approach is in accordance with the MTP in terms of simulating the CLEC environment and using the strategy provided to implement the functionality, retail parity, and capacity testing of U S WEST's OSS environment. The performance measures evaluations and relationship management observations will be performed outside the CLEC environment. The TA's plan includes specific entrance and exit criteria for each phase of the testing. Roles and responsibilities for each team member are identified and assigned. Work is scheduled, monitored and progress tracked to accurately reflect completion of tasks and attainment of project milestones.

1.3 Development of Test Scenarios, Test Cases and Test Scripts

The Test Scenarios found in the MTP, which define classes of tests to be conducted, were used to develop a list of specific Tests Cases. From this list of Test Cases, Test Scripts were written. Test Scripts were written only for the Functionality Test, the Retail Parity Evaluation and the System Capacity Test. The Performance Measurement Evaluation and Relationship Management Evaluation do not utilize Test Scenarios, Test Cases or Test Scripts as part of their evaluations.

The Functionality Test includes the development of Test Cases that address pre-ordering, ordering, provisioning, maintenance & repair, and billing. The Functionality Test Cases apply to services including:

- Resale
- UNE-P
- UNE-loop
- Designed Services
- UNE-loop with number portability
- Number portability

Functionality Test Case Order types include:

- New installation
- Conversion "as is"
- Conversion "as specified"
- Partial migration
- Change
- Disconnect
- Cancellation
- Move
- Suspend
- Restore
- 911/DA database updates as required
- Supplemental

See Appendix E for examples of the Functionality Test Cases. The TA will maintain the complete list of Test Cases and Test Scripts. All TAG members will be provided with complete copies of all Test Cases and Test Scripts after testing is completed.

Functionality Testing includes the following:

- a) A prescribed mix representing the products as required in the MTP
- b) A mix of flow through and non-flow through transactions
- c) Submission of LSRs and ASRs through all valid avenues of transmission as specified in the MTP
- d) Establishment of Friendlies accounts to support usage testing
- e) Processing multiple orders against a single account (e.g., new order, supplemental order, change order, disconnect order)
- f) Maintenance and Repair requests against both U S WEST and specific CLEC accounts

For the Retail Parity Evaluation, the Test Scripts are used in carefully controlling the pace and quality of the tests and are built to a greater level of specificity than those for either the Functionality Test or Capacity Test. Retail Parity Test Scripts apply to both Residential and Business customers for services including:

- POTS
- POTS PBX
- ISDN-BRI
- Centrex
- Private Line
- Designed Services

Retail Parity Test Case pre-order, order and maintenance/repair transaction types include:

- New Connect
- Conversion "as is"
- Conversion "as specified"
- Partial migration
- Change
- Disconnect
- Cancellation
- Move
- Suspend
- Restore
- 911/DA database updates as required

- Supplemental

See Appendix E for examples of the Functionality Test Cases. The TA will maintain the complete list of Test Cases and Test Scripts. All TAG members will be provided with complete copies of all Test Cases and Test Scripts after testing is completed.

To facilitate tracking and analysis of the test results, test cases for both Functionality and Retail Parity Evaluation have unique tracking numbers that will identify the type of product being tested and the iteration number. These tracking numbers are for internal use and are only populated on the Friendlies Entry Form and test scripts. The Pseudo-CLEC will assign a unique PON (Purchase Order Number) to each LSR generated during the course of testing.

Based on recommendations from the Statistical Team (see Appendix K), several iterations of each test case are included, depending upon the statistical sampling requirements of each functionality test scenario. The data in the Functionality and Retail Parity Evaluation Test Cases were used to create test scripts. See Appendix E for sample test scripts.

The System Capacity Test will be limited to LSRs that will flow-through the U S WEST Ordering processors, including errors and rejections that can be handled in a mechanized environment. **[Need to cross reference with the capacity test subcommittee agreements to make sure that this is still the case.]** The Capacity Test will include the same activities as the Functionality Test for pre-order and order processes.

For the Functionality Tests, test scripts will be delivered to the Pseudo-CLEC in lieu of receipt of customer calls. Pseudo-CLEC personnel will enter the data from the test scripts into the U S WEST OSS to generate the LSR. Pseudo-CLEC entered transactions will be entered into the U S WEST systems via a combination of IMA-GUI and Electronic Data Interchange (EDI) interfaces and other electronic interfaces. The IMA-GUI interface will be connected to U S WEST by both dial-up and directly connected leased lines. The IMA-EDI interface will be connected to U S WEST via T1. CLEC entered ASR transactions will be entered by CLECs using their EXACT interface to U S WEST. If the pre-order, LSR/ASR, or repair transaction is rejected, the rejection will be compared to the anticipated results for that test case to determine if further action is necessary, as some test cases are designed to reject.

1.4 Test Script Delivery and Processing

For the Functionality Tests, the TA will generate Test Scripts (Appendix B). The TA will deliver the Test Scripts to the Pseudo-CLEC. During the execution of the Test Scripts, TA representatives will be present at the Pseudo-CLEC site for monitoring purposes. The Test Scripts will consist of the prescribed mix of pre-order queries and orders to be processed for the current day's tests. Repair transactions will be similarly scripted.

The Pseudo-CLEC, or CLEC (in the case of ASR), will collect order status for daily reporting to the TA. The Pseudo-CLEC, or TA Observer (for ASR), will manually or mechanically date and time stamp all the relevant data for each pre-order, ordering,

provisioning, and M&R transaction from the time the test script is submitted to the OSS to the point of completion or cancellation. The information collected will include the following as applicable:

- a) Date/time stamp for each transaction processed via the EDI-IMA application (Note: as of 4/28/00: CGT is currently working with the Pseudo-CLEC to define the process by which this will be accomplished. Also, IMA-GUI will not be tracked. The reference to IMA-GUI not being tracked seems excessive. Some transactions submitted via the IMA-GUI such as the date and time an order was sent and the date and time a FOC was received will be tracked. Some clarification language from CGT explaining what is meant by the phrase, "IMA-GUI will not be tracked" would be helpful.)
- b) EDI acknowledgements
- c) Error rejections
- d) Resubmission of an order
- e) Firm Order Confirmation (FOC)
- f) Provisioning Transactions
- g) Service Order Completion (SOC)
- h) Manual jeopardy notifications
- i) Billing records

The Pseudo-CLEC and CLEC running the ASR tests will provide processing data to the TA. The TA will use the information received from the Pseudo-CLEC and CLECs in its evaluation of test results.

For the Retail Parity Evaluation, the TA will generate detailed Test Scripts and will closely control and monitor the execution of each script by the Service Order Representatives of both U S WEST and the Pseudo-CLEC. To ensure that test integrity is not compromised within the U S WEST Service Order Center, the TA will request that the U S WEST portion of the test be conducted in a room that is segregated from the other work in progress.

The System Capacity Test will be run in U S WEST's live production environment. The capacity tests for orders will go through the ordering process until the issuance of a FOC. The Pseudo-CLEC will collect and store the appropriate data (e.g. Performance Measures (PO1 & PO5 data) related to the System Capacity Test in a data repository. Additionally, U S WEST will provide the TA with performance measurement data for the System Capacity Test. The TA will use the Pseudo-CLEC collected data and the U S

WEST performance measurement data to evaluate the success level of the System Capacity Test.

The Performance Measures and Relationship Management evaluations will not include pre defined test scripts.

2. END-USER/FRIENDLIES

2.1. Introduction

End Users (“Friendlies”) are individuals within Arizona for which the 271 test is being conducted who volunteer their physical location to establish test lines. In addition, volunteers are offering their time to aid in the verification of U S WEST provisioning and repair operations and the generation of real-world usage and billing data. Friendlies will be used for the Functionality and Retail Parity tests. EB-TA Test Cases involving Friendlies will be executed by a CLEC with an EB-TA interface to U S WEST.

Friendlies will be recruited and managed by the TA. The recruitment of Friendlies will be carried out in a manner approved by the ACC. Solicitations targeted TA employees, state government employees, CLEC employees, and U S WEST employees as approved by the ACC.

2.2. Scope

The TA End-User Team will ensure Friendlies effect controlled usage which will generate billing data from multiple test sites by executing a set of precisely constructed test cases. The TA will track usage, billing, and M&R data resulting from these test activities.

2.3. Approach

The Friendlies’ test activities will focus on Resale, UNE-P, UNE-Loop, UNE-Loop with number portability, and number portability. The Friendlies’ activities will cause the controlled generation of usage records that will in turn generate billing data. The values of these records are to be tracked and validated by the TA End-User Team and the TA Billing Team in a manner consistent with the specified test procedures. The Pseudo-CLEC will be responsible for securing all Friendlies-related test data transactions and making it available to the TA.

2.4. Entrance Criteria

1. CGT End-User Team develops Friendlies solicitation methods
2. ACC reviews solicitation method(s) and approves solicitation method(s) for Friendlies
3. Solicitation of Friendlies

4. Potential Friendlies nominate themselves as volunteers
5. Friendlies are accepted by the CGT End-User Team
6. Test lines are pre-provisioned at necessary Friendly locations

2.5. The Use of Friendlies

A portion of the Friendlies will be assigned to participate in the testing of Resale, UNE-P, UNE-Loop, UNE-Loop with number portability, and number portability. Depending on the tests being performed, additional telephone lines may be installed at selected Friendlies test sites.

The TA End-User Team will identify Friendly volunteers that are served by a central office housing CLEC collocation facilities. These Friendlies will be utilized for UNE-Loop and UNE-Loop with number portability type test scenarios. The remainder of Friendlies will qualify as candidates for executing test cases other than UNE-Loop and UNE-Loop with number portability type test scenarios. The following process sequence will be applied to the assignments:

1. The End-User Team will identify selected central offices containing the collocation demarcs offered by the participating CLECs.
2. The TA will identify the NPA-NXXs associated with those central office locations.
3. Friendly volunteers will be selected through the association of their main directory number to the central office collocation prior to the assignment of the remaining test cases.
4. Once the Friendlies have been established, their location will be mapped to test cases.

In some cases, Friendlies' existing secondary lines may be used for unbundled loop, number portability and Retail to Wholesale parity tests. CLEC collocation cages at specific U S WEST locations will be identified and provisioned for use in the UNE-Loop and UNE-Loop with number portability testing.

Before testing may begin, Friendlies must be ready to execute predefined telephone calling/usage cases from the test locations. The purpose of Friendlies test cases is to:

- a) Report on service order successes and failures.
- b) Generate usage for billing evaluation.

- c) Verify product and feature availability.
- d) Demonstrate the provision of repair services by U S WEST.

Friendlylies will include a mix of business and residential accounts. Sufficient Friendly accounts will be identified to support the testing load. Friendlylies will receive information detailing the types of calls they will be required to originate, the dates required, and any documentation required during the testing. This information will be compiled in the Test Call Instructions (Figure 2.5-1) and the Call Detail Logs (Figure 2.5-2) provided to each Friendly.

Figure 2.5-1: Example of Test Call Instructions

Test Call Instructions

As a volunteer, please follow the instructions outlined below and complete the attached Call Detail Log to record these test calls. Return the top copy of the Call Detail Log in the Return Postage Paid Envelope within 24 hours of completing these test calls (retain the bottom copy of the original call Detail Log for your records).

Please perform these calls on the date indicated on the attached Call Detail Log.

If you have any problems or questions with these instructions, please contact Jason Stults at 1-800-227-4230 x3789 or Andrew Bennett at 1-800-227-4230 x2721 for clarification.

TEST CALL 1: Verify 900 blocking
 Dial 1-900-XXX-XXXX from the test line
 Verify you hear the recorded blocking message such as: "At the customer's request you cannot dial that number from this line". The call will be a failure if you are connected to the 900 number.

TEST CALL 2: Verify ability to dial 800 numbers.
 Dial 1-800-227-4230 from the test line to connect to the Cap Gemini voice messaging system.
 When you hear, "Thank you for calling Cap Gemini America" the test call is deemed successful, hang up and record in the Call Detail Log. If you do not hear "Thank you for calling Cap Gemini America", hang up and note the call was not successful in the comments section of the Call Detail Log.

TEST CALL 3: Verify Directory Assistance availability.
 Dial 1411 from the test line.
 Ask for the telephone number for the Local US Post Office in your city.
 Verify that the Directory Assistance Operator was able to give the number; record the number given on the Call Detail Log. If the call was not successful, please note this in the comments section of the Call Detail Log.

TEST CALL 4: Verify Long Distance Carrier [There should also be a verification call for the intraLATA toll carrier. There is a call in number similar to the 700-555-4141 for verifying the intraLATA toll provider.]
 Dial 1-700-555-4141 from the test line.
 You will hear the name of the long distance carrier on the test line. Hang up and record the name of the long distance carrier in the comment section of the Call Detail Log. If you are not connected to a Long Distance carrier or if you are not assigned to a Long Distance company, make a note that you were not connected or assigned, as appropriate, on the Call Detail Log.

TEST CALL 5: Long Distance Call Completion
 Dial 972-XXX-XXXX, note the start time of the call, and listen to the message. Hang up and record the call duration on the Call Detail Log. If call did not go through, please note that in the comments section of the Call Detail Log.

TEST CALL 6: Local Call Completion
 Dial XXX-XXX-XXXX, note the start time of the call, and listen to the message. Hang up and record the call in the Call Detail Log. If call did not go through, please note that in the comments section of the Call Detail Log.

TEST CALL 7: In-State Interlata Long Distance Call Completion
 Dial XXX-XXX-XXXX, note the start time of the call, and listen to the message. Hang up and record the call duration on the Call Detail Log. If call did not go through, please note that in the comments section of the Call Detail Log.

TEST CALL 8: In-State Intralata Long Distance Call Completion
 Dial XXX-XXX-XXXX, note the start time of the call, and listen to the message. Hang up and record the call duration on the Call Detail Log. If call did not go through, please note that in the comments section of the Call Detail Log.

TEST CALL 9: Verify One Plus Directory Assistance availability.
 Dial 1-303-555-1212 from the test line.
 Ask for the telephone number for the US Post Office Telephone Number in Denver.
 Verify that the Directory Assistance Operator was able to give the number; record the number given on the Call Detail Log. If the call was not successful, please note this in the comments section of the Call Detail Log.

Thank You for your participation in this effort!

Note: To test UNE-P receipt of InterLATA and IntraLATA test calls, only selected Friendlies test lines (mainly CGT employees) will be used for Friendly to Friendly test call termination.

Note: CGT employees will execute Calling Card Test Calls and Operator Assisted Test Calls on selected Friendly accounts.

Figure 2.5-2: Example of Call Detail Log

CALL DETAIL LOG					
NAME: _____			DATE: _____		
ADDRESS: _____					
TEST LINE TELEPHONE NUMBER: _____ () _____					
Test Number	Test Call Description	Date	Start Time of Call	End Time of Call	Comments
1	900/976 Blocking				
2	800 Number Dialing Capability				
3	Directory Assistance				
4	Long Distance Carrier Verification				Long Distance Carrier: _____
5	Long Distance Call Completion				
6	Local Call Completion				
7	In-State InterLATA Long Distance Call Comp.				
8	In-State IntraLATA Long Distance Call Comp.				
9	One Plus Directory Assistance Call				
10	<u>IntraLATA Toll Carrier Verification</u>				<u>IntraLATA Toll Carrier</u> _____

Please add any additional comments: _____

I certify the information completed above to be true and accurate. I further certify that I made the phone calls at the start and end times shown above.

2.5.1. IDENTIFYING FRIENDLIES

The TA End-User Team will recruit Friendlies for the required number of Friendly Test Cases to participate in the Functionality Test and the Retail Parity Evaluation of U S WEST CLEC services. Friendlies will be comprised of volunteers providing physical locations where test lines will be installed and/or where existing secondary lines will be converted. Once sufficient volunteers have been identified, the TA will compile a list of potential Friendlies from each TAG member, and determine which candidates will participate. The TA will ensure that a proper mix of Friendlies is obtained from each organization.

Potential Friendlies must have existing local service in the state of Arizona. The TA will determine which potential Friendlies from TAG member organizations will be candidates for conversions or new installations. If a Friendly candidate has more than one line, one or more of those lines may be converted to the Pseudo-CLEC. In most cases, the secondary line will be the one converted. Potential Friendlies with only one line may be candidates for the installation of a new secondary line.

The TA End-User Team will gather the following information from potential Friendlies:

- a) Name
- b) Address (Street/City/Zip)
- c) Residence or Business line
- d) Number of active lines currently installed at the address
- e) Daytime & Evening Contact Telephone Numbers
- f) Primary Inter-LATA (Local Access Transport Area) & Intra-LATA Primary Inter-exchange Carriers (PIC)
- g) Record Friendlies' Directory Listing preference

After obtaining the proper information from the potential Friendlies, the TA End-User Team will send Letters of Authorization (LOA) (Figure 2.5.1-1) for the potential Friendlies to sign and return. The signed LOAs will enable the TA to act as an agent to set up the Friendlies' lines for testing. Upon receipt of the signed LOA the TA will determine if the potential Friendly will be selected to participate, based on facilities availability. The TA will forward copies of the signed LOAs to the Pseudo-CLEC.

Prior to the start of the testing period, selected Friendlies will be provided Test Information Packets defining their responsibilities.

U S WEST with a list of Friendlies requiring installation of test lines. The guidelines for U S WEST to follow for installing test lines will be:

- a) POTS line with local calling capability only
- b) Bypass Credit Check
- c) New Line (not secondary to customer's existing Primary line)
- d) No LPIC or PIC
- e) Block 900/976
- f) Block International Calls
- g) Block Terminating Collect Billing in LIDB
- h) Block Terminating Third Party Billing in LIDB
- i) Block Originating Directory Assistance
- j) Standard DA listing
- k) All Flat-Rate service
- l) No Features
- m) Do not install in any Foreign Exchanges
- n) U S WEST to identify installs that are NON-MSA
- o) Billing information

U S WEST will contact Friendlies to coordinate the install process. U S WEST representatives will follow the script in Figure 2.5.2-1 when coordinating the install with the Friendlies (at no time making any reference to 271 compliance testing). Upon completion of the request to install the new test line, U S WEST will provide the customer service record ("CSR") to the TA End-User Team who will enter the date (data?) into

the Friendlies Tracking Database. If any conditions arise that jeopardize the installation effort, U S WEST will inform the TA End-User Team of these conditions via Email to the Email address identified in Figure 2.5.2-1. If the Friendlies have any questions throughout the installation process, U S WEST representatives will be instructed to refer the Friendlies to the TA End-User Team contact names in Figure 2.5.2-1.

Figure 2.5.2-1 Script for U S WEST new installs

Process for U S WEST to Install Friendlies Test Lines
<p>Receive Friendlies New Install list from CGT. Verify customer information in U S WEST databases. Prepare to set up the new test lines with the following guidelines:</p> <ul style="list-style-type: none"> POTS line with local calling capability only Bypass Credit Check New Line (not secondary to customers existing Primary line) No LPIC or PIC Block 900/976 Block International Calls Block Terminating Collect Billing in LIDB Block Terminating Third Party Billing in LIDB Block Originating Directory Assistance Standard DA listing All Flat-Rate service No Features Do not install in any Foreign Exchanges U S WEST to identify installs that are NON-MSA Use Billing Name: Kimberly S. Wright Use Billing Address: 4747 E. Elliot Rd., #29-1142, Phoenix, AZ 85044 <p>Contact customer using the following verbiage to coordinate the Friendlies test line installation:</p> <hr style="border: 0.5px solid black;"/> <p>This is _____ with U S WEST; Cap Gemini Telecommunications has provided me your contact information because you recently volunteered to assist in the testing relating to local telephone service in Arizona. I am contacting you to set up a time to install a test line at your residence.</p> <p>The First available date and time we have to install the test line is: _____</p> <p>If you are unavailable at this date and time, which date/time do you prefer: _____</p> <p>Okay, we will be there on _____, between the hours of _____ to set up the test line.</p> <p>Cap Gemini Telecommunications representatives will be providing you further information on testing requirements. Thanks for volunteering to help with this very important effort in the state of Arizona.</p> <p>If you have any questions or concerns regarding this test line please contact Jason Stults at 1-800-227-4230 x3789 or Andrew Bennett at 1-800-227-4230 x2721.</p> <p><i>Notes to U S WEST representative:</i> <i>If the volunteer has any questions, inform the volunteer to contact CGT at the above numbers</i> <i>U S WEST representatives can only discuss the install dates with the volunteer.</i> <i>The volunteers can not add any additional features to these lines during the testing effort.</i></p> <hr style="border: 0.5px solid black;"/> <p>Upon completion of the request to install the new test line, a copy of the customer service record needs to be printed and forwarded to CGT to confirm the installation of the test line.</p> <p>Any condition that may cause a jeopardy to the installation must be forwarded to CGT when the jeopardy condition is detected, by contacting CGT via Email at jstults@usa.capgemini.com and/or abennett@usa.capgemini.com with the Subject: "Friendlies Jeopardy Condition".</p>

2.5.3. MANAGING FRIENDLIES

Friendlies will be managed remotely via telephone and will be provided with Test Information Packets containing detailed instructions including:

- a) The Test Call Instructions (Figure 2.5-1) and Call Detail Logs (Figure 2.5-2) for each scenario assigned
- b) Unplanned Trouble / Repair Logs
- c) An outline of responsibilities throughout the testing period
- d) Return Postage Paid envelopes to return Call Detail Logs and Unplanned Trouble / Repair Logs

Each Call Detail Log will have assigned to it a specific date when testing is to be conducted. The TA End-User Team will follow up with each Friendly at predetermined times to ensure understanding and the ability to perform the responsibilities. Each Friendly will be responsible for making test calls on the designated test line, recording the details on a Call Detail Log (Figure 2.5-2), and returning that log to the TA within 24 hours of test call completion in the pre-addressed postage paid envelope included in the Test Information Packet. Friendlies will be responsible for retaining the carbon copy (bottom copy) of the Call Detail Log in case the completed Call Detail Log needs to be resubmitted to the TA.

2.5.3.1. CREATION OF VOICEMAIL BOXES FOR TEST CALLS

The TA End-User Team will manage the creation of voice mailboxes to be used for Friendly test calls. Instructions for making the test calls to these voice mailboxes will be provided to each Friendly via the test-call instructions in Figure 2.5-1. The TA End-User Team will setup the out-of-state Long Distance Voicemail Box in the 972 or 214 area code (Dallas, TX) for Friendlies Long Distance test calls (Test Call Number 5). The TA End-User Team will work with U S WEST to setup voicemail boxes in Arizona (in LATA 666 and LATA 668) for additional Friendlies test calls.

The TA End-User Team will create a greeting on each of these voice mailboxes stating "Thank you for your participation in this testing effort for the State of Arizona, your time is greatly appreciated. Please record that you have successfully completed this call in the appropriate section of your Call Detail Log. It is not necessary to leave a message on this number. Thank you and have a good day!"

2.5.4. DEVELOPING FRIENDLIES TEST CASES

The TA will determine the proper combination of test scenarios for Friendlies and determine which Friendlies will be assigned to specific scenarios based on facilities

availability. Test cases will be developed from the scenarios outlined in Attachment A of the MTP. Certain Friendlies may have more than one testing scenario (e.g., first scenario may be to install a new line, then issue a request to make a change on the line).

2.5.4.1.FRIENDLIES TEST SCENARIO ASSIGNMENT GUIDELINES

In order to properly match Friendlies with the correct test scenarios the TA End-User Team will utilize the following guidelines to match Friendlies to specific test scenarios:

Retail to UNE-P Conversion test scenario assignment:

- Friendlies must have existing local Service in Arizona

Resale to UNE-P Conversion test scenario assignment:

- Friendlies must have existing local Service in Arizona

Retail to Resale Conversion test scenario assignment:

- Friendlies must have existing local Service in Arizona

UNE-P to UNE-Loop Conversion test scenario assignment:

- Friendlies must have existing UNE-P service in Arizona – or this will require a line conversion to UNE-P to start the test sequence
- Collocation facilities available at Friendlies location

Resale New test scenario assignment:

- Friendlies Residence/Business location in Arizona

UNE Loop New Connect test scenario assignment:

- Collocation facilities available at Friendlies location

Retail to UNE Loop w/ Number Portability test scenario assignment:

- Friendlies must have existing local Service in Arizona
- Collocation facilities available at Friendlies location

Change UNE-P test scenario assignment:

- Friendlies must have existing local Service in Arizona
- Line has been converted to Pseudo-CLEC

Miscellaneous UNE-P test scenario assignment:

- Friendlies must have existing local Service in Arizona
- Line has been converted to Pseudo-CLEC

Private Line test scenario assignment:

- Friendlies must have existing local service in Arizona for conversion scenarios
- Collocation facilities available at Friendlies location

ISDN test scenario assignment:

- Friendlies must have existing ISDN service in Arizona for conversion scenarios
- Collocation facilities available at Friendlies location

CENTREX test scenario assignment:

- Friendlies must have existing Centrex service in Arizona for conversion scenarios

POTS PBX test scenario assignment:

- Friendlies must have existing POTS PBX service in Arizona for conversion scenarios

xDSL Capable Unbundled Loop test scenario assignment:

- Friendlies must have existing service in Arizona for conversion scenarios
- Collocation facilities available at Friendlies location

2.5.5. DETERMINING QUANTITY

The TA Statistics Team will identify the total number of Friendlies required to perform all test iterations, and provide this information to the TA End-User Team.

Approximately 200 Friendlies will be used for new test line installations and 150 Friendlies will be used for secondary line conversions (for a total of approximately 350 Friendly test lines to be utilized for the testing effort). The actual number of Friendlies used for new installations and secondary line conversions will be published in the final report.

2.5.6. DETERMINING DISTRIBUTION

The TA End-User Team will determine which Friendlies are candidates for new installations and/or secondary line conversions, and ensure that a sufficient number of new lines are installed for a statistically valid test.

2.5.7. TRACKING

The physical location of each Friendly will be documented and stored in the TA project database. The TA End-User Team will be responsible for ensuring all location information is correct and updated in a timely matter. See Figure 2.5.7-1 below for an example of the Friendlies information entry screen.

Figure 2.5.7-1: Example of Friendlies Entry Form

The screenshot displays the 'Friendly Information' form within the 'Sedona Friendly Database - [Contacts]' application. The form is organized into several sections:

- Header:** Shows the date and time (Tuesday, May 02, 2000 12:54:30 PM) and the title 'Friendly Information'. A 'TrackingNo' field is present on the right.
- Form Fields:**
 - ContactID:** A text input field.
 - Company Name:** A dropdown menu.
 - Home Phone:** A text input field.
 - First Name:** A dropdown menu.
 - Last Name:** A text input field.
 - Work Phone:** A text input field.
 - Secondary Line:** A text input field.
 - Address:** A large text input area.
 - Work Extension:** A text input field.
 - Text TN:** A text input field.
 - City:** A text input field.
 - State:** A dropdown menu.
 - Postal:** A text input field.
 - Local Carrier:** A dropdown menu.
 - LPIC:** A dropdown menu.
 - PIC:** A dropdown menu.
 - Email Name:** A text input field.
 - Directory Listing:** A dropdown menu.
 - Line Type:** Radio buttons for Residence, Business, and Other.
 - Active Lines:** Radio buttons for One, Two, Three, Four, and Zero.
- Buttons:** 'Add Record', 'Delete Record', 'Refresh', 'Close Form', 'Open Usage', 'Open Feature', and 'Open Colocation' are located on the right side. 'Save Record' and 'End Record' are located below the Line Type and Active Lines sections.
- Notes:** A large text area for entering notes.
- DuoDateTracking Table:** A table with columns: ContactID, InitialContact, LOASent, LOAReceived, Install/Conn Date, InfoPack Sent, CDL1Return Date, CDL1Received, CDL2Return Date, CDL2Received. The table currently shows one record.
- Footer:** Shows 'Records: 14 | 1 of 1' and 'Form View'.

2.5.8. MANAGING INSTALLATIONS

The TA End-User Team will identify the Friendly locations where new test lines will be physically installed. The new line installations, including inside wiring, will be set-up through U S WEST, or an outside installation vendor. Prior to Friendly test calls, the TA End-User Team will verify with the Friendly that the line has been successfully installed (i.e., there is dial tone) and the line is ready. If the TA End-User Team cannot verify the success of a new installation, the TA End-User Team and the Friendly will coordinate Maintenance and Repair directly with U S WEST until the Friendly is fully operational.

U S WEST will be responsible for any installation costs, monthly service fees, and usage charges associated with the testing effort on the installed or converted test lines. Friendlies will be responsible for paying all toll charges unrelated to testing.

2.5.8.1. UNPLANNED TROUBLE

Prior to the testing period, test lines will be installed by U S WEST at selected Friendlies locations. Friendlies will be instructed to contact CGT with any repair issues prior to the testing period. CGT will work with the Friendly to contact the U S WEST repair center to coordinate a repair. Friendlies with repair issues on their test lines will be instructed to contact the U S WEST repair center at 1-800-244-1111 for residential test lines and 1-800-603-6000 for business test lines. However, if after the repair ticket is completed and there are still repair issues prior to the testing period, CGT will contact the U S WEST 271 team to investigate and escalate the repair issue. This process will be followed for Friendlies that remain U S WEST retail accounts during the Retail Parity Evaluation testing period.

Once testing begins, the trouble reporting procedure will be dependent upon the status of the Friendlies' line, i.e., retail versus wholesale. Until the line is converted to the Pseudo-CLEC, the trouble reporting process will remain unchanged. Once the line has been established as a CLEC service, Friendlies will be provided an 800 number to contact the Pseudo-CLEC for any maintenance and repair issues not related to M&R scenarios. The Pseudo-CLEC will be responsible for providing the 800 number to include in the Friendlies' Test Information Packets. The Pseudo-CLEC will be responsible for reporting and resolving maintenance and repair issues, following normal CLEC trouble reporting procedures. Friendlies' Test Information Packets will contain an unplanned trouble log for the Friendly to fill out and detail any unplanned troubles reported to the Pseudo-CLEC.

2.5.9. MAPPING FRIENDLIES TO TEST CASES

The TA End-User Team will ensure appropriate scenarios are assigned to Friendlies in accordance with the MTP. When the features and test scripts are matched to specific Friendlies, the data will be available from the TA.

2.5.10. FRIENDLIES TEST INFORMATION PACKETS

Test Information Packets will be sent to the Friendlies via US mail. The TA End-User Team will verify that the Test Information Packet is received, answer any questions, and ensure awareness of the responsibilities. Test Information Packets will contain: detailed instructions on the test calls for the Friendlies to perform (Figure 2.5-1); Call Detail Logs (Figure 2.5-2) with scheduled test call dates to record test calls; Unplanned Trouble / Repair Log; and postage paid return envelopes to send the Call Detail Log and the Unplanned Trouble / Repair Log to the TA. Test Information Packets may contain more than one Call Detail Log and more than one Return Envelope if the Friendlies are testing more than one scenario.

2.5.11. VALIDATION OF 900/976 BLOCKING

All Call Detail Logs will include the testing of 900/976 blocking on the test lines. 900/976 Block is a feature that CLECs routinely have blocked on all lines unless the CLEC customer specifically requests 900/976 blocking be removed. Therefore, in order to make the testing valid, most orders entered for the Friendlies' test lines will include the 900/976 blocking features. In a few cases, the 900/976 blocking feature will not be activated in order to validate that Friendlies are capable of completing 900/976 calls.

2.5.12. LIDB BLOCKING OR ACCEPTANCE OF COLLECT AND THIRD-PARTY BILLING

The TA End-User Team will verify LIDB blocking or acceptance of collect and third-party billing to the Friendlies' test lines during the provisioning of all test lines. Collect and third-party billing will be set up to be either blocked or accepted by the U S WEST LIDB. The TA End-User Team will verify blocking or acceptance of collect or third-party billing calls terminating at selected Friendlies test lines through test calls. The TA End-User Team will record the results of the test calls in the TA database.

2.5.13. CREATION OF THE DATABASE

The TA End-User Team will work with the TA Project Database Development Team to ensure the portion of the TA project database created to manage the Friendlies contains the necessary tables and reports. The TA End-User Team will enter Friendlies information into the TA project database through the "Friendlies Entry Form" (Figure 2.5.7-1) and Call Detail Log information (Figure 2.5-2) through the "Call Detail Log Entry Form" (Figure 2.5.13-1). The data will assist the TA End-User Team in managing the tracking reports and statistics on Friendlies testing.

Figure 2.5.13-1: Example of Friendlies Call Detail Log Entry Form*

* Note all entry fields are not displayed on this screen copy, the user will use the right scroll bar to display and enter the additional test data.

The screenshot shows a Microsoft Access window titled 'Call Detail Log Entry Form'. The form is divided into several sections, each representing a different type of call test. At the top, there are fields for 'First Name', 'Last Name', 'Address', and 'Test Line'. Below these are six test entries, each with a title, 'StartTime', 'EndTime', and 'Test' radio buttons (Successful and Unsuccessful). A 'Comment' text box is provided for each entry. The test entries are: 900/976 Blocking, 800 Number Dialing Capability, Directory Assistance, Long Distance Carrier Verification, Long Distance Call Completion, and Local Call Completion. The status bar at the bottom indicates 'Record: 1 of 1' and 'Form View'.

2.5.14. COLLECTING CALL DETAIL LOGS

Within 24 hours of completion of testing, Friendlies will be responsible for mailing the completed Call Detail Logs to the TA End-User Team using the postage paid return envelopes included in the Test Information Packets. The TA End-User Team will enter the data into the TA project database through the Call Detail Log Entry Form (Figure 2.5.13-1). Compiling the completed data in the TA project database will allow the TA to analyze the results of all Friendlies testing.

2.5.15. MANAGING TEST CASE EXECUTION

Once the TA End-User Team has verified that the Friendlies have newly installed lines and ported lines in working condition (i.e., dial tone) the TA End-User Team will contact each Friendly two days prior to initiating call testing to ensure the following:

- a) Friendly is ready and able to test
- b) Friendly is aware of all testing responsibilities

- c) Friendly has all material that was sent in the Test Information Packets
- d) Friendly understands to return the completed Call Detail Logs (Figure 2.5-2) within 24 hours of testing completion in the postage-paid return envelopes included in the Test Information Packet provided prior to testing

2.5.16. CREATION OF REPORTS

The TA End-User Team will manage the creation of reports in the TA project database. The reports will document statistical results of all End-User testing.

2.5.17. RESTORATION OF SERVICE

All testing at Friendlies' locations will be complete at the conclusion of the specific U S WEST bill cycle for those end-users. The TA, Pseudo-CLEC, and U S WEST will work collaboratively to ensure that all new installs (including all test lines pre-provisioned by U S WEST for the testing effort) are permanently disconnected and all conversions are converted back to pre-test line conditions.

For Friendlies that are converting existing secondary lines, a Customer Service Record (CSR) of the Friendlies' existing services will be secured by the Pseudo-CLEC prior to any testing to obtain the detail of the existing features on the line to be converted to the Pseudo-CLEC. The Pseudo-CLEC will provide this information to the TA in generic text files to be submitted to the TA via Email upon conversion of the Friendlies secondary line. Also prior to the testing effort U S WEST will provide the TA the CSRs for Friendlies test lines that are pre-provisioned new test line installations.

When the testing has concluded, the TA will provide the original CSRs to U S WEST. U S WEST will convert the lines back to the original pre-test state or arrange for their disconnection, as appropriate.

2.6. Risks

A number of risks surround Friendlies solicitation and activities. In order for the 271 test effort to be successful, these risks must be mitigated. Otherwise, schedule delays, inaccurately reported test results, or other problems could occur.

To ensure that the testing effort is not affected by risks, the TA End-User Team will spend considerable time both before and during tests mitigating the risks contained in the table that follows:

Risk	Impact if Risk is not Mitigated	Mitigation Approach
Insufficient Friendlies before start of tests	Delay to tests either starting or completion	Establish at least three groups to whom solicitations will be sent one at a time. Monitor the call rate of volunteers following the solicitation and solicit subsequent groups once the volunteer rate per day goes below 10% of the peak rate.
Friendlies do not properly execute the test	Failure of the test case	On the call two days before the test is to occur, ask the Friendly for feedback as to how he or she interprets the step by step process for his or her tests as outlined in the Friendly Test Packet. Repeat instructions if required. If problems are anticipated regarding the Friendly being able to perform the test after the walk-through two days before the test, send a copy of the test packet to an Alternate (from among additional Friendlies). Call and walk the Alternate Friendly through the test.
Friendly test results are not received within 96 hours of the test.	Delay to test data update and reporting. Daily reports may be effected.	Contact Friendly and request they send their bottom copy of the Call Detail Log to the TA
Friendlies do not participate as promised	Delays to the testing	Call each Friendlies 2 days prior to the scheduled start of each test to verify that they will participate as promised. Prepare Friendlies Mailers

Risk	Impact if Risk is not Mitigated	Mitigation Approach
		for additional Friendlies for each test type
Confusion of Friendly during interval between volunteering and receipt of the LOA signature packet	Frustration of Friendly might result in losing a volunteer. This may subsequently result in a schedule delay.	LOA Signature Packets will be sent to the Friendly within 2 business days of the Friendly volunteering.
Confusion of Friendly during interval between signature of LOA and receipt of the Friendly Test Packet (describing tests the Friendly will run and how)	Frustration of Friendly might result in losing a volunteer. This may subsequently result in a schedule delay.	Bi-Weekly communications with all Friendlies in this category to let them know current status of the testing schedule.
Confusion of Friendly during interval between receipt of Friendlies Test Packet and test dates.	Frustration of Friendly might result in losing a volunteer. This may subsequently result in a schedule delay.	Bi-Weekly communication with all Friendlies letting them know any status we can provide at the time.

2.7. Exit Criteria

1. Friendlies testing complete
2. Original CSRs for converted lines are available
3. New installs disconnected
4. For migration of Friendlies to UNE-Loops, U S WEST, CLEC and the Pseudo-CLEC have successfully converted customers back to pre-test state
5. Test Results entered in TA project database
6. TA End-User Team Friendlies Reports from the TA project database are included in the final report

3. FUNCTIONALITY TEST

3.1 Scope

The Functionality Test is designed to provide information that the ACC can use to assess the ability of U S WEST's OSSs and processes to provide operational functionality to CLECs. The Functionality Test will include the following U S WEST processes:

- a) Pre-order
- b) Order/Provisioning
- c) Maintenance and Repair (M&R)
- d) Billing
- e) Special services for resale customers such as 911, Operator Assistance (OA) and Directory Assistance (DA).

The Functionality Test will determine if the OSS adequately performs the above functions for a set of predefined test scripts developed from scenarios. The Functionality Test will also verify and validate the following:

- a) Verify the ability of the CLEC participants or the Pseudo-CLEC to perform the necessary pre-order activities, to submit LSRs and ASRs through U S WEST's OSS which must successfully provision and install the requested service or facilities (ASRs will not be provisioned) in an accurate and timely fashion. This includes the ability to track the progress of the LSRs and ASRs through these systems, install the service or facility, observe final order completion, verify the establishment of billing records, and verify the accuracy of call records against documented test calls.
- b) Validate the ability of a CLEC participant to access Maintenance and Repair (M&R) systems using EB-TA. Additionally, the Pseudo-CLEC will access M&R systems using the U S WEST IMA-GUI. Relevant aspects of this access include the ability to:
 - 1. Determine whether these systems will generate a timely and accurate trouble report
 - 2. Determine whether U S WEST will notify the CLEC or the Pseudo-CLEC of successful restoration of service after the service fault was identified and corrected

3. Access U S WEST M&R OSS to obtain status
 4. Determine if a participating CLEC and the Pseudo-CLEC can obtain a Mechanized Loop Test (MLT) for a reported trouble
 5. Determine if the MLT results provide the CLEC and the Pseudo-CLEC the appropriate information
 6. Retrieve a customer's trouble history, as applicable
- c) Validate U S WEST database updates of certain special services, including the 911/E911, OA and DA databases for resale customers.

Testing will be performed with U S WEST's production OSS and processes using a variety of Friendlies and test accounts. The Functionality Test will focus on Resale, UNE-P, Designed Services, UNE-Loop, UNE-Loop with Number Portability (LNP), and Number Portability (NP). Some tests will be done in a manner such that a statistically significant quantity of test scripts will be tested. Reference Appendix K for a list of the product cell breakdown. For other test scripts, a few will be tested to determine if U S WEST has the capability to perform the required function. The additional test scenarios are:

- UDIT
- EELS
- Winbacks to U S WEST

The tests involve the collection of data in a controlled manner pursuant to specified test procedures, using specified input data. Both business and residential orders will be tested, and the testing will encompass new installation, conversion 'as is', conversion 'as specified', partial migrations, change, disconnect, cancel, suspend, and restore activities. The integration of pre-order data supplied by U S WEST and the order data required by U S WEST will be tested. Test scripts developed for the Functionality Test will include end-to-end processing so that all functionality from pre-order through billing can be evaluated for both urban and rural areas.

The definition of Pre-order, Order, and Provisioning processes are as follows:

Pre-order is the process by which CLECs query U S WEST databases to verify or obtain the information necessary to prepare and issue a valid LSR or ASR and to retrieve information about the resources of U S WEST.

Order is the process that CLECs use to format and issue LSRs or ASRs to U S WEST.

Provisioning consists of the processes that U S WEST uses to install the service or facility ordered, or otherwise implement the CLEC order.

The Pre-order, Order, and Provisioning Functionality Test will involve the following interfaces:

- a) EDI (The Pseudo-CLEC will develop an EDI interface to U S WEST's EDI interface)
- b) IMA-GUI (The Pseudo-CLEC will use U S WEST supplied IMA-GUI)
- c) EXACT (Collaboration with MCIW to test the existing EXACT interface.)

3.2 Maintenance and Repair Interfaces

Maintenance and Repair (M&R) is the function used by CLECs to report end user and network troubles to U S WEST, test the end user lines by MLT, isolate the trouble conditions, and check the status of the reported troubles. Any trouble, planned or unplanned that occurs during the test process will be considered part of the tests.

The M&R Functionality Test will involve the following interfaces:

- a) Electronic Bonding-Trouble Administration (EB-TA) (Collaboration with MCIW to test the existing EB-TA interface)
- b) IMA-GUI (The Pseudo-CLEC will use U S WEST supplied IMA-GUI)

3.3 Billing Interfaces

The billing process is the means by which U S WEST provides CLECs with wholesale bills, usage data and records for the services, features, network elements (e.g., loop) and features that were ordered and provisioned. The primary focus for testing the billing interfaces is to validate the timeliness, accuracy and completeness of the U S WEST billing processes.

The Billing Functionality Test will involve the following interfaces:

- a) Exchange Message Interface (EMI)
- b) Electronic Data Interchange (EDI)

3.4 Functionality Test Coverage and Scenarios

Functionality Test coverage has been established to ensure that the functionality being tested best reflects the current and anticipated business environment. The development of the scenario coverage is designed to ensure that each scenario provides value-added processing, and duplication of common processes is minimized. In order to gain a reliable statistical sample of processing measures, the statisticians will analyze the order

scenarios to determine the proper mix of product type/orders and the number of iterations required for statistical validity. The TA will work with the TAG to determine and finalize the transaction mixes to be utilized for the Functionality Test (Appendix K).

The Functionality Test will include flow-through service orders and manual processes used to process orders. Flow-through orders are electronically received LSRs which have service orders accepted by the Service Order Processor (SOP) without any human intervention.

3.5 Test Schedule

The TA will create a test schedule of the daily volume of orders to be issued by the Pseudo-CLEC (Appendix H). This schedule will identify the media to be used, summarized to depict weekly and total volumes. The schedule is for TA planning purposes and will be shared with all parties except U S WEST, as U S WEST's access to the schedule would provide a forewarning of the tests. U S WEST will have access to the test schedule following completion of the tests.

3.6 Functionality Test Participants

A successful Functionality Test requires participation, commitment, and accountability from CLECs, Pseudo-CLEC, TA, Friendlies, and U S WEST. The roles and responsibilities of these groups are as follows:

- a) CLECs that participate in the testing effort will be required to provide input to test scripts based on pre-defined scenarios. Additionally, they will be responsible for conducting certain tests to be monitored by the TA.
- b) The Pseudo-CLEC will have the same roles and responsibilities as an operating CLEC, with the additional responsibility of customizing its transaction generator software to function with U S WEST's OSS before testing begins.
- c) The TA will monitor the testing effort and act as test supervisor in the day-to-day operations of the project. In addition, the TA will track issues that arise during the test, perform root-cause analysis of those issues with input from the test participants, analyze the outcome of the test effort, produce test scripts and provide a feedback report to the ACC. The TA will be responsible for the generation of the Functionality Test Scripts, the coordination of other parties involved in the testing, and a final report.
- d) The Friendly volunteers will receive information packets detailing the types of transactions (calls) they will be required to originate, the dates required, and any reports they are required to complete to document their test calls.

- e) U S WEST will act in a supporting role as directed by the ACC or its advising representatives. This role includes providing Subject Matter Experts (SMEs) for consulting and support during test planning, preparation, execution, and analysis and for establishing the Friendly accounts. U S WEST's systems, operations, and processes are the basis for the test.

3.7 Functionality Test

The Functionality Test will involve the testing of pre-order, order, provisioning, billing, and maintenance and repair functions.

3.1.13.7.1 Approach

During test generation, the TA will monitor the overall performance of U S WEST's systems through observation of the members of the Pseudo-CLEC team. The Pseudo-CLEC will perform queries defined for each test script, and capture the results in the Pseudo-CLEC database. The updates to the Pseudo-CLEC database will be accessible to the TA on an as-needed basis. The TA will analyze these data and issue daily reports on test status.

Following root cause analysis on each failed test script, the TA will log the cause for the failure on the daily log. The TA will either reissue the test (with instructions as to the cause of the failure) or, in the case where a failure requiring U S WEST's attention is found, will prepare an Incident Work Order. The Incident Work Order will be handled in accordance with the Testing Incident Process in Appendix I.

The TA daily report will be updated at the end of each workday. It will include information from the daily log (Appendix D) regarding observations made during that day. The daily log will consist of the following fields:

- a) TA Tracking Number
- b) Purchase Order Number (PON)
- c) Process Area (Functionality)
- d) Process Sub-Area (e.g. UNE-P Residence)
- e) Transaction Media
- f) Date Submitted
- g) Date Completed
- h) Pending Status

- i) FOC Received Date
- j) SOC Received Date
- k) Expectations Met/Missed
- l) Comments

The specifications are defined in the following sections.

3.1.23.7.2 Tracking

Test scripts will be created by the TA, based on the test scenarios found in Appendix A of the MTP and subsequently TA developed Test Cases. See Appendix E for an excerpt of the Test Cases. Each Test Case will be assigned a unique tracking number and include the data necessary to create a test script for execution by the Pseudo-CLEC. The tracking number will be used by the Pseudo-CLEC to report order status to the TA, and to track the progress of test scripts throughout the test period.

Note: The Tracking Number is not the same as the Purchase Order Number (PON). The PON is generated by the Pseudo-CLEC and is a randomly generated number to further ensure blindness.

The format of the tracking number is as follows:

Scenario Abbreviation				Test Scenario Number			Test Case Instance		
A	A	A	A	N	N	N	n	n	n

Example: LPWP127002
 Product: Loop with Port
 Test Scenario: 127
 Instance: 002

The abbreviations for the scenarios are:

Abbreviation	Scenario
LPWP	Loop with Port
BASL	2-wire analog loop
XDSL	xDSL-capable Loop
DS1L	DS1 Loop
LNPL	LNP with Loop
LNPO	LNP Only
SDIR	Stand-alone Directory Listings
SUPP	Supplemental
MNTR	Maintenance and Repair

Abbreviation	Scenario
RESL	Resale
RETL	Retail

The sent and received times will be tracked by the Pseudo-CLEC for each of the functions performed for both mechanized and manual (faxed) transactions. This includes the date/time stamp affixed to EDI transactions as they arrive at the U S WEST firewall. The times will be recorded in the Pseudo-CLEC database and on the "Test Script". Reference Appendix B for an example of the test scripts. Input and response messages for each of the test scripts processed will be captured manually or electronically. These will be available to the on-site TA member during the process. The Pseudo-CLEC will provide the TA with the data.

3.1.33.7.3 Reset Test Accounts

Resetting test accounts may be required to minimize the amount of Friendlies and test accounts required to complete the functionality test. Situations may occur based on failure rates or increased number of iterations required for a given test criteria. U S WEST will be responsible to create or reset the accounts and CGT will be responsible for providing the information. The number of reset requests and the critical schedule benchmarks will determine the response time to complete the tasks.

The reset process will involve the TA completing a form (See Appendix F) and emailing it to U S WEST. A telephone call will also be made to alert U S WEST the request was submitted. On the form, a priority due date will be entered. U S WEST will perform the requested transaction and return the form to the TA when complete. Any jeopardy conditions affecting the completion of the test schedule will be escalated to the TAG utilizing the Master Issues Log (MIL) described in Appendix J.

3.1.43.7.4 Pre-Order

3.7.4.1 SCOPE

The pre-order process allows the Pseudo-CLEC to retrieve customer service information and information about U S WEST resources in order to issue a valid LSR for the customer's service request. The pre-order evaluation will consist of testing the functionality of U S WEST's IMA-GUI and EDI systems while the Pseudo-CLEC performs system queries to obtain valid customer information. Testing will assess the ability of these systems, as they are used, to gather and use information for the various types of business and residential test script orders.

The focus of the pre-order aspect of the Functionality Test will be on the retrieval and evaluation of the:

- a) CSR query that allows the CLEC to view an end-user's current service record.
- b) Address Verification query that allows the CLEC to verify service address information, as registered in U S WEST's service areas.
- c) Reserve Telephone Number(s) function that allows the CLEC a 30-minute window, during a given query, to reserve one or more telephone numbers at a verified address. U S WEST's random telephone numbers are reserved for 24 hours and if not used on an LSR within that 24 hour period, the telephone number (TN) will automatically be returned to the TN pool. Special TNs, vanity TNs and requests for large numbers of TNs must be requested manually through U S WEST number assignment bureau.
- d) Service and Feature Availability query that allows the CLEC to retrieve a list of services and features available on U S WEST's serving switch by the verified service address and as allowed by the CLEC's interconnection contract. In addition, available PIC & LPIC query that returns to the CLEC a list of long distance carriers that provide long distance service to the service address.
- e) Appointment Scheduler functionality that allows the CLEC to view available dates and appointment times for dispatch of field technicians. The CLEC is allowed a 30-minute window, during a given query, to reserve the desired due date which must be submitted via LSR within 24 hours.
- f) Facility Availability query that allows the CLEC to view whether dispatch is required for connection of new lines.
- g) Appropriateness and timeliness of reject messages as well as a successful connection to the pre-order system. Sent/receive times will be captured for future evaluation.
- h) Loop Qualifications query will provide loop makeup information and specific characteristics of the loop.

3.7.4.2 APPROACH

The TA approach is to satisfy the functionality requirements prescribed in the MTP, and will involve monitoring the test execution and recording the results in the TA Project database. The Pseudo-CLEC will provide access to the daily log and data files (i.e., LSRs, FOCs, SOCs, and Rejects) to the TA.

The daily pre-ordering responsibilities of the TA consist of:

- a) Delivering the test scripts to the Pseudo CLEC

- b) Monitoring and evaluations the performance of the EDI and GUI entry systems to the IMA gateway
- c) Collecting test script data from the Pseudo CLEC foe each test script executed
- d) Providing test script results for input into the daily tracking log

3.7.4.3 ENTRANCE CRITERIA

Prior to commencement of pre-order testing, the following items will be provided by the TA and the Subject Matter Experts. Additionally, the following information, and testing location must be confirmed.

- a) TA:
 - 1. Develop test scripts based on data from the test scenarios in the MTP
 - 2. Create a spreadsheet to document details associated with each test script and expected results
 - 3. Develop test script forms and provide data requirements using information from completed test script spreadsheets
 - 4. Collect names and addresses of Friendlies' from the End-User Team
 - 5. Populate Test Scripts with Friendly's name, addresses and other pertinent information about products, features and listings used to generate the test cases assigned to specific test scripts
 - 6. Receive the number of iterations for each Test Scenario from the Statistical Team
 - 7. Receive the volume of test scripts to be executed each day from the Statistical Team
 - 8. Update Test Scripts with execution dates
 - 9. Provide test scripts to the Pseudo-CLEC
 - 10. Establish daily update reports transfers to the TA for 911 and OA/DA systems
 - 11. Establish data flow to U S WEST for table updates for blocking directory printing and 911 fallout of pseudo accounts

b) Resources/Subject Matter Experts (SME):

1. U S WEST Core Testing Team is available for internal system queries
2. Names of the point of contacts and order entry personnel at the Pseudo-CLEC Site
3. Name of the point of contact and support personnel at the participating CLEC locations
4. Access to U S WEST's service ordering reference manuals
5. Performance measures have been implemented
6. Daily logs to document observations
7. U S WEST 911 IT SME for update data extracts
8. U S WEST 911 vendor SME for pseudo account maintenance
9. U S WEST operator services SME for blocking table maintenance

c) Information:

1. All Pre-Order Performance Measurements have been tested and successfully passed **[This looks like a less complete version of bullet number 6.]**
2. Pseudo-CLEC has the ability to send and receive transactions through U S WEST gateways
3. Daily Schedule for all tasks to be performed on a given date
4. Validation that the Pseudo-CLEC is able to collect data. This will be accomplished using transactions performed during the "Readiness Certification" process. During this process, the Pseudo-CLEC will verify that the TA is able to access the Pseudo-CLEC database to extract the elements required for analysis
5. Test data elements available in the databases
6. The Performance Measurement Evaluation process has been successfully passed for all relevant Performance Measures. The TA will organize Functionality Testing into a number of test phases by mapping Test Cases/Scripts to Performance Measures that have successfully passed the

process audit. Testing can then begin for Test Cases/Scripts that map only to Performance Measures that have passed the required audits

7. Test quantities have been identified by the Statistical Team
 8. Email addresses have been established for 911 and OA/DA maintenance processes
- d) Locations: Pseudo-CLEC test site

3.7.4.4 PRE-ORDER ACTIVITIES

The TA will use the test scenarios from the MTP to develop test cases, which will then be used to create test scripts. The test scripts will be delivered to the Pseudo-CLEC in lieu of incoming telephone calls from end-user customers. The Pseudo-CLEC will perform the pre-order queries to gather the data necessary to prepare the LSRs. Subsequently, as part of the order process, the Pseudo-CLEC will enter the data in the IMA-GUI or EDI application.

Upon commencement of testing, pre-order activities will include:

- a) Retrieve test scripts scheduled for execution each day and enter on the daily tracking log
- b) Deliver the test scripts as specified in the test schedule for that day's testing to the Pseudo-CLEC.
- c) Monitor a sampling of Pre-order activities (e.g., address validation, CSR query, etc.) and document observations (e.g., effectiveness of training, etc.)
- d) Monitor and evaluate overall performance of the IMA-GUI/EDI systems
- e) Collect completed test scripts from the Pseudo-CLEC and enter the results on the daily tracking log
- f) Verify the expected results against actual results to ensure the objectives are attained
- g) Validate the accuracy of the data input by the Pseudo-CLEC, when actual results are different from expected results, and determine if a re-test is required
- h) Download data for each day's executed test scripts from the Pseudo-CLEC database and store the results for future evaluation
- i) Prepare the Pre-Order portion of the daily test report

3.7.8.53.7.4.5 EXIT CRITERIA

The exit criteria for pre-order testing will consist of successful system responses to queries and retrieval of customer service information. This will include validation that:

- a) Pre-order data entry corresponds to test script data
- b) Pre-order responses match the expected results defined for each test script
- c) Interface and system errors have been identified and testing incidents have been handled in accordance with the Testing Incidents Process (Appendix I)
- d) All Test Scripts have been completed
- e) All daily logs have been completed
- f) All performance benchmarks and parity requirements have been achieved in accordance with the Functionality Test Evaluation section of this document

3.7.5 Order/Provisioning

3.7.5.1 SCOPE

The Functionality Test for Order and Provisioning involves the transmission of LSRs from the Pseudo-CLEC via IMA-GUI and EDI, including processing by U S WEST, the generation of responses back to the Pseudo-CLEC, and provisioning of the service by U S WEST for some LSRs.

ASRs from a volunteer CLEC will be transmitted using EXACT. U S WEST will process the request and generate responses back to the volunteer CLEC, however, ASRs will be cancelled prior to being provisioned.

The scope of the Functionality Test encompasses the following:

- a) Testing of U S WEST's interfaces and order entry systems to validate that they provide the ability to receive LSRs via EDI, IMA-GUI and FAX as prescribed in the MTP for those types of service for which FAX is the only means of LSR submission and ASRs via EXACT, ~~and via FAX as prescribed in the MTP for those types of service for which FAX is the only means of LSR submission~~
- b) The transmission of multiple order types by the Pseudo-CLEC to U S WEST, including new installation, conversion as specified, conversion as is, changes,

outside moves, suspends, restores, disconnects, cancellation orders and 911/DA database updates as required

- c) The transmission by U S WEST to the Pseudo-CLEC of Acknowledgements (EDI), Rejects, Jeopardy Notifications, Firm Order Confirmations (FOC), and Service Order Completion (SOC) status
- d) Validation that each request has been provisioned as specified in the order
- e) The processing of flow-through and non flow-through orders (i.e., those accepted by the SOP and those needing human intervention in order to be created)
- f) Daily reporting of test status to include:
 - 1. Number of tests run to date by category
 - 2. Tests passed to date by category
 - 3. Tests failed to date by category
 - 4. Incidents recorded to date
 - 5. Testing incident resolutions received to date (via Performance Acceptance Certificates from U S WEST)
 - 6. Re-tests performed on Performance Acceptance Certificates to date
 - 7. Passed re-tests, and failed re-tests (orders still in progress will not be included on the report, but will be tracked)
 - 8. For coordinated requests, determine if U S WEST contacted the Pseudo CLEC at the appropriate times and provided the appropriate information.

3.7.5.2 APPROACH

The TA approach is to satisfy the functionality requirements prescribed in the MTP, and will involve monitoring the test execution and recording the results in the TA Project database. The Pseudo-CLEC will provide access to the daily log and data files (i.e., LSRs, ACKs, ASRs, FOCs, SOCs, and Rejects) to the TA.

~~3.7.8.3~~ 3.7.5.3 ENTRANCE CRITERIA

Prior to commencing the order functionality test, the following criteria must be met:

- a) All Order and Provisioning Performance Measurements have been tested and successfully passed.

- b) Receive the number of iterations for each Test Scenario from the Statistical Team
- c) All pre-order entrance criteria have been met
- d) Sufficient Pseudo-CLEC and U S WEST resources available to process the test scripts as scheduled based on statistical volume projections
- e) Friendly volunteers are available to begin testing
- f) Collocation assignments have been established at the CLEC demarcation points in U S WEST and end offices
- g) Adequate procedures for monitoring Pseudo-CLEC activities have been established
- h) Test scripts have been completed and are ready to be delivered to the Pseudo-CLEC by the TA

3.7.5.4 ACTIVITIES

Monitoring

During the execution of the test scripts, the TA will have team members on-site at the Pseudo-CLEC Order Entry Desk location. The team will observe and document order entry methods, training effectiveness, and interactions between the Pseudo-CLEC and U S WEST.

If the LSR is rejected, the Pseudo-CLEC personnel will compare what was on the test script to what was entered. If the reject was due to a mistype, the Pseudo-CLEC will re-enter the test script. If the data was correctly entered, the test script will be forwarded to the TA for further investigation. The TA will assist in resolving issues (between the Pseudo-CLEC and U S WEST) and/or preparing Incident Work Orders in accordance with Appendix I when appropriate.

If the ASR is rejected, the CLEC personnel will compare what was on the test script to what was entered. If the reject was due to a mistype, the CLEC will re-enter the test script. If the data was correctly entered, the test script will be forwarded to the TA for further investigation. The TA will assist in resolving issues (between the CLEC and U S WEST) or preparing Incident Work Orders in accordance with Appendix I when appropriate.

Tracking

Each Test Script will be monitored by use of a tracking number assigned by the TA during the Pre-Order phase. The Tracking Number will be used by the Pseudo-CLEC to report order status back to the TA. The TA will use the Tracking Number to monitor the

progress of each test script throughout its lifecycle. The Pseudo-CLEC will provide the TA access to the data file containing LSR, ACK (EDI), FOC, Reject and SOC information on a daily basis. The TA will retain the data and provide statistics on the timeliness of U S WEST order processing. Daily Test Status Reports will be prepared from this information and will be transmitted to the ACC, and subsequently to the Test Advisory Group (TAG) at the ACC's discretion.

Friendlys Service Validation

Each Friendly will confirm whether their respective service requests were provisioned in an accurate and timely fashion and without any outages. See the End-User Section, Managing Service Installation, for a description of validating Friendlys installations. For orders that have been supplemented, the Friendly will verify that service was not installed early or that their service was not disrupted on the original due date.

Service Validation

The TA will access U S WEST's switch and compare feature/functionality via the- IMA-GUI, Maintenance and Repair, Feature Availability function and compare the switch data to the LSR to validate the accuracy of provisioning.

3.7.8.53.7.5.5 EXIT CRITERIA

Prior to exiting the order functionality test, the following criteria must be met:

- a) The Pseudo-CLEC has successfully executed all test scripts
- b) The Pseudo-CLEC has provided the required data for each test script to the TA
- c) Statistics were collected that reflect U S WEST's timeliness in processing of order, and the generation of Acknowledgments (EDI), Rejects, FOCs, and SOCs for Pseudo-CLEC LSRs and other provisioning transactions. FOC and SOC timeliness for ASRs will also be represented in the collected statistics.
- d) Statistics were collected that reflect the timeliness and accuracy of U S WEST's provisioning of requested services
- e) The TA validated that the orders were provisioned as specified
- f) The TA evaluated the results and concluded that all tests are complete
- g) All requirements designated by the MTP were achieved and there are no additional outstanding requirements
- h) The TA has supplied to U S WEST a list of all test accounts that have active test circuits connected to enable U S WEST to purge its order, provisioning, and

billing systems of these test accounts as specified on the exit checklist (Appendix L)

- i) All outstanding incidents were closed in accordance with the Testing Incidents Process (Appendix I)
- j) All performance benchmarks and parity requirements have been achieved in accordance with the Functionality Test Evaluation section of this document (Section 7.3.4)

The summarized results of observations and findings collected during the Monitoring phase will be published in accordance with the reporting guidelines approved by the ACC.

~~3.1.6~~ 3.7.6 Trouble/Maintenance and Repair

3.7.6.1 SCOPE

The Trouble/Maintenance and Repair Evaluation will focus on a list of basic trouble conditions, both physical and feature-related, that regularly effect customers of both the CLEC and U S WEST. Maintenance and repair will be coordinated through the EB-TA interface (MCIW) and the IMA-GUI interface. Maintenance and repair requests will be created to evaluate the effectiveness of U S WEST's reporting systems and responsiveness to trouble calls.

- a) The primary focus of the testing will be on U S WEST's: Electronic process of testing lines for possible trouble (e.g. MLT)
- b) Response to requested updates on the status of pending trouble reports
- c) Proper disposition of the reported trouble through the system in which the report was generated, including a verification of the disposition code and the cause code
- d) Proper notification to the CLEC and Pseudo-CLEC when the trouble is cleared

The Trouble/Maintenance and Repair evaluation will simulate normal CLEC M&R activity when a service affecting and non-service affecting situation occurs. The testing will use lines established in previous test scripts.

~~3.7.8.2~~ 3.7.6.2 APPROACH

To test the effectiveness of U S WEST's trouble reporting systems, the TA will create test scripts to simulate a customer calling the local provider to report a trouble condition (See Appendix G). During the tests but prior to reports of line trouble, the TA will call the

U S WEST Core Testing Team and request configuration changes to specified accounts to induce actual trouble conditions. Only switch related trouble setup would require U S WEST assistance; Friendlies or TA members will induce all other line conditions. These trouble conditions will be induced "on the fly" during tests as opposed to being induced before testing begins. The trouble report test scripts, containing a description of the trouble condition, will be delivered by the TA to either the EB-TA CLEC (MCIW) Repair Center or the Pseudo-CLEC after the trouble condition has been initiated. Members of the TA will remain on-site during this phase of the testing.

The evaluation of U S WEST's system will focus on system performance, generation of trouble reports, system responses, and ticket closure.

Examples of planned troubles that will require coordination with U S WEST include:

- a) No dial tone
- b) Features not working
- c) Features not provisioned
- d) Cannot accept collect calls
- e) Static/noise on line
- f) Cannot call 411
- g) Cannot call out
- h) Cannot call 555-1212
- i) Cannot call long distance
- j) Cannot receive calls
- k) Cannot call 800-555-1212
- l) Reports of trouble condition on the due date of a service request
- m) Trouble conditions involving a service request, but reported after the due date

3.7.6.3 ENTRANCE CRITERIA

The Trouble/Maintenance and Repair Functionality test entrance criteria are:

- a) Test cases using the data from the Test Scenarios in the MTP are developed

- b) A spreadsheet documenting the details associated with each test script and the anticipated results has been created
- c) Information directing the number of test cases and iterations for each test case has been received from the Statistical Team
- d) The test script spreadsheet has been populated with end-user names, addresses, and trouble condition needed to generate specific test script
- e) A test schedule has been developed based on volume information provided by the Statistical Team
- f) The test script spreadsheet has been updated with execution dates assigned to each test script
- g) Test accounts successfully provisioned and activated
- h) Coordination between the TA, U S WEST, and the EB-TA CLEC (MCIW) for the use of EB-TA to submit mechanized trouble reports on selected accounts.
- i) The TA will compare MCIW's EB-TA interface to U S WEST's system specifications to determine any differences between the two so that the evaluation can properly address those differences and the expected results are valid.
- j) Modifications have been made by U S WEST and MCIW to allow the Pseudo-CLEC trouble reports to pass through MCIW's EB-TA gateway
- k) Daily Log Forms to record observations are produced
- l) Maintenance and Repair Performance Measurement process evaluations have been successfully passed
- m) Trouble conditions appropriately simulated and induced

3.7.6.4 TRACKING

The TA will report troubles to the Pseudo-CLEC using the Trouble Report test script (Appendix G). The following information is required to track the status of troubles:

- a) Tracking number
- b) Issue Date and Time
- c) Media Type (IMA-GUI or EB-TA)
- d) TN or Circuit ID

- e) Customer Name
- f) Service Address
- g) Contact Name
- h) Ticket Number
- i) Can Be Reached Number
- j) Trouble Condition
- k) Setup Action (actions taken to induce/stage troubles)
- l) Commitment date and time
- m) Status report, including date and time
- n) Date and time trouble report closed
- o) Disposition and cause codes

A copy of the completed trouble report test script will be given to the on-site TA member for analysis and archival when the trouble report is closed.

~~3.7.8.5~~ 3.7.6.5 ACTIVITIES

When testing begins, the M&R Team will:

- a) Retrieve test scripts scheduled for execution each day from the TA Project database
- b) Deliver trouble report test scripts as specified in the test schedule for that day's testing to either MCIW (EB-TA) or the Pseudo-CLEC (IMA-GUI). Batches of test scripts will be delivered periodically during the day.
- c) Monitor trouble verification procedures and documenting observations
- d) Monitor and evaluate the overall performance of the EB-TA and IMA-GUI systems (e.g., system response to query)
- e) Request and document periodic status of trouble report via EB-TA or IMA-GUI until trouble report is closed

- f) Collect test scripts from MCIW and test results from Pseudo-CLEC after execution.
- g) Verify the expected results indicated on the test script against actual results to ensure the objectives were attained
- h) Validate the accuracy of data input by the EB-TA CLEC (MCIW) or Pseudo-CLEC (IMA-GUI) when unexpected results are received, and re-issue tests cases when necessary
- i) Download data for each day's executed test scripts from the Pseudo-CLEC database to the TA
- j) Provide pre-authorization for Maintenance of Service Charges

3.7.6.6 EXIT CRITERIA

The Pseudo-CLEC and MCIW will have been able to perform the following functions:

- a) Create trouble tickets via both IMA-GUI and EB-TA
- b) Request an MLT
- c) Request and review trouble ticket status via the IMA-GUI or EB-TA and document status/results on daily log
- d) Receive/Request trouble ticket closure notification, including the disposition and cause codes
- e) Receive emergency notification for network events (e.g., switch failures)
- f) Execute and pass all Trouble/Maintenance test scripts
- g) Successfully retrieve customer trouble histories
- h) Achieve performance benchmarks and parity requirements in accordance with the Functionality portion of the plan
- i) Access U S WEST's switch and compare feature/functionality via the IMA-GUI, Maintenance and Repair, Feature Availability function and compare the switch data to the test account CSR

Additionally, all Incident Work Orders must have been properly addressed and successfully re-tested with passing results in accordance with the Testing Incidents Process (Appendix I).

~~3.7.8.7~~ 3.7.6.7 DELIVERABLES

Trouble/Maintenance and Repair deliverables are:

- a) Project daily log consisting of all monitoring activities
- b) Completed daily log form
- c) Daily test reports

3.8 Billing

3.8.1 Scope

The Billing evaluation will determine whether U S WEST is providing the CLECs with accurate and timely wholesale bills and usage data, including records for services, features, network elements and functions that are ordered and provisioned.

~~3.8.5~~ 3.8.2 Approach

The Pseudo-CLEC will be assigned at least one monthly bill cycle by U S WEST for issuing bills. U S WEST will provide the bills to the Pseudo-CLEC in two formats, electronic and paper. The electronic bills will be available for the TA Billing Team to access within 24 hours of receipt by the Pseudo-CLEC; the paper bills will be forwarded to the TA within 72 hours of receipt by the Pseudo-CLEC. The bills will be analyzed to verify that they are correct and accurate. U S WEST will make the usage files available to the Pseudo-CLEC on a daily basis and the TA will have access to these files. The information contained on these daily usage files will be used to verify that the usage billed is correct and accurate. The method for validating access-billing records will be documented in the CGT internal process document.

~~3.8.4~~ 3.8.3 Entrance Criteria

In order to perform the Billing Functionality Test, the TA Billing Team requires:

- a) The Pseudo-CLEC must complete U S WEST's customer questionnaire
- b) Receipt of paper copies of the Pseudo-CLEC bills
- c) Receipt of electronic copy of the Pseudo-CLEC bills in EDI format (to be translated by the Pseudo-CLEC)
- d) Daily usage files sent in electronic format

- e) Universal Service Order Code (USOC) rate tables provided by the Pseudo-CLEC
- f) The Performance measurement evaluation of billing measures has been passed.
- g) Receipt of sample U S WEST IABS (Integrated Access Billing System) and CRIS (Customer Records Information Systems).
- h) Validation of how Pre-subscribed Inter-exchange Carrier Charge (PICC) fees are calculated and applied, along with the exact charge associated with each type of fee
- i) A complete list of all applicable billing business rules, including billing increments, minimum and rounding.

Dependencies for this effort include:

- a) Bills received in a timely manner
- b) Access to the translated electronic bill file from the Pseudo-CLEC
- c) Access to the translated electronic daily usage data from the Pseudo-CLEC
- d) File transfer connectivity is established between U S WEST and Pseudo-CLEC
- e) Receipt of necessary business rules and applicable charges from U S WEST to the TA

~~3.15~~ 33.8.4 Activities

The Pseudo-CLEC will work with U S WEST to determine the bills that will be generated and the monthly bill cycles assigned. U S WEST will provide the Pseudo-CLEC with paper and electronic copies of all bills. In addition, U S WEST will provide the Pseudo-CLEC with the daily usage files. The TA Billing Team will have access to the electronic billing data and will receive paper bills from the Pseudo-CLEC.

The TA Billing Team will review the daily usage files to verify the data sent by U S WEST during a reporting period are included in the files. The TA will be collecting the Call Detail Logs which will provide feedback on what was sent and what was processed by U S WEST. The Call Detail Log information and the daily usage files will be compared and analyzed to determine if the records are correct. Any discrepancies will be researched and handled as necessary. Errors in billing will be identified and documented by the TA Billing Team and given to the Pseudo-CLEC to be handled through U S WEST's billing inquiry process.

When the bills are received, the validation process will be performed by comparing the bills to the daily usage records (that were validated per the paragraph above). This will verify whether the daily usage file records are correctly reflected on the bill. The charges will be validated against the Pseudo-CLEC or participating CLECs' USOC rates as provided in their interconnection agreements. Usage from the daily usage files will be calculated to verify the bills reflect the correct cumulative charges from the monthly summary invoices. Discounts will be validated against the appropriate tables provided by U S WEST or by the rates/discounts identified in the Pseudo-CLEC interconnection agreement. Comparing charges against the validated charge list provided by U S WEST will verify any fees and surcharges. Any discrepancies will be researched and handled as necessary. Errors in billing will be identified and documented by the TA Billing Team and given to the Pseudo-CLEC to be handled through the U S WEST billing inquiry process. These inquiries will be monitored and the results documented as part of the evaluations.

The primary focus of bill evaluation will be the assessment of the ability of U S WEST's billing systems to process bills in an accurate and timely manner. The following elements will be included in the validation of the bills as noted above:

- a) **Order Validation:** Verify that only ordered services are billed. The TA will verify that changes to orders and features are reflected correctly on the appropriate bill. Comparing service order information to the billing information shall be the method by which validation of charges will be conducted. To assist in the order validation process, the TA Billing Team will receive end user bills that will be generated from U S WEST established test accounts and Friendlies accounts.
- b) **Charges:** Verify bills provide accurate recurring, non-recurring and usage-sensitive charges. The TA will determine whether:
 1. Correct monthly recurring charges appear on each month's bill
 2. non-recurring charges appear correctly on the appropriate bill
 3. usage-sensitive charges appear on the appropriate bill and are correct.

Pseudo-CLEC interconnection rates, based on the type of products and/or service that is ordered, will be used to validate these charges.

- c) **Usage Rates:** Verify that rates are applied correctly for each product, service or element. The TA Billing Team will determine whether the rates charged on each bill correspond to the rates in the Pseudo-CLEC interconnection agreement.
- d) **Taxes and Surcharges:** Verify that taxes and surcharges have been assessed correctly. The team will determine whether the appropriate taxes are assessed on each bill, and that all surcharges are correct and included on the bills. If the Pseudo-CLEC elects tax exempt status, the TA Billing Team will verify that there

are no taxes charged where applicable. Any U S WEST surcharges or fees assessed to the Pseudo-CLEC will also be evaluated for accuracy.

- e) Discounts: Verify that discounts and adjustments are applied correctly. The team will determine whether adjustments to bills carrying corrections of errors from a previous month have been correctly made, and whether discounts contracted between U S WEST and the Pseudo-CLEC have been applied to the bill accurately. The adjusted amounts will also be verified against the Billing Performance Measurement regarding accuracy of carrier bills.
- f) Prorated Bills: Verify that prorated amounts are charged accurately in terms of the installation or disconnect date and in accord with the billing business rules provided by U S WEST. The TA will verify whether prorated amounts are properly applied to the bill.
- g) Service Disconnects: Verify that disconnects are processed and appear accurately on the bill. The TA will determine whether a disconnect on a new account that has been created in the same bill cycle is charged correctly. It will further determine whether the account does not appear on the second bill cycle, and that disconnects for accounts created in a previous bill cycle are reflected on the correct bill and that the charges are correct. For those end-user accounts that are migrated from U S WEST to the Pseudo-CLEC, the TA Billing Team will also verify whether the end-users receive a "final bill" from U S WEST and whether the end-user is billed for the same services by the Pseudo-CLEC and U S WEST.
- h) Support of CLEC to IXC Billing: Testing will be done to evaluate U S WEST's production of originating ~~interlata~~interLATA call records to be used by the Pseudo-CLEC for IXC access billing.

~~3.15.~~ 23.8.5 Exit Criteria

Prior to exiting the billing functionality test, the following criteria must be met:

- a) The capture and documentation of billing information provided on the wholesale bills to the Pseudo-CLEC by the TA
- b) The evaluation of the paper and electronic copies of the monthly bills for a minimum two-month time period and the electronic copies of the daily usage file on a weekly basis by the TA.
- c) The TA Billing Team's documentation and analysis of the information provided by the Pseudo-CLEC and /or CLEC's billing data.
- d) Closure of all outstanding issues logged in the TA Master Issues Log (see Appendix J for the Master Issues Log Process).

- e) Closure of all issues deemed by the TAG to require U S WEST system corrections as documented on Incident Work Orders and processed in accordance with the Testing Incidents Process (Appendix I).
- f) The results of the bill validation are documented in the final report to the ACC.

5 CAPACITY TEST / SCALABILITY EVALUATION

5.1 Introduction

The Capacity Test will validate that U S WEST's OSS and processes can handle loads equal to or greater than estimated Pre-order and Order volumes projected one year from the date of the running of the Capacity Test (3Q 2001 at the established performance measures levels). The test is currently scheduled to be performed in 3Q 2000.

The test will be performed in two phases. Phase 1 is designed to test the U S WEST systems with the expected 3Q 2001 volumes. Phase 2 is designed to stress the U S WEST systems with a load greater than Phase 1 load.

Phase 1 will test the expected busy day load for 3Q 2001. The transactions will be input at the same proportionate rate as the current transactions are input. That is if 10% of the current daily load is input from 10AM – 11AM, then 10% of the test load will be input in the same timeframe. To reduce the risk of adversely affecting U S WEST production users, the test will be run over a period of several days. The first test will be performed with volumes that represent the forecast volumes six months into the future. If the test is successful, the test will be repeated with volumes that represent the forecast for nine months into the future. If the test is unsuccessful, an Incident report will be issued, and U S WEST will be given an opportunity make changes to their systems,- and a retest will be performed.

If ~~that~~ the 9-month test is successful, the test will be repeated with volumes that represent the forecast for twelve months into the future. If the 9-month test is unsuccessful, Phase 2 will commence using the 6-month volumes.

If the 12-month test is successful, we will proceed to Phase 2. If the 12-month test is unsuccessful, we will proceed to Phase 2 with the 9-month volumes.

Phase 2 is designed to stress U S WEST systems and will be performed over a four-hour period. The busy hour volume from the successful phase 1 test will be the base for the Phase 2 test. This volume will be incremented in fifteen-minute intervals until a volume 50% higher than the base volume is reached. This higher volume will be input at a sustained rate for two hours.

Additionally, the capacity test will include a review of procedures associated with computer system scalability and staff scalability, to determine, under stated assumptions, whether or not U S WEST appears capable of handling both projected and unexpected CLEC future demand. U S WEST's ability to handle unexpected CLEC future demand will be evaluated as part of these scalability evaluations.

The System Capacity Test will be modeled to reflect volumes needed to adequately test the U S WEST systems that support the Arizona CLEC community. To perform the test,

those systems that support all fourteen states in the U S WEST region will be tested with the projected fourteen state volumes. Those systems that support a specific region will be tested with the volumes that support that region. (For the test only the Central region data will be evaluated). Those systems, that only support Arizona, will be tested with Arizona volumes.

The System Capacity Test will focus on the systems and interfaces in U S WEST's processing flow up to and including processing into U S WEST's service order system. (The service order processor is necessary to provide FOCs.) U S WEST systems beyond the service order system will not be included in the System Capacity Test.

Areas addressed by the Capacity Test / Scalability Evaluations are:

- a) System capacity testing: testing using load generators to verify the ability of U S WEST's OSS to perform under a defined workload at established performance levels
- b) System scalability: the theoretical ability of U S WEST's systems to handle a growth rate higher than anticipated
- c) Staff scalability: the theoretical ability of the U S WEST personnel staffing processes to handle a growth rate that may be higher than anticipated

5.2 System Capacity Testing

5.2.1 SCOPE

The scope of the System Capacity Test is to evaluate whether the relevant U S WEST systems have sufficient capacity to handle the defined workload volumes required to support CLEC pre-order and order activities at the currently defined performance levels. The defined workload volumes, as approved by the TAG, will be determined by a review of historical data and forecasts to reflect typical operations for one year into the future (3Q 2001). The Pseudo-CLEC will generate necessary quantities of simulated activity for processing via U S WEST's GUI and EDI gateways.

Since the intent of the System Capacity Test is to validate the performance capacity of the systems, LSRs that will flow-through the U S WEST Ordering processors, including errors and rejections that can be handled in a mechanized environment, will be used.

The System Capacity Test will be run in U S WEST's live production environment. The capacity tests for orders will go through the ordering process until the issuance of a FOC. U S WEST's Maintenance & Repair, Electronic Bonding Interface (EBI), billing and usage, and CRIS systems are out of scope for the purposes of this test.

Following receipt of FOCs for orders on the test, the orders will be cancelled. Any capacity test orders that fall into the error queue will also be cancelled and will not be processed by U S WEST's ISCs. This cleanup effort will be done during non-business hours and will not be tracked for the System Capacity Test. As an additional safeguard against provisioning occurring, an extended due date of Friday, 12/29/2000 will be used.

Additionally, U S WEST will provide the TA with performance measurement data for the System Capacity Test. The TA will use the Pseudo-CLEC collected data and the U S WEST performance measurement data to evaluate the success level of the System Capacity Test.

5.2.2 APPROACH

The following sections define the test requirements and detail the overall process for conducting, administering and managing the System Capacity Test as required by the MTP. The test requirements and specification plan for the test will be reviewed with the CLECs, the Pseudo-CLEC, and U S WEST prior to conducting the System Capacity Test. To accommodate fairness and blindness of the test, U S WEST and the CLECs will not know in advance the actual dates the System Capacity Test will be performed.

5.2.2.1 Pre-Ordering

The pre-order process of the Capacity Test will include the same activities as the Functionality Test.

The Test Generator will provide pre-ordering volume sufficient to cover the planned test workload over periods expressed in hours. The total number of queries required for the pre-order tests will be, 12,954 of which 20% (2591) will be entered through the GUI interface and 80 % (10,363) will be entered through the EDI interface. The mix of pre-order queries will be established on the basis of ratios of pre-order to order transactions that will be used in the ordering capacity test. The processing of these queries will follow the same hourly volume patterns as specified for the order tests as defined in Table 5.2.2.5-3. This mix will be selected from the transactions shown below:

- a) CSR
- b) Address Validation
- c) Request for telephone number (TN)
- d) Feature and Service availability
- e) Appointment Scheduler
- f) Facility availability

- g) PIC /LPIC
- h) Loop Qualification

5.2.2.2 Ordering

For the purpose of this test, the following will apply:

- a) The test will consist primarily of LSRs that will flow-through the U S WEST Service Order processes, however, mechanized error rejects, which do not involve manual processes, will also be included to test the systems' ability to process rejects within the volume defined and according to the performance measurements
- b) Non-flow-through order types will not be included
- c) Provisioning will not be included
- d) The hourly volumes will be based on the historical patterns U S WEST currently supports in its production environment, augmented by the volumes projected by the CLECs for operations in 3Q01.
- e) The Pseudo-CLEC will generate the order volume, mix, and arrival rates defined by the TA

5.2.2.3 Test Volume Phase 1

Since the System Capacity Test will be executed in a production environment, production orders will be processed during the time the test is executed. System Capacity Test orders will be submitted in addition to the production orders to achieve the intended forecast volume. The quantity of required System Capacity Test pre-order and order transactions will be derived by tabulating the CLEC and U S WEST volumes and then subtracting the current volumes from the forecast volumes. The percent of transactions submitted via GUI and those submitted via EDI will also be derived from the current and forecast volumes.

To determine the System Capacity Test volumes, the following steps will be done:

- a) The type of orders that will be used in the System Capacity Test will be finalized. Since the System Capacity Test is limited to LSRs that will flow-through the U S WEST Ordering processors, including errors and rejections that can be handled in a mechanized environment. Non-flow through order types may be excluded. The test cases are limited to the pre-order and order processes. UNE-Loop, UNE-Loop with LNP, and Resale (need to know in advance any conditions that would disqualify these types of services from flow-through capable) are the

order types that currently will be used. If it becomes necessary to input orders that require manual processing, U S WEST will insure that the orders will fall to the correct queue for processing. U S WEST will not process the orders.

- b) For each order type, as applicable, the percent of new, change, and conversion requests currently being processed will be determined. This will be done by analyzing the historical production data that U S WEST has provided to the TA.
- c) Through analysis of the current production data and forecasts for 3Q 2000 projected CLEC volumes, the Capacity Test subcommittee will derive the quantity of each of the order types to be included in the System Capacity Test. The volumes for non-flow through orders will be added to flow-through orders. The participating CLECs will validate these estimates. By summing these quantities, the test baseline volume will be identified.
- d) The TA will review the current ratio of pre-order transactions to order transactions as well as the number and type of pre-order transactions that will occur for each type of order, and the percent of each type of order in the volume baseline, to determine the pre-order test volumes. The test volume will be the sum of:
 1. Stand-alone pre-order transactions
 2. Pre-order transactions by order type (See Table 5.2.2.5-2)
- e) U S WEST and each CLEC will provide the TA with their respective 3Q 2001 order projections. The projections will include all types of orders, (flow through and non-flow through) and identify what percent of the orders are projected to be submitted via GUI and what percent are to be submitted via EDI.
- f) The TA will review the U S WEST and CLEC order projections and reconcile any significant discrepancies between the U S WEST and CLEC views. The volumes to be used for the Capacity Test will be the difference between this volume and the actual volume for 3Q 2000. The volume will then be divided between GUI and EDI. The Capacity Subcommittee will determine the percentage mix. See table 5.2.2.5-1.

5.2.2.4 Test Volume Phase 2

The stress volume will be determined as follows. The daily volume from Phase 1 will be increased by 50%. The busy hour load (11% of the daily load) will be used as the baseline for the test. The stress test volume will be 150% of the baseline volume.

The first hour of the test will be run using this baseline volume. During the second hour the volume will be increased in fifteen-minute increments until the stress volume is

reached. During the third and fourth hours the stress volume will be maintained at an even rate.

Table 5.2.2.4-1 Stress test volumes

Pre-order and Order Stress Volumes	Total Order Volume 3Q2001	Total Pre-Order Volume 3Q2001	Production Order Volume 3Q2000	Production Pre-Order Volume 3Q2000	Test Order Volume 3Q2001	Production Pre-Order Volume 3Q2000
Daily 3Q2001 Volume	6754		3938		2816	12954
50% Increase to Establish Peak Daily volume					1408	6477
Total Daily Volume					4224	19431
Highest Percent of Orders Sent during One Hour					11%	11%
Total Peak Hour Volume					464	2140
Hour 1 (Baseline for the Stress Test)					314	1425
Hour 2 (Stress hour volume) sent in the following 15 minute increments					434	2140
First 15 minutes (16% of Hour 2 volume)					70	535
Second 15 minutes (22% of Hour 2 volume)					94	470
Third 15 minutes (28% of Hour 2 volume)					122	600
Fourth 15 minutes (34% of Hour 2 volume)					148	728
Hour 3 (Stress hour volume) sent evenly over the hour					434	2140
Hour 4 (Stress hour volume) sent evenly over the hour					434	2140

5.2.2.5 Test Mix

The test cases for the System Capacity Test define the quantities of order types that comprise the order and pre-order transactions. These test cases will be selected from the same basic group of test cases defined for the Functionality Test. Once the statistical approach and analysis is finalized, the mix of order types and interfaces (in percentages) will be detailed in a tabular format. The historical data mix supplied by U S WEST and agreed to as being indicative of actual operations by the TAG will be used to allocate the proportions of System Capacity Test cases between GUI and EDI.

Table 5.2.2.5-1: Core Set of LSRs for Capacity Test

	% of Orders (approximate)	Scenario Types by Product/Activity	% of Orders (approximate)
Stand-alone LNP	?	Stand-alone LNP	?
UNE 2 Wire Loops with NP	?	Retail to UNE Basic Loop	?
		Reconfigurations	?
		UNE Basic Loop – New	?
UNE 2 Wire Loops		UNE Basic Loop – Disconnects	?
			?
		Retail to UNE Basic Loop	?

without NP		Reconfigurations	
		UNE Basic Loop – New	?
		UNE Basic Loop – Disconnects	?
Resale	?	Retail to Resale Migrations	?
		Resale – New	?
		Resale – Change	?
		Resale – Disconnects	?
Totals	100%	Totals	100%

The System Capacity Test input mix will have these additional properties:

- a) It must create intentional error conditions that result in rejects in U S WEST’s IMA-GUI and EDI interfaces. Although a failed transaction requires no manual work in this test, the ordinarily expected occurrence of error/reject messages will be integrated into the test process.
- b) To attain a satisfactory volume of transactions, the mix will contain replications of transactions that will be created by the load generator provided by the Pseudo-CLEC. Fields on the LSRs will be “parameterized” to allow the orders to be accepted without causing duplication errors. A review of U S WEST’s business rules will be used to determine the fields that are best suited for this approach.

The distribution of the pre-order queries for the pre-order volume test will be determined by the TA based on U S WEST statistical information.

The following chart shows the pre-order queries that will be used for each of the order types in the System Capacity Test.

Table 5.2.2.5-2: Pre-Order Query for each System Capacity Test Order Service Request

<u>Order Type</u>	<u>Service Request – Activity / Product</u>	<u>CSR</u>	<u>Addr Val</u>	<u>TN Rqst</u>	<u>Serv Avail</u>	<u>Appt Sched (Dispatch Only)</u>	<u>Facil Avail</u>	<u>PIC / LPIC</u>	<u>Loop Qual</u>
UNE – Loop	Retail to UNE Basic Loop Conversion	X	X				X		X
	UNE Basic Loop – New		X		X		X		X
	UNE Basic Loop – Disconnects	X							
UNE-Loop with LNP	Retail to UNE Basic Loop with LNP Conversion	X	X		X	X			X
	UNE Basic Loop with LNP – Disconnects	X							
Resale	Retail to Resale Conversion As Is	X	X		X			X	
	Retail to Resale Conversion As	X	X		X	X**		X	

	Specified								
	Resale – New		X	X	X	X	X	X	X
	Resale – Change	X	X		X	X**	X	X	
	Resale – Disconnects	X							
Stand-alone LNP	Stand-alone LNP	X	X						

The following chart shows how the transactions will be distributed during the day

Table 5.2.2.5-3: Transactions Per Hour

Time	Pre-Order Transactions Per Hour	% of Pre-Order Transactions Per Hour	LSR'S Per Hour	% of LSR'S Per Hour
6:00 AM	134	1.04%	29	1.04%
7:00 AM	579	4.47%	126	4.47%
8:00 AM	986	7.61%	214	7.61%
9:00 AM	1322	10.20%	287	10.20%
10:00 AM	1446	11.16%	314	11.16%
11:00 AM	1328	10.25%	289	10.25%
12:00 PM	1247	9.62%	271	9.62%
1:00 PM	1385	10.69%	301	10.69%
2:00 PM	1412	10.90%	307	10.90%
3:00 PM	1286	9.92%	279	9.92%
4:00 PM	897	6.93%	195	6.93%
5:00 PM	526	4.06%	114	4.06%
6:00 PM	257	1.98%	56	1.98%
7:00 PM	121	0.93%	26	0.93%
8:00 PM	30	0.23%	6	0.23%
TOTAL	12954	100.00%	2816	100.00%

5.2.2.6 Capacity Test Performance Measures

The System Capacity Test performance measures identified in the MTP (Appendix B) will be used as the success criteria for the System Capacity Test. These measures, listed in the table below, will be applied to evaluate U S WEST's systems' ability to handle the forecasted volume.

The applicable Capacity Test related Performance Measures are defined in the matrix below. The evaluation column indicates for which performance measures there will be a parity/benchmark comparison made during the tests.

Table 5.2.2.7-1 Performance Measures

Perf Meas. #	Performance Measures	Track	Evaluate	Performance Measurement
		PO-1	Average Response Time (to OSS Pre-Order Queries)	Y
PO-2	Electronic Flow-Through LSRs to SOP (percent)	Y	N	Resale: Diagnostic Unbundled Loops: Diagnostic (85% expectation)
PO-3	Average LSR Rejection Notice Interval	Y	N	<=4.5 business hours
PO-4	Percentage LSRs Rejected	Y	N	Diagnostic – no benchmark
PO-5	FOC Interval	Y	Y	95% within 20 minutes (GUI/EDI fully electronic)

Key for Table 5.2.2.7-1

Term	Definition
Track	Data will be gathered and reported
Evaluate	Data will be evaluated for parity performance or compliance with a benchmark
Y	The measure will be tracked or evaluated as a part of the results
N	The measure will NOT be tracked or evaluated as a part of the results

5.2.3 ENTRANCE CRITERIA

Prior to commencement of the System Capacity Test, the following entrance criteria need to be satisfied:

- a) Pseudo-CLEC IMA-GUI and EDI transaction generators are operationally certified by U S WEST and ready for test. This includes the ability of the Pseudo-CLEC to isolate the performance results for the performance measurements identified in Table 5.2.2.7-1 during the Phase I and Phase II test periods.
- b) A production environment to conduct the pre-order and order tests has been validated by the Pseudo-CLEC and the TA to be operational
- c) The scheduled dates for the System Capacity Test have been identified
- d) The TA has provided the Pseudo-CLEC with the test scripts to use for generating the load volumes for the test

- e) The Performance Measurement process evaluation has been successfully passed
- f) The processes used to collect, analyze and report performance data have been validated for adequacy and compliance and U S WEST calculations have been determined to be accurate
- g) The quantitative point at which the system performance is deemed to be unacceptable has been identified for both the Phase I and Phase II volumes. The quantitative point will be described in terms of the performance measurements identified in Table 5.2.2.7-1.
- h) U S WEST is able to separately report results for the performance measurements identified in Table 5.2.2.7-1 during the execution of the Phase I and Phase II tests

5.2.4 ACTIVITIES

The System Capacity Test activities that will occur prior to the test execution beginning are:

- a) A detail plan specifying the scope, approach, entrance, exit, and execution requirements for the System Capacity Test will be provided and reviewed with the Pseudo-CLEC, the CLECs, and U S WEST. The TA will amend and finalize the plan as needed.
- b) The TA will prepare test scripts for the pre-order and order System Capacity Tests
- c) The System Capacity Test will be conducted on-site at the Pseudo-CLEC's test site. The Pseudo-CLEC's system interfaces will be designed and tested to support interface transaction volumes for U S WEST's GUI and EDI gateways and back-end pre-order and order systems.
- d) The test generator will be designed to support the replication of the appropriate volume of test transactions from the required mix of test cases needed to support a valid System Capacity Test
- e) The TA will obtain the hourly historical production volume distribution for U S WEST's GUI and EDI systems from U S WEST. The test volumes during the System Capacity Test will be patterned to follow the same hourly transaction rates as those in U S WEST's production environment. The TA will provide the Pseudo-CLEC with the required hourly mix of test transaction volumes needed for the pre-order and order System Capacity Test
- f) The Pseudo-CLEC will stage the hourly mix of transactions in the test generator for the pre-order and order tests validated by the TA

- g) Based on the U S WEST and CLEC forecasts for 3Q01, the TA will determine the test load for the pre-order and order test
- h) The TA will determine the number of times the test load needs to be processed – TAG concurrence is required
- i) A review session will be held by the TA with the pseudo-CLEC to ensure that a complete set of verified test scripts for the pre-order and order tests are prepared and ready for the System Capacity Test execution

When the System Capacity Test execution begins, the activities will be:

- a) The Pseudo-CLEC will conduct the System Capacity Test according to the detailed test plan
- b) The TA will be on-site to observe and monitor the test
- c) Any issues or failures resulting from the processing of the scripts will be documented through the Testing Incidents process. See Attachment I
- d) If the TA believes that there was a significant number of fatal errors, then the test will be aborted and another test will be run after the cause of the errors have been resolved. Such an event will be documented in the Exception/Incident Work Order Process. The TA, U S WEST and Pseudo-CLEC will plan for the necessary load and cancellation transactions to conduct these tests
- e) The TA will validate that the test scripts are completed in the prescribed manner and that all results are recorded.
- f) Following FOC (or rejection) receipt for all test orders, the Pseudo-CLEC will cancel those orders by submitting cancellation requests. The cancellation orders will be done during non-business hours and will not be tracked as part of the System Capacity Test
- g) The TA will validate the performance measurement calculations using the definition of the performance measures (MTP Appendix B) and the captured test data. Failure to meet the thresholds agreed upon for benchmarks and parity measurements will result in retest. The retest will be handled in accordance with the process defined in Section 7.3.5 of this document.

5.2.5 EXIT CRITERIA

For the System Capacity Test to be considered completed, the following exit criteria will need to be satisfied:

- a) The pre-order and order System Capacity Test has been completed according to the plan
- b) All tests against the appropriate performance measurements including associated pre-ordering and ordering benchmarks have been completed
- c) All incidents that were opened in conjunction with the System Capacity Test have been resolved and/or closed
- d) All of the data associated with the System Capacity Test has been captured and retained by the Pseudo-CLEC
- e) The System Capacity Test evaluation and findings are included in the TA's final report compiled for the ACC
- f) All documentation related to the System Capacity Test is verified as complete by the TA and stored in the master project file
- g) All orders have been cancelled prior to provisioning

5.3 System Scalability Analysis

5.3.1 APPROACH

U S WEST's pre-order and order activities depend on the capabilities of certain computer systems. In conjunction with the Capacity Test, the TA will perform a System Scalability Analysis to determine if U S WEST has adequate procedures for scaling its systems to provide sufficient capacity to handle future CLEC loads. The analysis will include evaluation of U S WEST's:

- a) Procedures for tracking OSS loads and capacities
- b) Procedures for forecasting future OSS loads
- c) Processes for providing OSS computer growth

5.3.2 ENTRANCE CRITERIA

The entrance criteria for the System Scalability Analysis are that the TA has received:

- a) U S WEST's procedure for tracking OSS loads and capacities
- b) U S WEST's procedure for forecasting future OSS loads

- c) U S WEST's process for providing OSS computer growth
- d) Historical OSS load information from U S WEST

5.3.3 ACTIVITIES

The System Scalability Analysis will include:

- a) Structured discussions between the TA and U S WEST subject matter experts. These discussions will be used to gain clarification on sections of the received documentation, to better understand the U S WEST system architecture, and in general, to gain knowledge of the capacity adjustment procedures used within U S WEST
- b) A review by the TA of U S WEST's procedure for tracking OSS loads and capacities. Interface traffic, processing utilization, and industry performance measurements will be included in the review
- c) An evaluation by the TA of the procedure for forecasting OSS loads against the agreed upon criteria to be completed based on the documentation received. This evaluation will include comparing previous forecasts against historical OSS load information for both U S WEST and CLEC activity
- d) An assessment by the TA architecture SMEs to determine if U S WEST's OSS interfaces can quickly be made scalable to accommodate increases in CLEC volumes beyond the volume currently planned for the Capacity Test. The TA will perform this analysis based on documentation provided by U S WEST which details how it has designed its OSS interfaces to be scalable for increased demand.

The System Scalability Analysis will provide answers to the following questions:

MECHANIZED INTERFACES

1. Is there a defined documented EDI migration path for CLECs to develop their automated interfaces to connect to U S WEST
2. Are the U S WEST electronic interfaces scalable to support CLEC inter-connectivity to ~~U S WEST~~ U S WEST systems
3. Is the WAN network backbone adequately sized to meet current and projected CLEC usage
4. Are network dial-in access devices for CLEC dial-in users sufficiently scalable to support increased network workloads

5. Are appropriate network protocols for current and projected CLEC transaction activity being utilized

AUTOMATED SYSTEMS

1. Is there an established process for capacity planning and design? Are the processes sufficient and effectively executed by U S WEST
2. Is there a documented process and methodology in place, which is used to analyze the scalability of systems gateways and interfaces
3. Are there redundant sites used for the processing of CLEC orders
4. Do the operations support systems and gateway interfaces in use adequately scale to support projected capacity growth? Will the Gateway and other architectures in use by U S WEST scale quickly for unexpected CLEC growth
5. Is the amount of disk storage per server actively monitored and managed? Are the thresholds for acquiring additional disk storage sufficient to accommodate unexpected CLEC growth
6. Is there an established disaster recovery planning methodology
7. Is the disaster recovery process periodically tested to assess the process insuring that a recovery can take place
8. Are tape backup procedures in place and actively utilized? What archival procedures are used to secure the backups
9. Is there an established methodology for maintaining CLEC processing levels
10. Is there an established methodology for monitoring the ability to scale? Is sufficient monitoring done and is it effective to implement solutions that provide sufficient service levels to CLECs
11. Is there a process in place to monitor transaction response times, and are success ratios frequently reviewed to identify systems opportunities to improve them

CAPACITY PLANNING PROCEDURES

1. Is there an established process for obtaining performance data to determine future growth patterns? Is the performance data gathered in accordance with this process sufficient to allow proper forecasting of system growth for CLECs

2. Are capacity planning procedures documented, in place, and executed by U S WEST
3. Are capacity planning processes designed to provide an acceptable level of quality
4. Is there an established process for the development of capacity planning functions and procedures and its use in performing scalability
5. Is there an established process for budgeting funds and resources in the support of capacity planning
6. Is scalability monitoring and planning accounted for in capacity planning
7. Are there procedures and processes in place for supporting scalability
8. Is systems growth actively monitored and needs analysis performed
9. Is performance monitoring software installed and used at all site locations
10. Is systems performance monitored at acceptable levels
11. Are systems databases accounted for in the capacity planning process
12. Is capacity planning methodology documentation updated and maintained and is it available to the staff to support the capacity planning process

5.3.4 REPORTING

A final report from the System Scalability Analysis will include an assessment of U S WEST's documentation and procedures related to system sizing, an evaluation of the scalability of the architecture to accommodate future market growth, and an itemization of any identified non-compliant items. Any system scalability issue requiring corrective action, will be documented on an Incident Work Order and handled in accordance with the Test Incidents Process (Attachment I).

5.3.5 EXIT CRITERIA

The Exit Criteria for the System Scalability are U S WEST's:

- a) Procedure for tracking OSS load and capacity has been evaluated and the results included in the System Scalability Analysis Report
- b) Procedure for forecasting future OSS load has been evaluated and the results included in the System Scalability Analysis Report

- c) Process for expanding its OSS computer systems has been evaluated and the results included in the System Scalability Analysis Report

5.4 Staff Scalability

5.4.1 APPROACH

In many cases the U S WEST pre-order and order activities depend on manual processes. The TA will perform a Staff Scalability Analysis to determine if U S WEST has the ability to increase the number of personnel available to perform these manual functions. The analysis will include evaluation of:

- a) U S WEST's support center workforce development modeling procedures
- b) The linkages between U S WEST's future volume projections and U S WEST's workforce development modeling procedures
- c) U S WEST's volume contingency plans to meet unexpected CLEC increases in order volume
- d) U S WEST's disaster recovery plans to assure continued CLEC support
- e) The scalability of U S WEST's recruiting and training programs to provide for the availability of staff with the necessary skills to adequately perform the manual support function

The results of the Capacity Test, combined with the appropriate scalability analysis will provide the ACC with sufficient information to determine the commercial readiness of the U S WEST OSS.

5.4.2 ENTRANCE CRITERIA

The entrance criteria for the Staff Scalability Analysis are that the TA has received documentation detailing U S WEST's:

- a) Procedural framework for developing workforce models for its CLEC support centers, including help desks
- b) Contingency plans for unexpected increases in CLEC order volume
- c) Disaster recovery plans for sufficiently assuring continued CLEC support

- d) Staff recruiting and training programs as they relate to providing the appropriate staff to perform manual CLEC support functions
- e) U S WEST must identify all work centers that are dedicated to CLEC activity

5.4.3 ACTIVITIES

To support future workloads, the amount of U S WEST staff needed to provide for the level of CLEC service agreed upon, as reflected in the Performance Measurements – see MTP Appendix B, must be appropriately planned. The Staff Scalability test efforts will not directly determine that U S WEST currently employs the appropriate amount of staff, as it is not feasible to train and hire staff at this point in time. However, the staff planning process, in terms of the number of staff, the facilities in which to house the staff, and the required training, will be assessed by the TA.

The Staff Scalability Analysis will include:

- a) Structured discussions between the TA and U S WEST subject matter experts. These discussions will be used to gain clarification on sections of the received documentation and in general, to gain knowledge of the practical procedures used.
- b) An assessment of the support centers' ability to respond to increased workload and provide satisfactory resources to complete the manual handling of non flow-through LSRs.
- c) An examination of the support centers' workforce modeling procedures and the baseline assumptions used to create the resource capacity requirements. The TA will perform an analysis to evaluate the scalability of staffing, workstation capacity, training, forecasting, and responsiveness.

This evaluation will attempt to answer the following questions:

STAFF PLANNING AND SUPPORT

1. Is there a process in place to temporarily increase staff for large-scale projects outside of the normal workflow environment
2. Is there a plan in place to train not only the staff but emergency overflow staff, as well? Are estimated personnel orientation and training times reasonable and do they support the requirements for rapid change in the event of unexpected CLEC volume increases
3. Is there a risk management plan in place that addresses how to handle the loss of key personnel and to cover contingencies for required personnel increases in support of unexpected CLEC growth

4. Is the number and timing of shifts for each working day consistent and adequate for the workload
5. Are physical limitations for future and temporary staffing such as office space and equipment addressed in scalability planning
6. Is training of the staff performed as an ongoing process
7. Are all staff job functions and descriptions clearly documented
8. Is the ISC/AMSC Force model procedures and methodology documented and followed by the management and staff

MANUAL PROCESSES

1. Can U S WEST scale their workforce to confirm receipt to the CLEC of all paper source documents
2. Can U S WEST scale their workforce to provide sufficient personnel for collecting and distributing CLEC faxes
3. Is U S WEST capable of scaling their workforce to manage and handle fall-out exception processing
4. Is U S WEST capable of scaling their workforce to provide adequate staff to support call center CLEC information requirements
5. Is U S WEST capable of scaling their workforce to provide sufficient personnel for performing data entry through the CLEC access system for manual orders
6. Is there an established process in place for forecasting expected growth of CLEC business? Unexpected growth
7. Is there an established process for reviewing workload forecasts to determine their validity and accuracy

An examination of the disaster recovery plans will be done to ensure that sufficient procedures exist for continued CLEC operations in the event of a physical, technical, or natural disaster. Some of the areas to be reviewed will be the plans for channeling traffic to backup support centers, how resources are reallocated, and backup/recovery of critical CLEC data.

5.4.4 Exit Criteria

The Exit Criteria for the Staff Scalability are U S WEST's:

- a) Procedures for forecasting staffing levels has been evaluated and the results included in the Staff Scalability Analysis Report
- b) Contingency and Disaster Recovery procedures have been evaluated and the results included in the Staff Scalability Analysis Report

5.5 Risk Analysis

The System Capacity Test will be run in U S WEST’s live production environment. While special care will be taken to minimize impact on regular U S WEST company business, the very nature of the test will introduce risks to U S WEST and the CLECs’ operations. The following table is a collection of known risks for executing in a production environment and mitigation plans for each risk.

Table 5.5-1 Risk Analysis

Risk	Impact if Risk is not Mitigated	Mitigation Approach
Production System Overload	U S WEST production system becomes unusable for all parties. Normal business operations are halted for U S WEST and CLECs until system is restarted	U S WEST will provide the TA with a detailed system schematic with sections of the architecture most vulnerable for high volume issues. Rather than following a “normal” hourly production volume pattern, the System Capacity Test will be run in a series of escalating volumes (staircase). The test volume will be increased until either the systems reach an unacceptable stress level or the target volume is processed.
Telephone Number Saturation in a given area	Until more TNs are assigned , no TNs may be returned	The test accounts to be used in the test should be spread out across as many TN areas as possible.
Appointment Scheduler - Work Force Scheduling pushed out due to the capacity orders	“Real” orders have their due dates extended several days beyond what is considered normal. When the System Capacity Test orders are cancelled there may be a	The use of a fictitious day of 12/29/2000 will keep the work force from being affected. The orders will be cancelled prior to any provisioning occurring.

Risk	Impact if Risk is not Mitigated	Mitigation Approach
	period of days where the work force has no work assigned.	
Capacity Test Performance Measure Data cannot be tracked, collected, or reported by U S WEST or the Pseudo-CLEC for the day(s) on which the System Capacity Test is executed	The only measure for success was whether or not the test caused the system to fail. Unless the test's data can be captured separately, the performance measure evaluation would be meaningless.	The TA will work with U S WEST and the Pseudo-CLEC to determine if the data can be captured and to define the exact means by which it will be collected, transmitted, and tabulated.
Orders reject due to U S WEST Business Rules. (Duplication Errors)	The System Capacity Test would be aborted until the proper number of test accounts could be created and used.	The TA will work with U S WEST to fully understand the business rules and system edits so that test orders are not rejected due to duplicate or other checks. <i>U S WEST will correct any business rule deficiencies</i>
Cancellation Orders to clean up the System Capacity Test orders overload the system	The production environment could become unusable or suffer delays due to the volume of cancellation orders	<p>Option 1 The cancellation orders will be issued during non-business hours and staged to not impact the production environment.</p> <p>Option 2 Based on the fictitious due date, U S WEST does a mass delete of the orders outside of the normal cancellation process</p>
A test order is not properly cancelled	U S WEST completes the order to SOC for the test order. As this is a fictitious order, the allocation of resources and the actual work would not be correct	Following completion of all iterations of the System Capacity Test, and upon notification of the TA, U S WEST will scan their database of orders awaiting provisioning with the fictitious due date. All orders found with this criteria will be checked to

Risk	Impact if Risk is not Mitigated	Mitigation Approach
		verify that they were part of the test and then properly cancelled either by the Pseudo-CLEC via a cancellation order or directly by U S WEST.

5.5.1 U S WEST SYSTEM INFRASTRUCTURE INFORMATION

This section details the information that the TA will need from U S WEST to fully understand U S WEST's system infrastructure as it relates to the System Capacity Test. This information includes system drawings and schematics, transaction flow diagrams, and the business rules and system edits that could impact the replicated orders that will be used in the System Capacity Test.

U S WEST's system and network schematics must include the following:

- a) Name of each system and states utilizing each system
- b) Description of the function of each system
- c) Description of the type of system
- d) Physical locations of each application or system
- e) The protocols involved with each of the systems' interfaces
- f) Description of any checkpoints within each of the systems that would allow a rollback or recovery of data

The transaction flow diagrams depict, for the different order types used in the System Capacity Test, the systems that are accessed to process the order and the sequence in which the systems are accessed. Included in the transaction flow diagrams must include the following:

- a) Any systems in the process that require manual intervention.
- b) Any systems in the process that do not require, but do allow, manual intervention
- c) Which systems in the transaction process have logging and can provide both status and debugging information

A key assumption in preparing for the System Capacity Test is that multiple replications of a “seed” LSR will be created and submitted. To minimize the number of accounts that will be used and the number of fields that will be changed on each order, U S WEST’s business rules and system edits must be provided to the TA prior to the “seed” LSRs being created. In presenting these business rules to the TA, U S WEST will need to emphasize:

- a) Any rule that could cause an LSR to reject with a duplicate error
- b) Any rule related to how long an account remains in the system after FOC and cancellation (persistence)
- c) Any limitation to how many times an order can be placed on a given account in a given time period
- d) Any constraint on how many cancellation orders can be placed on a given account in a given time period
- e) Any condition that would cause a typical flow-through LSR to require manual attention

6. RELATIONSHIP MANAGEMENT EVALUATION

6.1 Scope

The Relationship Evaluation will examine the processes associated with the business operations of U S WEST and the CLEC community. Current business processes that U S WEST uses to conduct daily operational business with the CLECs will be evaluated and these observations and evaluations will be documented. Five business operations areas will be evaluated: CLEC Account Establishment; CLEC Account Management, EDI and IMA Interface Development, CLEC Training; and U S WEST Co-provider Industry Change Management Process (CICMP).

6.1.1 CLEC ACCOUNT ESTABLISHMENT

This evaluation will examine methods and procedures provided by U S WEST for establishing a new CLEC customer. The evaluation will focus on the available documentation accessible to CLEC businesses, the consultative assistance that U S WEST provides and on any additional documentation provided by U S WEST to its CLEC customers.

6.1.2 CLEC ACCOUNT MANAGEMENT

The CLEC Account Management evaluation will examine the methods, procedures and actions provided by U S WEST for managing their business relationship with the CLECs. The evaluation will examine Responses to Account inquiries, Help Desk Call Processing, Help Desk call closures, Help Desk Status Tracking, Problem Escalation, Forecasting, and Communications.

6.1.3 CLEC TRAINING EVALUATION

The scope of the CLEC Training Evaluation is to evaluate the availability of training schedules, the frequency of training in the various areas where training is offered, the detail of the training curriculum and the effectiveness of the training content.

6.1.4 INTERFACE DEVELOPMENT

This evaluation will examine the documentation, specification and consultative assistance provided by U S WEST to CLECs for use in building an EDI interface or installing the IMA-GUI interface. This test will also include an evaluation of the test environment U S WEST provides CLECs for pre-testing their EDI and EB-TA interfaces.

6.1.5 U S WEST CO-PROVIDER INDUSTRY CHANGE MANAGEMENT PROCESS EVALUATION

The U S WEST Co-Provider Industry Change Management Process (CICMP) will be examined to ensure that U S WEST's systems and/or processes for change management are conducted and communicated to the CLECs effectively, based on the defined change management procedures. The result of this effort will be the evaluation of the CICMP process and validation that it works as stated.

This process evaluation validates that U S WEST properly communicates its change management methods and procedures for system performance and system updates to each of the CLECs. As part of this evaluation, procedures to notify CLECs of planned and unplanned system downtime will be looked at. A CLEC's ability to request and have implemented changes to U S WEST's interfaces and systems will also be examined. The evaluation is also to assess that the Change Management process is executed by U S WEST according to the methods and procedures. This is a cooperative process for the CLECs and U S WEST to identify, communicate, and track OSS interface new functionality, enhancements to existing functionality, and required code maintenance included in software releases.

This evaluation is essential to ensure that the CLECs are:

- a) Provided with notice of pending system changes
- b) Provided with notice far enough in advance to be prepared when the enhancement is implemented
- c) Have a communication process between themselves and U S WEST for resolving problems that arise in relation to system upgrades
- d) Provided test environments, documentation, and other tools necessary to prepare and pre-test changes before they are implemented
- e) Provided with an opportunity to individually or collectively request and have implemented changes to U S WEST's interfaces and systems
- f) Provided with notice of planned and unplanned system downtimes

6.2 CLEC Account Establishment and Maintenance Evaluation

6.2.1 APPROACH

This evaluation will be used to ascertain the comprehensiveness of the published methods and procedures for establishing and maintaining a CLEC account. The methods and procedures will be evaluated on how appropriate the instructions are for completing necessary paperwork and what information is contained in the documentation.

6.2.2 ENTRANCE CRITERIA

- a) CLEC Account Establishment and Maintenance documentation is available
 1. Standard Interconnection Agreement Template
 2. Customer Questionnaire Template
- b) Access to U S WEST, Pseudo-CLEC, and CLEC personnel
- c) Pseudo-CLEC Interconnection Agreement
- d) Completed Pseudo-CLEC Customer Questionnaire
- e) Evaluation Criteria and Checklist
- f) Interview Questionnaire

6.2.3 ACTIVITIES

- a) Gather U S WEST CLEC Account Establishment documentation
- b) Review and evaluate the account establishment and maintenance documentation provided by the Pseudo-CLEC
- c) Perform U S WEST, Pseudo-CLEC, and CLEC personnel interviews
- d) Document observations

6.2.3.1 Gather Documentation

The U S WEST CLEC Account Establishment documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The TA will gather the documentation through network access and through contacts with U S WEST.

6.2.3.2 Review and Evaluate Documentation

The Pseudo-CLEC will keep records of its account establishment experiences. The TA will review and evaluate that documentation and compare it to the documented U S WEST processes. The evaluation will attempt to answer the following questions:

- a) Is the process for becoming a U S WEST Wholesale CLEC customer clearly presented and explained
- b) Is it clear whom the CLEC should contact to get started doing business with U S WEST
- c) Are the steps for the CLEC clearly documented? If so, is the information required to complete each step reasonable
- d) Does the documentation provided to CLECs by U S WEST clearly delineate the responsibilities of the CLEC-U S WEST Business Relationship
- e) Does the startup documentation available to CLECs provide adequate contact information
- f) Does the startup documentation available to CLECs identify escalation processes? If so, are these processes useable
- g) Does the startup documentation available to CLECs clearly outline the work activities required in order to bill IXCs for jointly provided switch access
- h) Does the startup documentation available to CLECs clearly outline the responses to be expected from each of the pre-order queries
- i) Does the startup documentation available to CLECs clearly outline the steps for processing orders of various types
- j) Does the startup documentation available to CLECs thoroughly identify and explain all reasons for rejects
- k) Does the startup documentation available to CLECs clearly set expectations on service intervals for resale and interconnection services

- l) Does the startup documentation available to CLECs sufficiently document the types of customized bills available for their use
- m) Is Tariff (SGAT) pricing information made available to CLECs
- n) Does the startup documentation available to new CLECs clearly explain how to report troubles, create trouble tickets, obtain status on troubles, escalate and close trouble tickets
- o) Does the startup documentation available to CLECs have a clear process for misdirected repair calls
- p) Does the startup documentation available to CLECs provide repair contact telephone numbers for each major type of service? If documented, do these include appropriate contacts for the full collection of services utilized by CLECs
- q) Are the calling card and LIDB implications for customers switching from U S WEST to a CLEC clearly explained
- r) Are the media for receiving billing outputs and reports clearly defined and accurate
- s) Does the startup documentation available to CLECs provide processes allowing the CLEC to escalate issues in the event U S WEST doesn't respond appropriately to CLEC needs
- t) Does the documentation available to CLECs provide clear tax exemption information
- u) Does the documentation available to CLECs provide a clear explanation of the interfaces available to the CLEC for OSS functions
- v) Does the documentation available to CLECs provide detailed information as to the means available for OSS access, available data files, and connectivity options? Is the method for ordering each clearly explained and are the timeframes for acquiring each type of access options
- w) Does the documentation available to CLECs clearly identify U S WEST's SS7 certification requirements
- x) Does the documentation available to CLECs clearly identify the U S WEST directory listing options available to CLECs including the features and functionality that can be made available to CLEC customers? Are the changes, if any, for these services clearly explained

- y) Does the documentation available to CLECs contain a process allowing CLECs to request new services? Is the process for requesting the new services clear and are the steps required and timeframes for response clearly delineated
- z) Does the documentation available to CLECs contain clear information and rules for how long distance carrier information (PIC/LPIC) changes will be handled
- aa) Does the documentation available to CLECs contain appropriate rules for handling customer switches from CLEC to CLEC
- bb) Does the documentation available to CLECs contain detailed information regarding the products available for resale
- cc) Does the documentation available to CLECs contain detailed information about U S WEST's Performance Measurement system
- dd) Does the documentation available to CLECs contain detailed information about the U S WEST U S WEST Co-provider Change Management Process

Additional questions may be investigated as the TA's analysis is conducted and as the specific needs dictate.

6.2.3.3 Perform Interviews

The TA will perform interviews with the Pseudo-CLEC, participating CLECs and U S WEST personnel to document the experiences encountered when establishing a new CLEC account.

6.2.3.4 Document Observations

All observations will be documented and reported in the Relationship Management summary report.

6.2.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of observations
- c) Summary report, including an inventory of documentation

6.3 CLEC Account Management Evaluation

6.3.1 APPROACH

The CLEC Account Management test will evaluate the methods, procedures and actions provided by U S WEST for managing business relationships with the CLECs. The evaluation will examine the timeliness, accuracy and completeness of US WEST U S WEST Responses to Account inquiries, the timeliness and responsiveness of Help Desk Call Processing, the appropriateness and methods applied to Help Desk call closures, the actual performance of Help Desk Status Tracking activities, the frequency and appropriateness of Problem Escalation efforts that are taken in response to CLEC inquiries, the reasonableness of Forecasting requests and the extent to which forecast information is applied by U S WEST into its various planning activities, and communications avenues that are available to CLECs by US WEST U S WEST and the extent that these are effective.

6.3.2 ACTIVITIES

The activities that will be performed in conducting the CLEC Account Management Evaluation are as follows:

- a) Gather U S WEST CLEC Help Desk, Forecasting, Communications, and other Account Management Process Documentation
- b) Review and evaluate the account documentation provided by U S WEST
- c) Perform U S WEST, Pseudo-CLEC, and CLEC personnel interviews
- d) Examine appropriate records
- e) Document observations

6.3.2.1 Gather Documentation

The U S WEST CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The Test Administrator will gather the documentation through network access and through contacts with U S WEST.

6.3.2.2 Review and Evaluate Documentation

This review will evaluate the U S WEST Processes and practices in managing the CLEC account relationship. The Test Administrator will review and evaluate the U S WEST Process documentation clarity and sufficiency in managing its CLEC relationships.

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Help Desk	Timeliness	Speed of Answer	Observations Interviews		
		Problem Resolution Time	Observations Interviews		
		Call Backs	Observations Interviews		
	Knowledge of Subject		Observations Interviews		
	Quality of Response	Closures	Documentation Review Observations Interviews		
				Referrals	Observations
		Escalations	Observations Interviews		
	Tracking	Documentation Review Observations Interviews			
Communi- cations Proactive	Process Assistance	Availability of Information	Documentation Review Observations		
		Attention to Details	Documentation Review Observations		
	Product Assistance	Availability of Information	Documentation Review Observations		
	Awareness	Attention to Details	Documentation Review Observations		
		Availability of Information	Documentation Review Observations		

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Communi- cations Reactive	Assistance	Availability	Observations Interviews		
		Attention to Detail	Observations Interviews		
	Problem Resolution				
Forecasting	Information	Coverage	Documentation Review Observations Interviews		
		Quality	Documentation Review Observations Interviews		
	Outlook Compu- tation	Quality	Observations Interviews		

6.3.2.3 Perform Interviews

The Test Administrator will perform interviews with Pseudo-CLEC, participating CLECs and U S WEST personnel to document the experiences encountered in regards to the timeliness, accuracy and completeness of ~~US WEST~~ U S WEST Responses to Account inquiries, the timeliness and responsiveness of Help Desk Call Processing, the appropriateness and methods applied to Help Desk call closures, the actual performance of Help Desk Status Tracking activities, the frequency and appropriateness of Problem Escalation efforts that are taken in response to CLEC inquiries, the reasonableness of Forecasting requests and the extent to which forecast information is applied by U S WEST into its various planning activities, and communications avenues that are available to CLECs by ~~US WEST~~ U S WEST and the extent that these are effective.

6.3.2.4 Examine Records

The evaluation will examine the accuracy and completeness of U S WEST's CLEC account management records. These records should include responses to account inquiries, closures/resolutions to problem inquiries, problem escalation efforts taken in response to CLEC inquiries, forecasting requests and planning activities.

6.3.2.5 Document Observations

All observations of interviews and records that are reviewed will be documented and reported in the Relationship Management summary report.

6.3.3 ENTRANCE CRITERIA

- a) CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation is available
- b) Access to U S WEST, Pseudo-CLEC, and CLEC personnel
- c) Evaluation Criteria and Checklist
- d) Interview Questionnaire
- e) Records that U S WEST is to provide to enable the TA to conduct its analysis of the Account Management function.

6.3.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of observations
- c) Summary report including an Inventory of Documentation

6.4 CLEC Training Evaluation

6.4.1 APPROACH

This test will be used to determine the availability of training schedules to the CLECs, how often this information is made available and in what formats this information is offered. The frequency of training on different topics and the effectiveness of the curriculum will also be evaluated. The documentation that is readily available to the CLECs will be used in this test, as will the training materials such as work books, student guides, and curriculum plans.

6.4.2 ENTRANCE CRITERIA

- a) Training Schedules
- b) Published syllabuses and handbooks
- c) Evaluation Criteria and Checklist
- d) Interview Questionnaire

- e) Pseudo-CLEC documentation of training – this should reflect training experience statements, classes taken, qualitative analysis done by the pseudo-CLEC

6.4.3 ACTIVITIES

- a) Gather U S WEST published training documentation
- b) Review and evaluate training documentation provided Pseudo-CLEC
- c) Document observations of training classes – the TA is to observe the training as delivered by U S WEST, but not necessarily the training delivered to the ~~pseudo~~ Pseudo-CLEC by U S WEST

6.4.3.1 Gather Documentation

The U S WEST training schedules and associated documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The TA will gather the documentation through network access and through contacts with U S WEST.

6.4.3.2 Review and Evaluate Documentation

The Pseudo-CLEC will keep records of it's U S WEST IMA-GUI training and experiences. The TA will review and evaluate those records and compare it to the TA's IMA-GUI training. **[It's not clear where the evaluation of the TA's review of the Pseudo-CLEC records can be found in the below list of questions.]** Interviews will be conducted with the Pseudo-CLEC personnel to determine the comprehensiveness of the training they received. The evaluation will attempt to answer the following questions:

- a) Is there a process for obtaining CLEC input for the training? If so, is the process clearly written and has it been adequately communicated to the CLECs
- b) Does the U S WEST training available to the CLECs adequately address the CLECs' need for product and training
- c) How does the U S WEST training balance the needs of both new and experienced users of the IMA-GUI
- d) Does U S WEST provide an adequate means for CLECs to provide feedback on their experience of CLEC training? If so are the processes for evaluating CLEC feedback properly documented
- e) Were training schedules and documentation readily available? If yes, in what formats were the schedules and documentation available? If no, what steps were needed to obtain the necessary documentation
- f) Was the documentation readable and easy to understand

| g) Was the documentation comprehensive

- g)h) What type of documentation was provided (what areas are covered)
- h)i) Was the frequency of training adequate
- i)j) Was the training information timely and up-to-date
- j)k) Were there costs associated with the training? If yes, what types of costs and the approximate amount
- k)l) Were contact names and numbers provided during the training class in the event there were follow-up questions about the training programs? If so, were the contacts able to provide the assistance needed? Additionally, were the answers direct and complete or did significant effort have to be expended to answer questions
- l)m) Are the processes for monitoring U S WEST Instructor performance documented? Do CLECs have proper input into the evaluation of the Instructors? Does U S WEST have a structured method for evaluating Instructor performance
- n) Did the Pseudo-CLEC personnel that received the IMA-GUI training believe that it was effective in preparing them to use the IMA-GUI interface

6.4.3.3 Document Observations

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Training Availability	Training Coverage	Completeness of training courses and forums	Document review Inspection		
		Adequacy of procedures to maintain training quality and utilization	Document review Inspection		
	Training Awareness	Availability of Training Schedules, Content and	Document review Observation		
	CLEC Input to Training Coverage	Adequacy of process for CLEC inputs to Training Curriculum			

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Training Program Quality Assurance	Student Feedback	Adequacy of process to survey training recipients on effectiveness of training	Document review Observation		
	Instructor Evaluation	Adequacy of the process for evaluating the quality of Instructors	Document review Observation		
Post Training Student Experience	Post Classroom Questions	Adequacy of coverage for student CLEC questions after returning to work	Interviews		
	Training/ Work Similarity	Similarity of work situation to class work situation used by U S WEST in the training	Interviews		

6.4.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluation of training information provided by U S WEST
- c) Summary report

6.5 Electronic Interface Development Evaluation

6.5.1 APPROACH

The Electronic Interface Development Evaluation is an evaluation of the U S WEST Interface Development and Implementation Documentation for EDI, EB-TA and Billing Activities development and IMA-GUI installation. This evaluation will be performed by the Test Administrator with involvement of U S WEST, the CLECs, and the Pseudo-CLEC.

6.5.2 ACTIVITIES

The Interface Development Evaluation will involve the following activities:

- a) Gather documentation
- b) Review and evaluate documentation
- c) Monitor and evaluate U S WEST's processes and procedures supporting CLEC interface development (EDI, EB-TA & Billing) and implementation (EDI, EB-TA, Billing and IMA) efforts
- d) Attend U S WEST/CLEC or U S WEST/Pseudo-CLEC interface technical meetings
- e) Document observations

6.5.2.1 Gather Documentation

The U S WEST EDI, EB-TA and Billing Interface Process and EDI, EB-TA and Billing development related documentation will be retrieved from its web site or provided by U S WEST. Additionally, the IMA Implementation Process and associated implementation documentation will also be retrieved. The Test Administrator will gather the documentation through network access and through contacts with U S WEST.

6.5.2.2 Review and Evaluate Documentation

The U S WEST Interface Development Process documentation will be reviewed and evaluated by the Pseudo-CLEC and Test Administrator. The observations by the TA will be documented and will be included in the summary report. The focus will be on the clarity, completeness and sufficiency of the information U S WEST makes available to CLECs for developing and/or implementing EDI, EB-TA, Billing and IMA-GUI OSS interfaces.

6.5.2.3 Monitor and Evaluate U S WEST's Processes Supporting CLEC Interface Development

The monitoring process will be conducted at U S WEST facilities, CLEC facilities, and Pseudo-CLEC facilities. The TA will observe the processes for design, development, testing and implementation of EDI, EB-TA and Billing interfaces and the processes for acquiring and implementing an IMA-GUI Interface to the U S WEST OSS. The TA will conduct interviews with U S WEST, Pseudo-CLEC, and CLEC personnel. This will identify and track OSS interface development and implementation activities while they

are in progress. The monitoring evaluation will attempt to answer the following questions:

- a) Are U S WEST processes, intervals and communications activities that are conducted during the development of an EDI, EB-TA or Billing interface to U S WEST's OSS or implementing a U S WEST ~~IMA-GUI~~ IMA-GUI interface to the U S WEST carried out in accordance with the U S WEST processes and procedures published and available to the CLECs
- b) Are the terms and definitions utilized in the EDI, EB-TA, Billing development and ~~IMA-GUI~~ IMA-GUI implementation documentation published and available to the CLECs
- c) Can the CLECs and the Pseudo-CLEC obtain documentation relating to building an interface and/or configuring service to the U S WEST EDI, EB-TA, Billing and ~~IMA-GUI~~ IMA-GUI interfaces? Is the documentation clear, accurate, and sufficient to build the interface
- d) Are meetings to discuss interface development reasonably scheduled and attended by U S WEST subject matter experts

6.5.2.4 Attend EDI and Billing Interface Development Meetings

With U S WEST and CLEC or Pseudo-CLEC permission, the Test Administrator will attend EDI Interface Development meetings to gather information and evaluate U S WEST's relationship and levels of support being provided with the parties involved in the CLEC EDI Development process.

Information will be gathered from participating CLECs to gather information and evaluate U S WEST's relationship and levels of support being provided with the parties involved in the CLEC EB-TA Development process.

6.5.2.5 Document Observations

All observations will be documented and reported in the Relationship Management summary report.

6.5.3 ENTRANCE CRITERIA

- a) U S WEST's documented Development processes and Technical Documentation for EDI, EB-TA and Billing development and IMA-GUI Installation/Configuration
- b) Evaluation criteria and checklists

- c) Interview Questionnaire

6.5.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluations and observations
- c) Summary report

6.6 Change Management Process Evaluation

6.6.1 APPROACH

The approach for this task is an evaluation effort by the TA with involvement of U S WEST, the CLECs, and the Pseudo-CLEC. The Methods and Procedures (M&P) established by U S WEST will be acquired. U S WEST will be monitored and evaluated on its adherence to its published M&P for change management. Following the collection of documentation, the TA will identify and track available instances of specific OSS Interface new functionality, enhancements and maintenance. U S WEST's capabilities and practices in testing corrections, enhancements and new functions will also be evaluated.

6.6.2 ACTIVITIES

- a) Gather documentation
- b) Review and evaluate documentation
- c) Monitor and evaluate U S WEST's ability to execute change management methods and procedures for software changes and a significant software release to determine whether the changes are implemented by U S WEST as announced and that unannounced changes are not implemented
- d) Attend regularly scheduled change management meetings
- e) Document observations

6.6.2.1 Gather Documentation

The U S WEST Co-provider Industry Change Management Process (CICMP) will be retrieved from the U S WEST web site or otherwise provided by U S WEST. The TA

will gather the documentation through network access and through contacts with U S WEST.

6.6.2.2 Review and Evaluate Documentation

The U S WEST change management process documentation will be reviewed and evaluated by the TA. The observations by the TA will be documented and will be included in the summary report. The evaluation will attempt to answer the following questions:

- a) Does the Change Management Process information available to the CLECs clearly document the methodology, timing and communication of U S WEST OSS software changes and releases
- b) Are terms and definitions utilized in the Change Management Process information clearly documented
- c) How are software releases handled? Are releases periodic and predictable (i.e., appropriately noticed) or random
- d) Does the Change Management Process information available to the CLECs clearly explain how CLECs can request changes to the OSS? Does the documentation include forms for requesting changes and clear instructions for completing, submitting and tracking progress on CLEC change requests
- e) Does the Change Management Process provide for frequent scheduled communications regarding changes to the CLECs
- f) Are release notes issued as part of the Change Management Process? If so, are they complete, clearly written and distributed in a timely fashion allowing CLECs time to properly prepare for change
- g) Does the Change Management Process information available to the CLECs provide a clearly defined escalation process
- h) If Change Management Processes, escalation processes or other U S WEST processes providing information as to how CLECs communicate, track, or escalate changes are web based, are the URLs for this information communicated to CLECs via multiple avenues
- i) Are the roles and responsibilities of each party clearly communicated in the U S WEST Change Management and escalation processes
- j) Does the documentation available to CLECs for U S WEST Change Management Processes clearly identify how change requests will be evaluated and prioritized for inclusion in future releases

- k) Does the Change Management Process information available to CLECs clearly explain how changes to the Process and forms utilized by the process will be accomplished? If so, is it clear how the new process will be distributed and how new forms will be distributed/implemented and the old process and forms retired
- l) If utilized, are release life cycles clearly described including all activities required by each segment of the lifecycle
- m) Monitor and evaluate U S WEST's ability to execute one significant software release through implementation
- n) Is there a process in place to notify CLECs in advance of planned system outages
- o) Is there a process in place to notify CLECs of unplanned system outages

6.6.2.3 Monitor and Evaluate

The TA will monitor the execution of the Change Management procedures based upon the observation criteria. The purpose of this process is to ensure that U S WEST is adhering to the methods and procedures it has established. It is imperative that the CLECs be provided with advance notice to system changes and enhancements and a test environment to test system changes prior to implementation. Without proper lead-times and a test environment, the CLECs will not be prepared to meet the user requirements of the changes or enhancements. ~~and that there is a test environment made available to CLECs.~~

The monitoring process will be conducted at U S WEST facilities, CLEC facilities, Pseudo-CLEC facilities, and through the Change Management monthly meetings held by U S WEST. The TA will observe the process in action by U S WEST, will conduct interviews with U S WEST and CLEC personnel, and attend monthly U S WEST CICMP meetings. This will identify and track the introduction of OSS interface new functionality, enhancements to existing software, and required code maintenance. The monitoring evaluation will attempt to answer the following questions:

- a) Are U S WEST methodologies, timing and communications for Change Management carried out in accordance with the U S WEST processes and procedures published and available to the CLECs
- b) Are the terms and definitions utilized in the Change Management documentation published and available to the CLECs understood by the parties
- c) How are software releases handled? Are releases periodic and predictable (i.e., appropriately noticed) or random

- d) Do the CLECs and the Pseudo-CLEC understand how they can request changes to the U S WEST OSS? Do they understand where to find the necessary forms? If deficiencies exist, what is the root cause
- e) Do frequently scheduled Change Management communications take place with the CLECs? If so, are the communications open and candid
- f) Does U S WEST follow the documented processes for tracking and monitoring CLEC change requests? Can the CLECs determine the status of their Change Requests without unreasonable effort
- g) Examine a number of randomly selected Release Notes to determine if they were distributed in a timely fashion and if the information was distributed in a fashion allowing CLECs time to properly prepare for change
- h) Are the escalation processes made available to the CLECs by U S WEST followed in practice
- i) If Change Management Processes, escalation processes or other U S WEST processes providing information as to how CLECs communicate, track, or escalate changes are web based, is the information reasonably accessible
- j) Are the roles and responsibilities of each party with regard to Change Management clearly understood
- k) Do CLECs and the Pseudo-CLEC understand how change requests will be evaluated and prioritized for inclusion in future releases? If they don't, what steps could be taken to ensure awareness in the future? Does U S WEST follow the release prioritization processes communicated in their Change Management Process
- l) Are changes to the Change Management Process executed in accordance with the information communicated in the U S WEST Change Management documentation available to the CLECs
- m) Are release life cycles clearly communicated and does U S WEST adhere to announced future releases as described in their Change Management Process
- n) Does U S WEST provide a development/change management test bed for use by the CLECs to test new development or changes before they are implemented? Does the test bed contain sufficient functionality and are proper test bed operating procedures in place to allow CLECs sufficient opportunity to implement changes in a timely fashion? Is the test bed consistent with the capabilities and functionalities of the production environment? Can CLECs obtain certification from U S WEST for updated releases through test bed testing or must certification also include production testing

6.6.2.4 Attend CICMP Meetings

The TA will attend monthly CICMP meetings to gather information and evaluate U S WEST's change management process.

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Change Management	Change Requests	Quality of Instructions Adherence to Process	Document review Observation Interviews		
	Software Release Prioritization	Clarity of Release Prioritization Process and Adherence to the Process	Document review Inspection of Tracking Logs Interviews		
	Software Release Notes	Quality of the Process Documentation, Quality, accuracy and completeness of Release Notes	Document review Inspection of Release Notes Interviews		
	Software Release Life Cycles	Communication consistency, Timeliness,			
	Awareness and Communications	Completeness and consistency of communications	Documentation review Meeting Evaluations Interviews		
	Implementation of Changes	Completeness and consistency of change implementation process	Inspection Document review Report review		

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
	Escalations	Clarity of Escalation Process and Adherence to the Process	Document review Inspection of Tracking Logs Interviews		
	Test Bed	Adequacy and completeness of functionality and process	Document review Observations Interviews		
	Tracking and Monitoring	Adequacy and completeness of change management tracking process	Document Review Observation Interviews		

6.6.3 ENTRANCE CRITERIA

- a) U S WEST's documented change management procedures
- b) Evaluation criteria and checklists
- c) Interview Questionnaire

6.6.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluations and observations
- c) Summary report

6. RELATIONSHIP MANAGEMENT EVALUATION

6.1 Scope

The Relationship Evaluation will examine the processes associated with the business operations of U S WEST and the CLEC community. Current business processes that U S WEST uses to conduct daily operational business with the CLECs will be evaluated and these observations and evaluations will be documented. Five business operations areas will be evaluated: CLEC Account Establishment; CLEC Account Management, EDI and IMA Interface Development, CLEC Training; and U S WEST Co-provider Industry Change Management Process (CICMP).

6.1.1 CLEC ACCOUNT ESTABLISHMENT

This evaluation will examine methods and procedures provided by U S WEST for establishing a new CLEC customer. The evaluation will focus on the available documentation accessible to CLEC businesses, the consultative assistance that U S WEST provides and on any additional documentation provided by U S WEST to its CLEC customers.

6.1.2 CLEC ACCOUNT MANAGEMENT

The CLEC Account Management evaluation will examine the methods, procedures and actions provided by U S WEST for managing their business relationship with the CLECs. The evaluation will examine Responses to Account inquiries, Help Desk Call Processing, Help Desk call closures, Help Desk Status Tracking, Problem Escalation, Forecasting, and Communications.

6.1.3 CLEC TRAINING EVALUATION

The scope of the CLEC Training Evaluation is to evaluate the availability of training schedules, the frequency of training in the various areas where training is offered, the detail of the training curriculum and the effectiveness of the training content.

6.1.4 INTERFACE DEVELOPMENT

This evaluation will examine the documentation, specification and consultative assistance provided by U S WEST to CLECs for use in building an EDI interface or installing IMA. This test will also include an evaluation of the integrateability of the U S WEST pre-ordering and ordering EDI interface, and an evaluation of the test environment U S WEST provides CLECs for pre-testing their EDI and EB-TA interfaces.

6.1.5 U S WEST CO-PROVIDER INDUSTRY CHANGE MANAGEMENT PROCESS EVALUATION

The U S WEST Co-Provider Industry Change Management Process (CICMP) will be examined to ensure that U S WEST's systems and/or processes for change management are conducted and communicated to the CLECs effectively, based on the defined change management procedures. The result of this effort will be the evaluation of the CICMP process and validation that it works as stated.

This process evaluation validates that U S WEST properly communicates its change management methods and procedures for system performance and system updates to each of the CLECs. As part of this evaluation, procedures to notify CLECs of planned and unplanned system downtime will be looked at. A CLEC's ability to request and have implemented changes to U S WEST's interfaces and systems will also be examined. The evaluation is also to assess that the Change Management process is executed by U S WEST according to the methods and procedures. This is a cooperative process for the CLECs and U S WEST to identify, communicate, and track OSS interface new functionality, enhancements to existing functionality, and required code maintenance included in software releases.

This evaluation is essential to ensure that the CLECs are:

- a) Provided with notice of pending system changes
- b) Provided with notice far enough in advance to be prepared when the enhancement is implemented
- c) Have a communication process between themselves and U S WEST for resolving problems that arise in relation to system upgrades
- d) Provided test environments, documentation, and other tools necessary to prepare and pre-test changes before they are implemented
- e) Provided with an opportunity to individually or collectively request and have implemented changes to U S WEST's interfaces and systems
- f) Provided with notice of planned and unplanned system downtimes

6.2 CLEC Account Establishment and Maintenance Evaluation

6.2.1 APPROACH

This evaluation will be used to ascertain the comprehensiveness of the published methods and procedures for establishing and maintaining a CLEC account. The methods and procedures will be evaluated on how appropriate the instructions are for completing necessary paperwork and what information is contained in the documentation.

6.2.2 ENTRANCE CRITERIA

- a) CLEC Account Establishment and Maintenance documentation is available
 - 1. Standard Interconnection Agreement Template
 - 2. Customer Questionnaire Template
- b) Access to U S WEST, Pseudo-CLEC, and CLEC personnel
- c) Pseudo-CLEC Interconnection Agreement
- d) Completed Pseudo-CLEC Customer Questionnaire
- e) Evaluation Criteria and Checklist
- f) Interview Questionnaire

6.2.3 ACTIVITIES

- a) Gather U S WEST CLEC Account Establishment documentation
- b) Review and evaluate the account establishment and maintenance documentation provided by the Pseudo-CLEC
- c) Perform U S WEST, Pseudo-CLEC, and CLEC personnel interviews
- d) Document observations

6.2.3.1 Gather Documentation

The U S WEST CLEC Account Establishment documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The TA will gather the documentation through network access and through contacts with U S WEST.

6.2.3.2 Review and Evaluate Documentation

The Pseudo-CLEC will keep records of its account establishment experiences. The TA will review and evaluate that documentation and compare it to the documented U S WEST processes. The evaluation will attempt to answer the following questions:

- a) Is the process for becoming a U S WEST Wholesale CLEC customer clearly presented and explained
- b) Is it clear whom the CLEC should contact to get started doing business with U S WEST
- c) Are the steps for the CLEC clearly documented? If so, is the information required to complete each step reasonable
- d) Does the documentation provided to CLECs by U S WEST clearly delineate the responsibilities of the CLEC-U S WEST Business Relationship
- e) Does the startup documentation available to CLECs provide adequate contact information
- f) Does the startup documentation available to CLECs identify escalation processes? If so, are these processes useable
- g) Does the startup documentation available to CLECs clearly outline the work activities required in order to bill IXCs for jointly provided switch access
- h) Does the startup documentation available to CLECs clearly outline the responses to be expected from each of the pre-order queries
- i) Does the startup documentation available to CLECs clearly outline the steps for processing orders of various types
- j) Does the startup documentation available to CLECs thoroughly identify and explain all reasons for rejects
- k) Does the startup documentation available to CLECs clearly set expectations on service intervals for resale and interconnection services

- l) Does the startup documentation available to CLECs sufficiently document the types of customized bills available for their use
- m) Is Tariff (SGAT) pricing information made available to CLECs
- n) Does the startup documentation available to new CLECs clearly explain how to report troubles, create trouble tickets, obtain status on troubles, escalate and close trouble tickets
- o) Does the startup documentation available to CLECs have a clear process for misdirected repair calls
- p) Does the startup documentation available to CLECs provide repair contact telephone numbers for each major type of service? If documented, do these include appropriate contacts for the full collection of services utilized by CLECs
- q) Are the calling card and LIDB implications for customers switching from U S WEST to a CLEC clearly explained
- r) Are the media for receiving billing outputs and reports clearly defined and accurate
- s) Does the startup documentation available to CLECs provide processes allowing the CLEC to escalate issues in the event U S WEST doesn't respond appropriately to CLEC needs
- t) Does the documentation available to CLECs provide clear tax exemption information
- u) Does the documentation available to CLECs provide a clear explanation of the interfaces available to the CLEC for OSS functions
- v) Does the documentation available to CLECs provide detailed information as to the means available for OSS access, available data files, and connectivity options? Is the method for ordering each clearly explained and are the timeframes for acquiring each type of access options
- w) Does the documentation available to CLECs clearly identify U S WEST's SS7 certification requirements
- x) Does the documentation available to CLECs clearly identify the U S WEST directory listing options available to CLECs including the features and functionality that can be made available to CLEC customers? Are the changes, if any, for these services clearly explained

- y) Does the documentation available to CLECs contain a process allowing CLECs to request new services? Is the process for requesting the new services clear and are the steps required and timeframes for response clearly delineated
- z) Does the documentation available to CLECs contain clear information and rules for how long distance carrier information (PIC/LPIC) changes will be handled
- aa) Does the documentation available to CLECs contain appropriate rules for handling customer switches from CLEC to CLEC
- bb) Does the documentation available to CLECs contain detailed information regarding the products available for resale
- cc) Does the documentation available to CLECs contain detailed information about U S WEST Performance Measurement system
- dd) Does the documentation available to CLECs contain detailed information about the US WEST Co-provider Change Management Process

Additional questions may be investigated as the TA's analysis is conducted and as the specific needs dictate.

6.2.3.3 Perform Interviews

The TA will perform interviews with the Pseudo-CLEC, participating CLECs and U S WEST personnel to document the experiences encountered when establishing a new CLEC account.

6.2.3.4 Document Observations

All observations will be documented and reported in the Relationship Management summary report.

6.2.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of observations
- c) Summary report, including an inventory of documentation

6.3 CLEC Account Management Evaluation

6.3.1 APPROACH

The CLEC Account Management test will evaluate the methods, procedures and actions provided by U S WEST for managing business relationships with the CLECs. The evaluation will examine the timeliness, accuracy and completeness of US WEST Responses to Account inquiries, the timeliness and responsiveness of Help Desk Call Processing, the appropriateness and methods applied to Help Desk call closures, the actual performance of Help Desk Status Tracking activities, the frequency and appropriateness of Problem Escalation efforts that are taken in response to CLEC inquiries, the reasonableness of Forecasting requests and the extent to which forecast information is applied by U S WEST into its various planning activities, and communications avenues that are available to CLECs by US WEST and the extent that these are effective.

6.3.2 ACTIVITIES

The activities that will be performed in conducting the CLEC Account Management Evaluation are as follows:

- a) Gather U S WEST CLEC Help Desk, Forecasting, Communications, and other Account Management Process Documentation
- b) Review and evaluate the account documentation provided by U S WEST
- c) Perform U S WEST, Pseudo-CLEC, and CLEC personnel interviews
- d) Examine appropriate records
- e) Document observations

6.3.2.1 Gather Documentation

The U S WEST CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The Test Administrator will gather the documentation through network access and through contacts with U S WEST.

6.3.2.2 Review and Evaluate Documentation

This review will evaluate the U S WEST Processes and practices in managing the CLEC account relationship. The Test Administrator will review and evaluate the U S WEST Process documentation clarity and sufficiency in managing its CLEC relationships.

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Help Desk	Timeliness	Speed of Answer	Observations Interviews		
		Problem Resolution Time	Observations Interviews		
		Call Backs	Observations Interviews		
	Knowledge of Subject		Observations Interviews		
	Quality of Response	Closures	Documentation Review Observations Interviews		
				Referrals	Observations
		Escalations	Observations Interviews		
	Tracking	Documentation Review Observations Interviews			
Communi- cations Proactive	Process Assistance	Availability of Information	Documentation Review Observations		
		Attention to Details	Documentation Review Observations		
	Product Assistance	Availability of Information	Documentation Review Observations		
	Awareness	Attention to Details	Documentation Review Observations		
		Availability of Information	Documentation Review Observations		

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Communications Reactive	Assistance	Availability	Observations Interviews		
		Attention to Detail	Observations Interviews		
	Problem Resolution				
Forecasting	Information	Coverage	Documentation Review Observations Interviews		
		Quality	Documentation Review Observations Interviews		
	Outlook Computation	Quality	Observations Interviews		

6.3.2.3 Perform Interviews

The Test Administrator will perform interviews with Pseudo-CLEC, participating CLECs and U S WEST personnel to document the experiences encountered in regards to the timeliness, accuracy and completeness of US WEST Responses to Account inquiries, the timeliness and responsiveness of Help Desk Call Processing, the appropriateness and methods applied to Help Desk call closures, the actual performance of Help Desk Status Tracking activities, the frequency and appropriateness of Problem Escalation efforts that are taken in response to CLEC inquiries, the reasonableness of Forecasting requests and the extent to which forecast information is applied by U S WEST into its various planning activities, and communications avenues that are available to CLECs by US WEST and the extent that these are effective.

6.3.2.4 Examine Records

The evaluation will examine the accuracy and completeness of U S WEST’s CLEC account management records. These records should include responses to account inquiries, closures/resolutions to problem inquiries, problem escalation efforts taken in response to CLEC inquiries, forecasting requests and planning activities.

6.3.2.5 Document Observations

All observations of interviews and records that are reviewed will be documented and reported in the Relationship Management summary report.

6.3.3 ENTRANCE CRITERIA

- a) CLEC Help Desk, Forecasting, Communications, and other Account Management Process documentation is available
- b) Access to U S WEST, Pseudo-CLEC, and CLEC personnel
- c) Evaluation Criteria and Checklist
- d) Interview Questionnaire
- e) Records that U S WEST is to provide to enable the TA to conduct its analysis of the Account Management function.

6.3.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of observations
- c) Summary report including an Inventory of Documentation

6.4 CLEC Training Evaluation

6.4.1 APPROACH

This test will be used to determine the availability of training schedules to the CLECs, how often this information is made available and in what formats this information is offered. The frequency of training on different topics and the effectiveness of the curriculum will also be evaluated. The documentation that is readily available to the CLECs will be used in this test, as will the training materials such as work books, student guides, and curriculum plans.

6.4.2 ENTRANCE CRITERIA

- a) Training Schedules
- b) Published syllabuses and handbooks
- c) Evaluation Criteria and Checklist
- d) Interview Questionnaire

- e) Pseudo-CLEC documentation of training – this should reflect training experience statements, classes taken, qualitative analysis done by the pseudo-CLEC

6.4.3 ACTIVITIES

- a) Gather U S WEST published training documentation
- b) Review and evaluate training documentation provided Pseudo-CLEC
- c) Document observations of training classes – the TA is to observe the training as delivered by U S WEST, but not necessarily the training delivered to the pseudo-CLEC by U S WEST

6.4.3.1 Gather Documentation

The U S WEST training schedules and associated documentation will be retrieved from the U S WEST web site or will otherwise be provided by U S WEST. The TA will gather the documentation through network access and through contacts with U S WEST.

6.4.3.2 Review and Evaluate Documentation

The Pseudo-CLEC will keep records of it's U S WEST IMA training and experiences. The TA will review and evaluate those records and compare it to the TA's IMA training. Interviews will be conducted with the Pseudo-CLEC personnel to determine the comprehensiveness of the training they received. The evaluation will attempt to answer the following questions:

- a) Is there a process for obtaining CLEC input for the training? If so, is the process clearly written and has it been adequately communicated to the CLECs
- b) Does the U S WEST training available to the CLECs adequately address the CLECs' need for product and training
- c) Does U S WEST provide an adequate means for CLECs to provide feedback on their experience of CLEC training? If so are the processes for evaluating CLEC feedback properly documented
- d) Were training schedules and documentation readily available? If yes, in what formats were the schedules and documentation available? If no, what steps were needed to obtain the necessary documentation
- e) Was the documentation readable and easy to understand
- f) Was the documentation comprehensive

- g) What type of documentation was provided (what areas are covered)
- h) Was the frequency of training adequate
- i) Was the training information timely and up-to-date
- j) Were there costs associated with the training? If yes, what types of costs and the approximate amount
- k) Were contact names and numbers provided during the training class in the event there were follow-up questions about the training programs? If so, were the contacts able to provide the assistance needed? Additionally, were the answers direct and complete or did significant effort have to be expended to answer questions
- l) Are the processes for monitoring U S WEST Instructor performance documented? Do CLECs have proper input into the evaluation of the Instructors? Does U S WEST have a structured method for evaluating Instructor performance

6.4.3.3 Document Observations

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Training Availability	Training Coverage	Completeness of training courses and forums	Document review Inspection		
		Adequacy of procedures to maintain training quality and utilization	Document review Inspection		
	Training Awareness	Availability of Training Schedules, Content and	Document review Observation		
	CLEC Input to Training Coverage	Adequacy of process for CLEC inputs to Training Curriculum			

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Training Program Quality Assurance	Student Feedback	Adequacy of process to survey training recipients on effectiveness of training	Document review Observation		
	Instructor Evaluation	Adequacy of the process for evaluating the quality of Instructors	Document review Observation		
Post Training Student Experience	Post Classroom Questions	Adequacy of coverage for student CLEC questions after returning to work	Interviews		
	Training/ Work Similarity	Similarity of work situation to class work situation used by U S WEST in the training	Interviews		

6.4.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluation of training information provided by U S WEST
- c) Summary report

6.5 Electronic Interface Development Evaluation

6.5.1 APPROACH

The Electronic Interface Development Evaluation is an evaluation of the U S WEST Interface Development and Implementation Documentation for EDI, EB-TA and Billing Activities development and IMA GUI installation. This evaluation will be performed by the Test Administrator with involvement of U S WEST, the CLECs, and the Pseudo-CLEC.

6.5.2 ACTIVITIES

The Interface Development Evaluation will involve the following activities:

- a) Gather documentation
- b) Review and evaluate documentation
- c) Monitor and evaluate U S WEST's processes and procedures supporting CLEC interface development (EDI, EB-TA & Billing) and implementation (EDI, EB-TA, Billing and IMA) efforts
- d) Attend U S WEST/CLEC or U S WEST/Pseudo-CLEC interface technical meetings
- e) Document observations

6.5.2.1 Gather Documentation

The U S WEST EDI, EB-TA and Billing Interface Process and EDI, EB-TA and Billing development related documentation will be retrieved from its web site or provided by U S WEST. Additionally, the IMA Implementation Process and associated implementation documentation will also be retrieved. The Test Administrator will gather the documentation through network access and through contacts with U S WEST.

6.5.2.2 Review and Evaluate Documentation

The U S WEST Interface Development Process documentation will be reviewed and evaluated by the Pseudo-CLEC and Test Administrator. The observations by the TA will be documented and will be included in the summary report. The focus will be on the clarity, completeness and sufficiency of the information U S WEST makes available to CLECs for developing and/or implementing EDI, EB-TA, Billing and IMA OSS interfaces. The ordering requirements will be evaluated to assess the extent to which information that U S WEST supplies in its pre-ordering information can be integrated into the ordering transactions by CLECs.

6.5.2.3 Monitor and Evaluate U S WEST's Processes Supporting CLEC Interface Development

The monitoring process will be conducted at U S WEST facilities, CLEC facilities, and Pseudo-CLEC facilities. The TA will observe the processes for design, development, testing and implementation of EDI, EB-TA and Billing interfaces and the processes for acquiring and implementing an IMA GUI Interface to the U S WEST OSS. The TA will

conduct interviews with U S WEST, Pseudo-CLEC, and CLEC personnel. This will identify and track OSS interface development and implementation activities while they are in progress. The monitoring evaluation will attempt to answer the following questions:

- a) Are U S WEST processes, intervals and communications activities that are conducted during the development of an EDI, EB-TA or Billing interface to U S WEST's OSS or implementing a U S WEST IMA GUI interface to the U S WEST carried out in accordance with the U S WEST processes and procedures published and available to the CLECs
- b) Are the terms and definitions utilized in the EDI, EB-TA, Billing development and IMA GUI implementation documentation published and available to the CLECs
- c) Can the CLECs and the Pseudo-CLEC obtain documentation relating to building an interface and/or configuring service to the U S WEST EDI, EB-TA, Billing and IMA GUI interfaces? Is the documentation clear, accurate, and sufficient to build the interface
- d) Are meetings to discuss interface development reasonably scheduled and attended by U S WEST subject matter experts
- e) Is there consistency in the definition of data elements between pre-ordering and ordering requirements?
- f) Do the data definitions (i.e., form, format, content, usage and meaning) between pre-ordering and ordering elements enable integration from pre-order transactions into order transactions without requiring translation, or reconfiguration of the data elements?

6.5.2.4 Attend EDI and Billing Interface Development Meetings

With U S WEST and CLEC or Pseudo-CLEC permission, the Test Administrator will attend EDI Interface Development meetings to gather information and evaluate U S WEST's relationship and levels of support being provided with the parties involved in the CLEC EDI Development process.

Information will be gathered from participating CLECs to gather information and evaluate U S WEST's relationship and levels of support being provided with the parties involved in the CLEC EB-TA Development process.

6.5.2.5 Document Observations

All observations will be documented and reported in the Relationship Management summary report.

6.5.3 ENTRANCE CRITERIA

- a) U S WEST's documented Development processes and Technical Documentation for EDI, EB-TA and Billing development and IMA Installation/Configuration
- b) Evaluation criteria and checklists
- c) Interview Questionnaire

6.5.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluations and observations
- c) Summary report

6.6 Change Management Process Evaluation

6.6.1 APPROACH

The approach for this task is an evaluation effort by the TA with involvement of U S WEST, the CLECs, and the Pseudo-CLEC. The Methods and Procedures (M&P) established by U S WEST will be acquired. U S WEST will be monitored and evaluated on its adherence to its published M&P for change management. Following the collection of documentation, the TA will identify and track available instances of specific OSS Interface new functionality, enhancements and maintenance. U S WEST's capabilities and practices in testing corrections, enhancements and new functions will also be evaluated.

6.6.2 ACTIVITIES

- a) Gather documentation
- b) Review and evaluate documentation

- c) Monitor and evaluate U S WEST's ability to execute change management methods and procedures for software changes and a significant software release to determine whether the changes are implemented by U S WEST as announced and that unannounced changes are not implemented
- d) Attend regularly scheduled change management meetings
- e) Document observations

6.6.2.1 Gather Documentation

The U S WEST Co-provider Industry Change Management Process (CICMP) will be retrieved from the U S WEST web site or otherwise provided by U S WEST. The TA will gather the documentation through network access and through contacts with U S WEST.

6.6.2.2 Review and Evaluate Documentation

The U S WEST change management process documentation will be reviewed and evaluated by the TA. The observations by the TA will be documented and will be included in the summary report. The evaluation will attempt to answer the following questions:

- a) Does the Change Management Process information available to the CLECs clearly document the methodology, timing and communication of U S WEST OSS software changes and releases
- b) Are terms and definitions utilized in the Change Management Process information clearly documented
- c) How are software releases handled? Are releases periodic and predictable (i.e., appropriately noticed) or random
- d) Does the Change Management Process information available to the CLECs clearly explain how CLECs can request changes to the OSS? Does the documentation include forms for requesting changes and clear instructions for completing, submitting and tracking progress on CLEC change requests
- e) Does the Change Management Process provide for frequent scheduled communications regarding changes to the CLECs
- f) Are release notes issued as part of the Change Management Process? If so, are they complete, clearly written and distributed in a timely fashion allowing CLECs time to properly prepare for change
- g) Does the Change Management Process information available to the CLECs provide a clearly defined escalation process
- h) If Change Management Processes, escalation processes or other U S WEST processes providing information as to how CLECs communicate, track, or escalate changes are web based, are the URLs for this information communicated to CLECs via multiple avenues
- i) Are the roles and responsibilities of each party clearly communicated in the U S WEST Change Management and escalation processes
- j) Does the documentation available to CLECs for U S WEST Change Management Processes clearly identify how change requests will be evaluated and prioritized for inclusion in future releases

- k) Does the Change Management Process information available to CLECs clearly explain how changes to the Process and forms utilized by the process will be accomplished? If so, is it clear how the new process will be distributed and how new forms will be distributed/implemented and the old process and forms retired
- l) If utilized, are release life cycles clearly described including all activities required by each segment of the lifecycle
- m) Monitor and evaluate U S WEST's ability to execute one significant software release through implementation
- n) Is there a process in place to notify CLECs in advance of planned system outages
- o) Is there a process in place to notify CLECs of unplanned system outages

6.6.2.3 Monitor and Evaluate

The TA will monitor the execution of the Change Management procedures based upon the observation criteria. The purpose of this process is to ensure that U S WEST is adhering to the methods and procedures it has established. It is imperative that the CLECs be provided with advance notice to system changes and enhancements and a test environment to test system changes prior to implementation. Without proper lead-times and a test environment, the CLECs will not be prepared to meet the user requirements of the changes or enhancements and that there is a test environment made available to CLECs.

The monitoring process will be conducted at U S WEST facilities, CLEC facilities, Pseudo-CLEC facilities, and through the Change Management monthly meetings held by U S WEST. The TA will observe the process in action by U S WEST, will conduct interviews with U S WEST and CLEC personnel, and attend monthly U S WEST CICMP meetings. This will identify and track the introduction of OSS interface new functionality, enhancements to existing software, and required code maintenance. The monitoring evaluation will attempt to answer the following questions:

- a) Are U S WEST methodologies, timing and communications for Change Management carried out in accordance with the U S WEST processes and procedures published and available to the CLECs
- b) Are the terms and definitions utilized in the Change Management documentation published and available to the CLECs understood by the parties
- c) How are software releases handled? Are releases periodic and predictable (i.e., appropriately noticed) or random

- d) Do the CLECs and the Pseudo-CLEC understand how they can request changes to the U S WEST OSS? Do they understand where to find the necessary forms? If deficiencies exist, what is the root cause
- e) Do frequently scheduled Change Management communications take place with the CLECs? If so, are the communications open and candid
- f) Does U S WEST follow the documented processes for tracking and monitoring CLEC change requests? Can the CLECs determine the status of their Change Requests without unreasonable effort
- g) Examine a number of randomly selected Release Notes to determine if they were distributed in a timely fashion and if the information was distributed in a fashion allowing CLECs time to properly prepare for change
- h) Are the escalation processes made available to the CLECs by U S WEST followed in practice
- i) If Change Management Processes, escalation processes or other U S WEST processes providing information as to how CLECs communicate, track, or escalate changes are web based, is the information reasonably accessible
- j) Are the roles and responsibilities of each party with regard to Change Management clearly understood
- k) Do CLECs and the Pseudo-CLEC understand how change requests will be evaluated and prioritized for inclusion in future releases? If they don't, what steps could be taken to ensure awareness in the future? Does U S WEST follow the release prioritization processes communicated in their Change Management Process
- l) Are changes to the Change Management Process executed in accordance with the information communicated in the U S WEST Change Management documentation available to the CLECs
- m) Are release life cycles clearly communicated and does U S WEST adhere to announced future releases as described in their Change Management Process
- n) Does U S WEST provide a development/change management test bed for use by the CLECs to test new development or changes before they are implemented? Does the test bed contain sufficient functionality and are proper test bed operating procedures in place to allow CLECs sufficient opportunity to implement changes in a timely fashion? Is the test bed consistent with the capabilities and functionalities of the production environment? Can CLECs obtain certification from U S WEST for updated releases through test bed testing or must certification also include production testing

6.6.2.4 Attend CICMP Meetings

The TA will attend monthly CICMP meetings to gather information and evaluate U S WEST's change management process.

Document Observations

All observations will be documented and reported in the Relationship Management summary report.

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
Change Management	Change Requests	Quality of Instructions Adherence to Process	Document review Observation Interviews		
	Software Release Prioritization	Clarity of Release Prioritization Process and Adherence to the Process	Document review Inspection of Tracking Logs Interviews		
	Software Release Notes	Quality of the Process Documentation, Quality, accuracy and completeness of Release Notes	Document review Inspection of Release Notes Interviews		
	Software Release Life Cycles	Communication consistency, Timeliness,			
	Awareness and Communications	Completeness and consistency of communications	Documentation review Meeting Evaluations Interviews		
	Implementation of Changes	Completeness and consistency of change implementation process	Inspection Document review Report review		

Process	Area	Evaluation Measure	Evaluation Technique	CGT Findings	U S WEST Comments
	Escalations	Clarity of Escalation Process and Adherence to the Process	Document review Inspection of Tracking Logs Interviews		
	Test Bed	Adequacy and completeness of functionality and process	Document review Observations Interviews		
	Tracking and Monitoring	Adequacy and completeness of change management tracking process	Document Review Observation Interviews		

6.6.3 ENTRANCE CRITERIA

- a) U S WEST's documented change management procedures
- b) Evaluation criteria and checklists
- c) Interview Questionnaire

6.6.4 EXIT CRITERIA

- a) Completed checklists and questionnaires
- b) Documentation on results of evaluations and observations
- c) Summary report

77. PERFORMANCE MEASUREMENT EVALUATION

7.1 Scope

The Performance Measurement Evaluation (PME) will include an evaluation of the processes, and the procedures that U S WEST has in place for collecting retail and CLEC data and computing the results of the performance measurements documented in Appendices B & C of the MTP. The PME includes the development of a statistical approach, a performance measurement process audit/review, an evaluation of the three most current consecutive months of U S WEST retail and CLEC performance measurement data, functionality test performance measure evaluations and capacity test performance measurement evaluations.

The PME is designed to provide a statistically valid assessment of U S WEST's performance in providing service to the CLECs and its retail customers based on established measures. Where applicable, the PME tests and substantiates conformance with the standards U S WEST must meet in order to comply with Section 271 of the (TA-96) Act.

From the MTP, Performance Measurements fall into three broad categories: parity, benchmark, and report only. Parity Measures will be used to assess the degree that U S WEST OSS Systems allow parity access for competing CLECs. Benchmarks define a level of performance for service provided to a CLEC for which there is not an equivalent function within U S WEST. The report-only category is provided for those measures for which it was determined were of interest but were used for diagnostic purposes, often because they back-up other performance measurements. The report only category also includes measures for which there is not yet sufficient information or the need to set a benchmark.

U S WEST has committed to provide retail and CLEC results of the performance measurements listed in Appendices B and C of the Master Test Plan (MTP).

Appendix B of the MTP contains detailed descriptions of U S WEST's performance measurements. Each page lists the following information: 1) the indicator number for the measurement, (2) the name of the measurement, (3) the purpose of the measurement, (4) a detailed description of the measurement, (5) the formula used to compute the result of the measurement, (6) relevant notes and explanations and (7) Standards for the measures.

Appendix C lists which performance measurements will be included in the Functionality Test PME and/or in the Capacity Test PME. The Functionality Test is broken out into OSS functionality testing and end-to-end functionality testing. Only those measurements with a "Yes" indication will be considered during the Functionality and Capacity Tests. Those measurements with no "Yes" indication will only be included in the testing to the extent that they are assessed during the Performance Measurement Evaluation to verify that U S WEST is collecting adequate data and computing accurate results.

7.2 Approach

The Performance Measurement Evaluation will require a combined audit and test approach including a Performance Measurement Process Evaluation, a Historical Data Evaluation, and Performance Measurement Evaluations during the Functionality and Capacity Tests.

-The Performance Measurement Process Evaluation is an audit /review of the processes and practices utilized by U S WEST for gathering and computing the retail and CLEC results for the performance measures identified in Appendix B of the MTP. Since this process evaluation is an entrance criteria for Functionality Tests, the process evaluation may be conducted in two phases. Conducting the audits in this fashion will permit testing to begin for those performance measures that are currently available. A second process audit/review will be conducted for those areas of the test feeding performance measures being developed by U S WEST.

A Historical Data Evaluation will be conducted on the 3 most current consecutive months of U S WEST retail and CLEC data. The Historical Data Evaluation will be conducted in phases that match the availability of the Performance Measurement data.

The Functionality and Capacity Test performance measurement evaluations will be conducted during the Functionality and Capacity Tests. These performance measurement evaluations will be conducted as final validations to the test cases that map to individual performance measures.

7.3 Activities

Activities that will be conducted as part of the Performance Measurement Evaluation will include the following:

- a) Develop the Statistical Approach for the Arizona 271 Tests
- b) Perform a Performance Measurement Process Audit/Review
- c) Perform a Historical retail and CLEC Data Review (using the 3 most current consecutive months of U S WEST historical data
- d) Gather, compute, evaluate, and appropriately retest based on Performance Measurement Data (as specified in Appendix C of the MTP) for the Functionality Tests
- e) Gather, compute, evaluate, and appropriately retest based on Performance Measurement Data (as specified in Appendix C of the MTP) for the Capacity Tests

- f) Prepare Interim and Final Reports (including PME Process Audits Report, Historical Data Evaluation Report, and PME reports for Functionality and Capacity Tests)

7.3.1 DEVELOP THE STATISTICAL APPROACH

A TAG statistical sub-committee was formed to address statistically sound quantities, and to make a recommendation for the statistical methodology to be used for the Tests. The Subcommittee met on January 25, 2000 to allow statisticians from the parties to review alternative statistical approaches presented by the TA, AT&T, Sprint, and U S WEST. It was agreed at the meeting that the TA will evaluate monthly performance measurements results against established Benchmarks in a "Stare and Compare" fashion. If individual monthly performance results do not meet or exceed benchmark levels, as identified in the MTP, the TAG will determine whether new instances of tests for the individual benchmark will be re-conducted with appropriate Incidents reported and repaired by U S WEST until the benchmark level is achieved.

For initial work establishing the test volumes and methodology, U S WEST prepared and submitted to the TA a spreadsheet including, for each measure, all product types organized by product groups, and other levels of disaggregation such as whether or not service was required to be Dispatched, and local population density. The TA worked with the CLEC and U S WEST Statistical Sub-committee representatives to identify any disaggregation levels that might be reasonably excluded from tests due to low or no future market interest or irrelevance. The committee flagged products and population densities in which the products should be tested and whether the product tests should reflect dispatched and/or non-dispatched status. It was determined that test quantities of 135 will approximately achieve the chosen level of material difference and result in the desired levels of Alpha and Beta.

As a result of these Statistical Sub-committee meetings, the overall test sample quantity for the Arizona 271 Tests were established at approximately 1620-1890 Functionality test orders (for 12-14) flagged products/disaggregations. Subsequently, the sub-committee met to discuss the statistical method for the tests. Following presentations by the statisticians, the sub-committee asked the TA to develop a statistical method for the tests and to develop a test plan for presentation to the sub-committee.

The following is an overview of the statistical approach that will be utilized:

In order to be allowed to compete in the long-distance market, an ILEC must provide non-discriminatory access to its OSS. The statistical approach will permit performance measurement results to be evaluated in a manner that facilitates a determination of whether U S WEST is providing non-discriminatory access. The purpose of employing statistical methods is to help determine whether observed differences in performance are attributable to inherent variability in performance (in which case, the difference would be considered statistically insignificant) or to some other factor (in which case, the difference would be considered to be statistically significant). In the latter case, where a

difference is considered to be statistically significant, the performance will be considered to have not met the parity standard.

Two types of statistical error are recognized in implementing the statistical approach. These are (1) erroneously concluding that a particular observed difference is statistically significant when, in fact, it is not; and (2) erroneously concluding that a difference is not significant when, in fact it is. The probabilities of these two types of error occurring under specified conditions in a statistical test are expressed in percentages or decimal fractions that are commonly referred to as “alpha” and “beta.” (Which error type is called “alpha,” and which is called, “beta,” depends on whether the selected hypothesis assumes parity or non-parity.). As an initial method for allocating the overall sample size (1,620 to 1,890) among the specified product/disaggregation categories, sufficient test quantities of each relevantly disaggregated test cell (product, dispatch/non-dispatch, local population density indicator, interface, etc.) will be taken to ensure that, where practical, both these alpha and beta risks are limited to .05.

The statistical approach will be used to test parity of U S WEST's performance for CLECs with U S WEST's performance for its retail customers for those measurements with a retail analog. For measurements without a retail analog, the performance measurement result will be compared directly with the corresponding benchmark.

The measurements marked with a “Yes” in Section 1 of Appendix C of the MTP will be evaluated using a statistical approach.

Only those test scenarios and cases that meet the levels of disaggregation outlined below will be included in the statistical tests of parity and compliance. Other test scenarios and cases will be run to test whether functionality exists, but not in sufficient volume to evaluate parity / compliance or draw conclusions based upon statistics.

For Ordering and Provisioning Measurements, and Maintenance and Repair Measurements, the following disaggregations will be used:

Product	Geography	Whether Dispatched
Analog Loop	MSA	Dispatch
Business	MSA	Dispatch
Business	MSA	Non-Dispatch
DS1 and 4-Wire Loop	Hi-D	Dispatch
NL-Loop-2W	Hi-D	Dispatch
UNE-P	MSA	Non-Dispatch
Residence	MSA	Dispatch
Residence	MSA	Non-Dispatch

Statistical Testing will occur at the above disaggregation levels, and these will exclusively define the design constraints and statistical sample size requirements within the total quantities agreed by the statistical sub-committee. Other potentially confounding factors, such as Order Type, Features Only, etc., will be controlled through weighting. Similarly, aggregate tests, which combine data at the various disaggregation levels, will be performed using weighted combinations. The weights used (both for combining ~~pseudo~~Pseudo-CLEC test data from different product groups, order types, etc., and for combining comparative retail analog U S WEST data from different product groups, order types, etc.) will be determined by a detailed projection of the expected 2Q2001 CLEC market mix.

More detailed information on the statistical approach can be found in Appendix K.

7.3.2 PERFORMANCE MEASUREMENT PROCESS AUDIT/REVIEW

The TA will conduct reviews necessary to perform an assessment and documentation of U S WEST processes governing the data collection, calculation and reporting of performance measurements. Process comparisons will be made against industry best practices and the Service Performance Indicator Definitions (PID) jointly agreed between U S WEST and the CLECs in the State of Arizona (as contained in Appendix B of the MTP). The review will answer the following questions for both retail and CLEC data:

- a) Are the U S WEST documented performance measure business rules, gathering methods and procedures sufficient to ensure that the data elements gathered are accurate and complete
- b) Are any of the U S WEST data gathering or calculation processes manual? If so, is U S WEST manual data gathering and calculation processes sufficiently documented to ensure completeness, proper disaggregation, and accuracy
- c) Does the U S WEST performance measurement process documentation contain proper information mapping data elements needed to compute each performance measure to a specific U S WEST system
- d) Are the U S WEST documented data gathering and exclusion business rules consistent with the PID
- e) Are the U S WEST calculations performed as defined in the PID
- f) Are U S WEST supervisory review processes adequately documented and practiced to ensure calculation compliance in place and adequate to ensure the continuing accuracy of calculations
- g) Are documented U S WEST change control procedures in place to ensure that changes to data are tracked and available for review? Are these sufficient

- h) Are U S WEST procedures in place to ensure that the PID remains consistent with U S WEST's internal methods and procedures for collecting, analyzing and reporting both CLEC and retail performance data
- i) Is the U S WEST Performance Measurement Report Version Control Process documented, sufficient and practiced
- j) Are historical logs available for changes to reported performance measures
- k) Do procedures for changing data include appropriate change/version control? Are these procedures documented and consistent with the PID
- l) How are Performance Measurements reports made available to the CLECs

The TA will request copies of all U S WEST retail and CLEC Performance Measurement handling and calculation process documentation. Once received, the TA will review the documentation and will schedule appropriate interviews with U S WEST subject matter experts for clarification on the processes used for data exclusions, data gathering and computing the measures. The TA will also gather schedules for U S WEST data gathering and computations.

Additionally, the TA will conduct clarification discussions with CLEC representatives to determine if any deviations, which may have occurred in the past, should be further investigated during the Performance Measurement Testing.

During other testing, the Test Administrator will visit with U S WEST areas executing the Measurement Processes and will observe data gathering, exclusions and computations in process. The Test Administrator will evaluate, document and report all deviations from process, improperly excluded data (if any is discovered), or other information gathered which might invalidate the Performance Measurement numbers reported by U S WEST.

The following activities will be conducted as part of the performance measurement process review:

- a) Identify the systems that impact performance measures and data that are collected from these systems
- b) Gain an understanding of the data flows and processes related to each individual performance measure
- c) Gain an understanding of the business requirements, methods and procedures, definitions, extraction criteria, calculations, exclusions, and other related information used by U S WEST to calculate performance measures

- d) Review the U S WEST documented performance measure business rules, methods and procedures to ensure that sufficient controls are documented to ensure the data collected and calculated is accurate and complete
- e) Observe and document U S WEST general applications process controls, and perform walkthrough observations of performance measure transactions
- f) Observe, evaluate and document controls related to security, change management, reliability, and integrity of information across the OSS Systems utilized to collect performance measures
- g) Observe, evaluate and document the controls related to the completeness and accuracy of inputs and updates of performance measure data including supervisory practices for controlling accuracy and completeness

Process deficiencies or practice deviations from documented processes discovered requiring work by U S WEST, will be entered on Incident Work Order forms and forwarded to the TAG for subsequent prioritization and submittal to U S WEST for repair and subsequent re-testing per the Test Administrator's Testing Incidents Process (Attachment I).

7.3.3 HISTORICAL DATA REVIEW

The TA will request the three most current consecutive months of retail and CLEC historical raw data (before exclusions) and U S WEST computed Performance Measures. Upon receiving the data, the TA Statistics Team will perform an independent computation of a representative sample of all Performance Measurements, Z statistics and other computations, averages, standard deviations, rates, proportions, sample sizes, etc. from U S WEST provided raw data. The TA will compare the independently computed data to the Z statistics and other computations computed by U S WEST.

The TA will evaluate, document and report all differences between the numbers computed by U S WEST and those computed by the TA. Problems discovered requiring work by U S WEST, will be entered on Incident Work Order forms and forwarded to the Test Advisory Group (TAG) for subsequent prioritization and submittal to U S WEST for repair and subsequent re-testing per the Test Administrator's Testing Incidents Process (see Attachment I).

In addition, the historical evaluation will also investigate the presence of potentially confounding factors that may need to be further controlled in the design and analysis of the functionality tests.

7.3.4 FUNCTIONALITY TEST PERFORMANCE MEASURE EVALUATION

Appendix C of the MTP lists which performance measurements will be included in the Functionality Test. The Functionality Test is broken out into OSS functionality testing

and end-to-end functionality testing. Only those measurements with a "Yes" indication in the MTP Appendix C will be included in the Performance Measurement Evaluation for the Functionality Tests.

The TA will acquire and/or develop data, calculate Functionality Test Results, and validate results of U S WEST, Pseudo-CLEC and CLEC analyses for the Functionality Tests. During the Functionality Tests, Performance Measurement raw data for the Pseudo-CLEC test orders, trouble reports and other transactions, calculated z statistics and other calculations will be collected from U S WEST for all those measurement with a "Yes" indication in the MTP Appendix C. Using the raw data (before exclusions) from U S WEST, the TA will perform an independent calculation of all measurements with a "Yes" indication in the MTP Appendix C and will also perform an independent calculation of the same measurements for the same orders using the Functionality Test Data provided by the Pseudo-CLEC.

The TA will compare U S WEST's computed z statistics and other calculations to TA computed z statistics and other calculations (from U S WEST's provided raw data) and to TA computed z statistics (from Functionality Test Data collected by the Pseudo-CLEC). Discrepancies in the calculations will be evaluated, documented and reported by the TA.

Problems discovered requiring work by U S WEST, will be entered on Incident Work Order forms and forwarded to the TAG for subsequent prioritization and submittal to U S WEST for repair.

Performance Measure evaluation during testing will be performed on testing units called cells. Cells are groups of test cases for which statistical quantities were set before testing began. During the testing, performance measures will be utilized as follows:

1. Benchmarks

The TA will evaluate Benchmarks in a "Stare and Compare" fashion. If individual benchmark levels identified in the PID aren't achieved during testing of the full complement of tests for a given cell, the incident will be evaluated by the TA, reported to the TAG and repaired by U S WEST in accordance with the Testing incidents process (Appendix I). A full complement of new test instances for the cell will then be subsequently re-tested. This entire process will be repeated until the benchmark level is achieved.

2. Parity Measurements

The TA will evaluate Parity Measurement Computations for raw data collected from the Pseudo-CLEC using statistical testing. If individual parity levels as identified in the PID aren't achieved during testing of the full complement of tests for a given cell, the incident will be evaluated by the TA, reported to the TAG and repaired by U S WEST in accordance with the Testing incidents process (Appendix I). A full complement of new test instances for the cell will then be

subsequently re-tested, as directed/prioritized by the TAG. This entire process will be repeated until parity is achieved.

3. Report Only Measurements

Since the report-only category is provided for those measurements the Commission or other regulatory bodies determined were of interest but were used for diagnostic purposes, often because they back-up other performance measurements, the data will be gathered and reported only. This is also appropriate since the report only category also includes measures for which there is not yet sufficient information or the need to set a benchmark. Where the results of one of the performance measurements they back up are inconclusive, statistical analysis of the appropriate report-only measurement based on the data gathered during the test is provided.

7.3.5 CAPACITY TEST PERFORMANCE MEASURE EVALUATION

The System Capacity Test will be run in U S WEST's live production environment. The capacity tests for orders will go through the ordering process until the issuance of a FOC. System Capacity Test orders will be submitted in addition to the production orders to achieve the intended forecast volume. The quantity of required System Capacity Test pre-order and order transactions will be derived by tabulating the CLEC and U S WEST volumes and then subtracting the current volumes from the forecast volumes.

The Pseudo-CLEC will collect and store information related to the System Capacity Test in a data repository. Additionally, U S WEST will provide the TA with performance measurement data for the System Capacity Test. The TA will use the Pseudo-CLEC repository and the U S WEST performance measurement data to evaluate the success level of the System Capacity Test.

The test requirements and specification plan for the test will be reviewed with the CLECs, the Pseudo-CLEC, and U S WEST prior to conducting the System Capacity Test. To accommodate fairness and blindness of the test, U S WEST and the CLECs will not know in advance the actual dates the System Capacity Test will be performed.

Appendix C of the MTP lists the performance measurements that will be included in the Capacity Test. Only those measurements with a "Yes" indication in the MTP Appendix C will be tested during the Capacity Tests and evaluated during the Performance Measurement Evaluation. During the testing, performance measures will be utilized as follows:

1. Benchmarks

The TA will evaluate Benchmarks in a "Stare and Compare" fashion. If individual benchmark levels identified in the PID aren't achieved during testing of the full complement of tests for a given cell, the incident will be evaluated by the

TA, reported to the TAG and repaired by U S WEST in accordance with the Testing incidents process (Appendix I). A full complement of new test instances for all cells in the Capacity Test will then be subsequently re-tested. The failed measures within the failed cells will be reevaluated on the new test. At the discretion of the TAG, additional measures in additional cells possibly effected by the fix may also be reevaluated. This entire process will be repeated until the benchmark level is achieved.

2. Parity Measurements

The TA will evaluate Parity Measurement computations for raw data collected from the Pseudo-CLEC using statistical testing. If individual parity levels as identified in the PID aren't achieved during testing of the full complement of tests for a given cell, the incident will be evaluated by the TA, reported to the TAG and repaired by U S WEST in accordance with the Testing incidents process (Appendix I). A full complement of new test instances for all cells in the Capacity Test will then be subsequently re-tested, as directed/prioritized by the TAG. The failed measures within the failed cells will be reevaluated on the new test. At the discretion of the TAG, additional measures in additional cells possibly effected by the fix may also be reevaluated. This entire process will be repeated until parity is achieved.

3. Report Only Measurements

Since the report-only category is provided for those measures the Commission or other regulatory bodies determined were of interest but were used for diagnostic purposes, often because they back-up other performance measurements, the data will be gathered and reported only. This is also appropriate since the report only category also includes measures for which there is not yet sufficient information or the need to set a benchmark. Where the results of one of the performance measurements they back up are inconclusive, statistical analysis of the appropriate report-only measurement based on the data gathered during the test is provided.

7.3.6 PREPARE INTERIM AND FINAL PERFORMANCE MEASURE EVALUATION REPORTS

Interim reports will be produced and published by the TA for PME Process Audits, Historical Data Evaluation, and for the Functionality and Capacity Tests. The interim report for the PME Process Audits may be produced in two phases to allow Functionality Testing to begin based on performance measures already in operation with a second report produced and approved for those performance measures being developed by U S WEST. The Final Report will be produced and published by the TA. Recipients of the final report will be the ~~State Commission~~ ACC, U S WEST, and all CLECs participating in the test.

All intellectual property, raw data, results, reports generated, process updates, process and test documentation will be retained by Cap Gemini Telecommunications for a period

of three years, or Federal Communications Commission/State Commission legal retention requirements, whichever is the greater period. All proprietary guidelines of CGT will be followed for retention and storage of test data, output, and records. Any connectivity established between U S WEST, the CLECs, and CGT for the purpose of data transfer, Pseudo-CLEC processing, report generation, and system testing will be disconnected immediately following completion of the test. Unless specifically ordered by the ACC or the FCC, any requirements for connectivity beyond the completion of the test will require negotiation and formal agreement between U S WEST and CGT, or the CLEC(s) and CGT.

7.4 Entrance Criteria

The following must be complete prior to initiating the PME:

- a) Performance Measurements as outlined in the PID are operationally ready and at least two months of performance data is available for the evaluation to begin. The evaluation may be conducted in two phases to allow testing to progress based on available performance measures.
- b) The TA has been granted access to the appropriate U S WEST site(s) to conduct the on-site testing and monitoring. This includes the creation of any necessary access arrangements such as security badges and access to private monitoring facilities and equipment.
- c) Properly disaggregated historical data (before exclusions) for pre-ordering, provisioning, trouble reporting and billing transactions from U S WEST and participating CLECs has been provided to the TA, consistent with the two-phased approach described above.
- d) All summarized historical data has been provided at the appropriate levels of disaggregation.
- e) Processes for transmittal and receipt of historical data have been created and verified.
- f) The Pseudo-CLEC 's ability to create and to transmit data to the TA has been confirmed.

7.5 Exit Criteria

The PME will conclude upon satisfaction of the following conditions:

- a) The collected data has been analyzed by the TA

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- b) All Performance Measures have passed; and/or all parties agree the test is concluded; and/or the ACC calls an end to the test
 - c) The findings from the TA's analysis have been documented in the Performance Measurement Evaluation Report
 - d) Interface and System errors which have been identified have been resolved via the Master Issues Log Process and/or the Test Incidents Process

8. COLLOCATION AND INTERCONNECTION

8.1 Scope

The purpose of this evaluation is to assess the interaction between U S WEST and it's CLEC wholesale customers in the areas of Network Design Requests (NDR), Collocation, collocation, and interconnection trunking. This test will focus on qualitative evaluation obtained from pre-interview questionnaires and live interviews with the participating CLECs and U S WEST. The measures demonstrating fulfillment performance will be evaluated based on historical data.

8.2 Approach

The TA will develop a questionnaire and deliver it to each of the participating CLECs. This questionnaire will include questions on the usability and completeness of procedures and documents, adequacy of NDR, collocation forecast forms and order/provisioning processes for interconnection trunking. The questionnaire and interview will ensure that all applicable requirements of the Performance Indicators in Appendix B of the MTP are addressed and information is collected to enable full and complete evaluation.

U S WEST will be given an opportunity to reply in writing to responses received from the CLECs. The TA will review CLEC questionnaire responses and compare them to U S WEST documentation. The TA will perform any additional research necessary and prepare a report on collocation and interconnection. The results will be published in accordance with the reporting guidelines approved by the ACC.

8.2.1 COLLOCATION/INTERCONNECT QUESTIONNAIRE

The collocation/interconnect questionnaire requests milestone date information from the CLECs complied over a ninety-day period as well as subjective information on product quality and performance. The TA will design the final questionnaire, the information requests therein to include the following:

- a) Feasibility Studies: Total number of studies undertaken in the study period, compiled by collocation product [virtual, physical (caged, cage-less or shared), augmentation] with the following associated data:
 - 1) Committed due date for feasibility study
 - 2) Date feasibility study completed or rejected
- b) Collocation Quote Intervals: Total number of applications in the study period, compiled by collocation product [virtual, physical (caged, cage-less or shared), augmentation] with the following associated data:

- 1) Date requested by CLEC for completion of collocation quote
 - 2) Date costs are established by U S WEST and transmitted to the CLEC
 - 3) Date the CLEC sends confirmation and acceptance of the rates to U S WEST
- c) Installation Intervals - Collocation:
- 1) Total number of orders
 - 2) Date U S WEST receives down payment from CLEC
 - 3) Original due date for completion of installation
 - 4) Installation interval met on original due date or number of days delayed
 - 5) Number of completion dates missed and root cause/responsible party
 - 6) Actual completion dates
- d) Trunking - Interconnection: Total number of requests in the study period for both original and augmentation, with the following associated data:
- 1) Date requested by CLEC (application date)
 - 2) Date U S WEST accepts order (FOC)
 - 3) Date(s) U S WEST sends any supplemental FOCs not a result of a CLEC supplemental order
 - 4) Committed Due Date (CDD)
 - 5) Actual completion date (CD)
 - 6) Number of completion dates missed and root cause/responsible party for missed due date
- e) Repair and trouble reporting procedures - Mean Time To Repair (MTTR) – Interconnection:
- 1) Total number of repair reports
 - 2) Date and time trouble reported per occurrence
 - 3) Date and time trouble isolated to U S WEST network per occurrence

- 4) Date and time trouble isolated to the CLEC's network and referred back to CLEC per occurrence
- 5) Date and time trouble cleared per occurrence
- f) Repair and trouble reporting procedures – Trouble cleared within four hours – Interconnection:
 - 1) Total number of troubles in the study period compiled by trouble reports in high and low density areas
 - 2) Number of CLEC interconnection troubles cleared within four hours, compiled by high and low density areas
- g) Repair and trouble reporting procedures – Interconnection – Repeat failure rate:
 - 1) Total number of troubles reported in the study period
 - 2) Number of trouble reports received by U S WEST or transmitted to U S WEST within 30 days of original trouble report in the study period
- h) Repair and trouble reporting procedures – Interconnection – Trouble report rate per 100 trunks in-service:
 - 1) Total number of interconnection trunks in-service each day for the study period
 - 2) Total number of interconnection trunks out of service each day for the study period

8.2.2 INTERVIEW

The interviews will be conducted by the TA and structured to review the questionnaires, NDR performance, observe order, provisioning and maintenance processes. The TA's preliminary assessments may reveal that additional tests or interview materials are required.

8.2.3 ENTRANCE CRITERIA

Prior to commencement of collocation and interconnection evaluations, the TA requires the following:

- a) Specific CLECs have been identified

- b) CLEC and U S WEST contact name, address, e-mail address and phone numbers for each area of evaluation (NDR, collocation and interconnection trunking) have been supplied to the TA
- c) The time-frame for the evaluation has been established

8.2.4 ACTIVITIES

The collocation/interconnect evaluation will include the following sequence of activities:

- a) The TA will send a questionnaire to each of the specific CLECs
- b) The TA will request that specific CLECs complete and return questionnaires to the TA within 30 days of “Questionnaire Sent Date” (QSD)
- c) Interview dates for specific CLECs will be established upon TA’s receipt of a completed questionnaire
- d) Compile the data and information obtained by the questionnaires and interviews
- e) Conduct analysis and produce report

8.2.5 EXIT CRITERIA

The exit criteria for the collocation and interconnection evaluations are:

- a) All questionnaires received are documented
- b) All interviews are documented
- c) No additional evaluation activities are required
- d) Evaluation report is completed and published in accordance with the reporting guidelines approved by the ACC

APPENDIX A – GLOSSARY

This appendix lists the terms and acronyms used in this document.

Acronym	Term	Definition
ACC	Arizona Corporation Commission	Arizona government agency responsible for regulatory functions
ACK	Acknowledgement	Term used to describe a response for a system
ACR	Assigned Commissioner Ruling	
ATIS	Alliance for Telecommunications Industry Solutions	A trade group based in Washington, D.C. and open to membership of North American and World Zone 1 Caribbean telecommunications carriers, reseller, manufacturers and provider of enhanced services. Originally called the Exchange Carriers Standards Association (ECSA), the ATIS is heavily involved in standards issues including interconnection and interoperability issues.
BAN	Billing Account Number	
BASL	Basic Loop	A transmission path that connects an end-user's premises to a U S WEST Central Office
BTN	Billing Telephone Number	
CGA	Cap Gemini America	
CT	Capacity Test	Test ability of new mechanized systems to support the Testing Load. A pre-order and order test will be performed for purposes of this test.
CGT	Cap Gemini Telecommunications	
CIC	Carrier Identification Code	
CLEC	Competitive Local Exchange Carrier	A communications company which sells/re-sells communications services in direct competition with the Incumbent Local Exchange Carrier (ILEC)
CLLI	Common Language Location Identifier	An 11 digit alphanumeric code used as a method of identifying physical locations and equipment i.e., central office relay racks etc.
CO	Central Office	
CPE	Customer Premises Equipment	Customer-owned equipment
CRIS	Customer Records Information System	A department and system within U S WEST that records and bills exchange calls placed over the network.
CSR	Customer Service Record	A record of customer specific information such as name, address, telephone number, telecommunication services subscribed to and certain other data relating to the services provided.
DA	Directory Assistance	Directory Assistance Systems
DOR	Delayed Service Order Request	Term used to describe service request(s) for which no available facilities are identified during Retail Parity testing
DOJ	Department of Justice	
DSL	Digital Subscriber Line	Generic name for a family of evolving digital services to be provided by local telephone companies to their local subscribers
DS1L	DS1 Loop	4-wire Non-Loaded digital Loop capable of 1.5 KB transmissions

Acronym	Term	Definition
DSR	Directory Service Request	OBF Directory Form
EB-TA	Electronic Bonding-Trouble Administration	U S WEST Trouble administration System
EDI	Electronic Data Interchange	Interface protocol that provides for mechanized order processing. Both the CLECs and U S WEST will have systems (EDI Interface) to support the EDI functionality
EMI	Exchange Message Interface	An Alliance for Telecommunications Industry Solutions (ATIS) standard format of messages used for the interchange of telecommunications message information among telephone companies.)
ETE	End-to-End Testing	For the purposes of this testing end-to-end is defined as testing to demonstrate the flow through capability of providing local service requests to the CLECs in parity to existing retail.
EXACT	Exchange Access Control and Tracking system	The system is used to receive Access Served Requests (ASR) from the Interexchange Carriers (IC) and CLECs to process the ASR and create the service order. Firm Order Confirmation (FOC) is also sent back via this system.
FCC	Federal Communications Commission	
FOC	Firm Order Confirmation	Response from the service order processor that acknowledges successful receipt of a CLEC order (i.e., provides notification SOP edits have passed).
FT	Functionality Test	A documented set of instructions designed to test and/or validate specific functions of a process or system.
GUI	Graphical User Interface	A simplified method of accessing programs within a computer by using a mouse to point to icons, which in turn cause the programs to perform a specific function.
HPC	High Performance Communications	The Pseudo-CLEC.
IABS	Integrated Access Billing System	System that provides for CLEC and inter-exchange carrier billing
IMA	Interconnect Mediated Access	A system that allows CLECs electronic access to U S WEST Operational Support System to perform pre-order, order, and repair business functions. IMA can be accessed via the WEB or through a dedicated EDI electronic interface. The WEB access, also known as the IMA GUI, provides many pre-order transactions. Pre-order requests are not presently available in the EDI version of IMA and must be handled manually.
ILEC	Incumbent Local Exchange Carrier	In this document, the term ILEC represents U S WEST.
IR	Incident Report	
ISDN	Integrated Services Digital Network	Digital services designed for use with desktop applications, telephone switches, computer telephony and voice processing systems
IXC	Inter-exchange Carrier	Long-haul, long distance inter-LATA carriers for voice, video and data traffic.
	Jeopardy (relative to MTP process)	A notice that is issued whenever a key-project milestone and/or commitment is at risk according to the MTP.
LATA	Local Access and Transport Area	As defined in 47 U.S.C. Section 3 (25)
LIDB	Line Information Data Base	Database used primarily for residential customers.
LNP	Local Number Portability	
LNPL	LNP with Loop	The ability to change Service Providers location or services

Acronym	Term	Definition
		while retaining the same local directory number.
LNPO	LNP Only	
LOA	Letter of Authorization	
	Loop Qualification	The Pre-order process to validate that xDSL loop meets the requirements of U S WEST for DSL service
LPIC	Local Primary Interexchange Carrier	Local primary interexchange carrier selected by end-user.
LPWP	Loop with Port	
	Loop	A transmission path that connects an end-user's premises to a U S WEST Central Office
LSOG	Local Service Ordering Guidelines	
LSR	Local Service Request	A form prepared by the CLEC to request U S WEST to provide the services as specified in the specific tariffs/contracts agreements. Information required for administration, billing and contact details is provided for in the various fields within the LSR.
M&P	Methods and Procedures	Current methods and procedures (e.g., tasks) defined to support operations required. These tasks are thoroughly planned out, explained and typically are outlined in detailed steps.
M&R / MNTR	Maintenance and Repair	Ability to provide for requests, status and resolution of potential troubles
MCIW	MCI Worldcom	
	Migration	Refers to "conversion as is" or "conversion as specified."
MLT	Mechanized Loop Test	A mechanized test used to determine loop situations
MTP	Master Test Plan	
NDR	Network Design Request	
NP	Number Portability	
OA	Operator Assistance	U S WEST systems supporting Operator Services
OBF	Ordering and Billing Forum	Industry Standards Organization dedicated to resolving critical issues such as billing format issues between competing local exchange carriers, etc.
OC&C	Other Charges & Credits	Other Charges and Credits Bill Section
OCN	Operating Company Number	A four-digit number assigned to uniquely identify CLECs.
OSS	Operations Support Systems	For purposes of this test OSS refers to systems that are included for testing within this MTP.
PAC	Performance Acceptance Certification	Documented steps required by U S WEST for a CLEC to qualify for IMA system data entry
PIC	Primary Inter-exchange Carrier	Primary interexchange carrier selected by end-user.
PON	Purchase Order Number	A unique number placed on an LSR to track the order.
POTS	Plain Old Telephone Service	
RESL	Resale	Service that allows a CLEC to purchase U S WEST retail services in order to resell these services to their own end-user.
RETL	Retail	
RSRP	Resale Repair	
RTRP	Retail Repair	
RPONS	Related Requests	
SME	Subject Matter Expert	
SOC	Service Order Completion	Response from the service order processor that acknowledges the provisioning systems provided a successful completion of

Acronym	Term	Definition
		the request (LSR) (i.e., provides notification the service has been provisioned).
SOP	Service Order Processor	
SUPP	Supplementals	
TAG	Test Advisory Group	Consists of the ACC, its consultant, the TA, the Pseudo-CLEC, U S WEST, and those CLECs and other participants who wish to participate
TA	Test Administrator / Manager	Oversees the execution and assesses the processes and test execution
	Test Case	Test Cases are comprised of Test Scenarios duplicated with different Test End-Users to make up the required number of test cases as they relate to UNE 3 rd Party Testing.
	Test Scenario	A specifically defined request and activity as it relates to UNE 3 rd Party Testing.
	Test Specification	Document defining test case scenarios, purpose, method, expected results required for various test phases
	Test Scenarios	General definition of the test and type of tests to be run
	Test Scripts	For each test case the script is a definition of the steps required to run a test case and expected results for the test case
TN	Telephone Number	A number associated with a telephone service, typically 7 digits in length; the first 3 digits are associated with the prefix and the last 4 with a specific range
UNE	Unbundled Network Elements	As defined in MTP.
UNE-P	UNE-P	A combination of the loop, port and transport. The port includes the switch and access to vertical features associated with the switch and associated databases. The loop includes loop feeder, loop carrier, loop distribution and the NID. U S WEST definition: A pre-assembled service on an as is basis. This includes a U S WEST loop and switch port defined as a typical existing 1FR/1FB voice grade analog circuit, with no loading preference, connecting to a compatible switch port with like to like service as measured service. No physical work will be done. This service offering is basically a change of billing responsibility and change from flat to measured service.
UNE-Loop	UNE Loop	A transmission path that connects an end-user's premises to a U S WEST Central Office
USOC	Universal Service Order Code	A industry code which represents a product or service offered by a Telecom provider
	Vanity TN	Term used to describe special telephone numbers, such as those that spell a word/name, available for selection as requested by a customer
	Working Left In	Term used to describe "soft dial tone" or other service configuration in which a customer disconnect is performed via software rather than a physical removal of facilities
xDSL	Generic Digital Subscriber Line	A general name internal to CGT for evolving high speed transmission technology. The service is limited to 2-wire loop capable of supporting digital transmissions of data. The term "x" symbolizes multiple types of services.

TEST SCRIPT		
Tracking Number: LPWP005001	PON: (assigned by HPC)	
Issue Date:	5/15/2000	
Media Type:	IMA	
TN:	303-555-2345	
WTN:	N/A	
Customer Type:	Residential	
Customer Name:	Mildred Smith	
Service Address:	600 W. Grove Pkwy, Apt CE1111, Tempe, AZ	
Contact Name:	Mildred Smith	
Activity Request:	Conversion as is	
Number of Lines:	1	
Hunt Type:	N/A	
Features:	Call waiting, call forwarding busy line/don't answer	
CFA:	N/A	
Scenario:	Convert 1 RES line to UNE-P, multiple features	
Directory Information:	Non-listed	
Activities	Necessary for this script	
Address verification	Yes	
Request CSR	Yes	
Service availability query	No [This should be yes.]	
PIC/LPIC update	No	
Facility availability query	No	
Telephone reservation	No	
Due date interval query	No	
Release order	Yes	
Receive order receipt acknowledgement	Yes	
Receive FOC	Yes	
Receive SOC	Yes	

Activity	Results	Error Msg.
Address verification - Select Pre-Order Validate by Telephone Number from the IMA screen, then enter the customer's telephone number	OSS should return one or more validated addresses, however, if an error message is returned, review data input to ensure accuracy of typing	If entry of data is correct, Write "error message" on the bottom of the Test script to allow for further analysis
Request CSR - Select Review CSR from the IMA screen	OSS should return the Customer Service Record which matches the data shown on the Test Script, however, if an error message is returned, review data input to ensure accuracy of typing or document the discrepancy in information shown on the CSR	If entry of data is correct, Write "error message" on the bottom of the Test script to allow for further analysis
Service availability query	"Conversion as is" orders do not require this query [This query should be done as the CLEC will need to determine what features the customer currently has for its own records.]	
Telephone reservation	"Conversion as is" orders do not require this query	
PIC/LPIC update	"Conversion as is" orders do not require this query	
Facility availability query	"Conversion as is" orders do not require this query	
Due date interval query	Standard due date interval for a "conversion as is" should be used, therefore, no due date interval query is required	
New LSR- Select Order New LSR from the IMA menu	Enter the PON, from the pull-down menus select 1) the correct product type from the REQTYP field (left field), 2) Firm Order from REQTYP field (right field), 3) Conversion as is from the Activity field, 4) Residential, Single-Line, Flat Rate from the TOS field	
Submit order - Depress the Submit button on the bottom of the Order Information for New LSR screen	Use the LSR form displayed to verify all information is correct and make sure the phrase "Ready for Validation" is displayed in the Status column next to the form name	If the Order Information For New LSR window has not been fully updated, the form will not launch and a message displays indicating which fields are incomplete. Update or edit the information in the fields identified and resubmit
Receive order receipt acknowledgement	The system should respond with a message that the order has passed the edits and been released to the OSS	If no acknowledgement is returned, identify this condition on the Test Script
Receive FOC	Business rules dictate when the FOC should be returned to the CLEC. The business rules for a conversion as is resale order dictate that the FOC should be returned in twenty minutes. This should be indicated in the script.	If the FOC is not returned within the specified time, this information will be noted and actual receipt of FOC or reject will be tracked
Receive SOC	The SOC should be returned the next business day after the due date	If the SOC is not returned, as specified, check the order status and follow-up until the SOC or reason for delay is returned

BASL08 4001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Pre-Order - Step 3 of 4	Validate CLEC CFA	Test cases performed by Pseudo-CLEC	Validate service address was transferred from the address validation query, CLEC CFA	Accuracy and Completeness of Response	Observation	Qualitative	Facilities information in easily understandable format, or clearly defined error message received	Evaluate facilities information format	The facilities information is not returned
								CFA information or clearly defined error message received	Yes/No	Qualitative	CFA information or clearly defined error message received	Evaluate facility availability query	Error message continually received or no response received
								Accuracy and Completeness of Response	Observation	Qualitative	CFA information in easily understandable format, or clearly defined error message	Evaluate CFA information format	The CFA information is not returned

BASL08 4001	PON	Functionality Test	Install Bus UNE loop, no features or listing	Pre-Order Step 4 of 4	Appointment Scheduling query Appointment Scheduling would not be done with unbundled loops. If the facility check shows that facilities are available, then the due date should be the standard interval as shown in the standard interval guide.	Test cases performed by Pseudo-CLEC	PON, # of lines; NPA-NXX; type of service	Due date interval or clearly defined error message received	Yes/No	Qualitative	List of available appointments or clearly defined error message received	Evaluate Appointment Scheduling information	Error message continually received or no response received
									received				

									the address validation query	Form on the LSR			LSR	the loop form	
BASL084001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Ordering - Step 4 of 10 [Step 4 and 5 should probably be reversed]	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	Order submission acknowledged was received	Qualitative	Notification from the gateway that the order was transmitted and received	Ensure the order passed to the gateway	No acknowledgment received			
BASL084001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Ordering - Step 5 of 10	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	LSR passed the IMA up-front edits	Qualitative	No Errors	Ensure all data from pre-ordering was accepted by gateway edit checks	Input data from pre-ordering was rejected by gateway edit checks			
BASL084001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Ordering - Step 6 of 10	Receipt of FOC	Test cases performed by Pseudo-CLEC	None	FOC received in 20 minutes	Quantitative	FOC was not returned within 20 minutes	Comparison of FOC receipt to expected results	FOC was not returned within 20 minutes			
BASL084001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Ordering - Step 7 of 10	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	Pseudo-CLEC PON matches the PON on the FOC	Observation and comparison	Pseudo-CLEC PON matches the PON on the FOC	Determine if Pseudo-CLEC can match up order information returned on the FOC	PON does not match			

BASL08 4001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Order Completion - Step 2 of 6	Validate order processing intervals	Test cases performed by Pseudo-CLEC	None	Compare the conversion start and end time interval [This would not be required for a new connect loop]	Time logged	Qualitative	The start and end time interval does not exceed downtime agreement between Pseudo-CLEC and U S WEST	Comparison of the actual downtime to the agreed upon timeframe	The downtime interval exceeds agreed upon timeframe
BASL08 4001	PON	Functionality Test	Install 1 Bus UNE loop, no features or listing	Order Completion - Step 3 of 6	Receipt of SOC	Test cases performed by Pseudo-CLEC	Mechanically generated SOC	SOC interval	Time logged	Qualitative	SOC is received by noon of the day after the order completion date	Comparison of SOC receipt to standard time intervals	SOC is not received within the interval set forth by the PID (by noon of the day after the order completion date)

LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Pre-Order - Step 3 of 3	Perform a Service Availability Query and determine end user's existing services and features	Test cases performed by Pseudo-CLEC	End User's NPA, NXX, State, Service Type, USOC list	USOC description or clearly defined error message received	Yes/No	Qualitative	USOC description or clearly defined error message received	Evaluate USOC data	Error message continually received or no response received	Information is not complete or readable
			listing					USOC description or clearly defined error message received	Observation and comparison against source data in the test script (data from US WEST provided accounts)	Qualitative	USOC information or clearly defined error message received	Evaluate the completeness and accuracy of CSR data	Information is not complete or readable	
								Accuracy and completeness of response	Observation and comparison against source data in the test script (data from US WEST provided accounts)	Qualitative	USOC information or clearly defined error message received	Evaluate the completeness and accuracy of CSR data	Information is not complete or readable	
								Accuracy and completeness of response	Observation and comparison against source data in the test script (data from US WEST provided accounts)	Qualitative	USOC information or clearly defined error message received	Evaluate the completeness and accuracy of the USOC information	Information is not complete or readable	

LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Ordering - Step 3 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	Manually entered order data	Data entry progressed without problems	Yes/No	Qualitative	The order is complete and error free	Ensure the order will process	Receive an error notification from the gateway
LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Ordering - Step 4 of 10 <u>[Step 4 of 10 and Step 5 of 10 should probably be reversed]</u>	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	Order submission acknowledgment received	Yes/No	Qualitative	Notification from the gateway that the order was transmitted and received	Ensure the order passed to the gateway	No acknowledgment received
LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Ordering - Step 5 of 10	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	LSR passed the IMA upfront edits	Yes/No	Qualitative	No Errors	Ensure all data from pre-ordering was accepted by gateway edit checks	Input data from pre-ordering was rejected by gateway edit checks
LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features,	Ordering - Step 6 of 10	Receipt of FOC	Test cases performed by Pseudo-CLEC	None	FOC interval	Time logged	Quantitative	FOC was returned next business day if order submitted by	Comparison of FOC receipt to expected results	FOC was not returned the next business day when order submitted by 3 p.m.

LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Order Completion - 3 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the U S WEST order number received on the SOC with the U S WEST order number received on the FOC	Observation and comparison	Qualitative	The U S WEST order number should match the order number on the order	Comparison of acknowledged order number on the PON to the order number on the FOC	The order number on the SOC does not match the order number on the FOC. Service order number located in daily due-date control-log tracking expected notifications
LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Order Completion - 4 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the TN obtained through Pre-Order query to the TN on the SOC	Observation and comparison	Qualitative	The TN should match the TN on the order	Comparison of acknowledged order number on the SOC to the TN on the FOC	The TN on the SOC does not match the TN on the order and test script. TN could not be located in daily due-date control-log tracking expected notifications
LPWP0 01001	PON	Functionality Test	Convert 1 Retail Res. line to UNE-P, no features, straight line listing	Order Completion - 5 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the due date on the FOC to the due completion date on the SOC	Observation and comparison	Qualitative	The completion date should match the due date received on the FOC	Comparison of acknowledged completion date on the SOC to the completion due date on the FOC	Completion date does not match the due date on the FOC and no jeopardy notification has been received

RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Ordering - Step 1 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	All Pre-Order output information from CSR, address, USOCs, directory number(s), PIC codes, facilities	Pre-Order information is accurate and properly populated to the order transaction	Yes/No	Qualitative	Pre-Order information is properly forwarded to the order transaction	Evaluate all information received from pre-ordering satisfies the required fields on the order defined in the U S WEST business rules	Additional information on the order is required by U S WEST which is not available through Pre-Order
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Ordering - Step 2 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	Standard U S WEST Due Date Interval	Data entry progressed without problems	Yes/No	Qualitative	Due date interval accepted	Ensure the due date interval was added for non-dispatched request	Due date interval rejected
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Ordering - Step 3 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	Manually entered order data	Data entry progressed without problems	Yes/No	Qualitative	The order is complete and error free	Ensure the order will process	Receive an error notification from the gateway
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Ordering - Step 4 of 10 [Step 4 and 5 should probably	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	Order submission acknowledgment was received	Yes/No	Qualitative	Notification from the gateway that the order was transmitted and received	Ensure the order passed to the gateway	No acknowledgment received

RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Order Completion - Step 2 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare PON on the SOC with the PON on the original order	Observation and comparison	Qualitative	The PON should match the PON on the order and test script	Comparison of acknowledgement at the PON on the SOC to the PON on the order and test script	The PON on the SOC does not match the PON on the order or test script could not be located in daily due-date control-log tracking expected notifications
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Order Completion - Step 3 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the U S WEST order number received on the SOC with the U S WEST order number received on the FOC	Observation and comparison	Qualitative	The U S WEST order number should match the order number on the order	Comparison of acknowledgement at the order number on the SOC to the order number on the FOC	Service order number on the SOC does not match the service order number on FOC could not be located in daily due-date control-log tracking expected notifications
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Order Completion - Step 4 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the TN obtained through Pre-Order query to the TN on the SOC	Observation and comparison	Qualitative	The TN should match the TN on the order	Comparison of acknowledgement at the TN on the SOC to the TN on the FOC	TN on the SOC does not match the TN on the order or test script could not be located in daily due-date control-log tracking expected notifications

RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Order Completion - Step 5 of 6	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare the due date on the FOC to the due completion date on the SOC	Observation and comparison	Qualitative	The due completion date should match the order number due date on the order, or valid reason provided for change of due date (e.g., no premise access at time of install)	Comparison of acknowledgment at the completion date on the SOC to the due date on the FOC	The completion date on the SOC does not match the due date on the order or test script. Due date could not be located in daily due date control-log tracking expected notifications, and no documented reason given for change of due date.
RESL04 6001	PON	Functionality Test	Convert 1 Bus. line to Resale, single feature, additional listing	Order Completion - Step 6 of 6	Validate SOC information the services and features were properly installed [The SOC does not recap the services and features installed]	Validate the request was completed as ordered	End user's directory number for IMA M&R feature verification	Service working as requested in the switch and the customer's service record	Observation and comparison	Qualitative	The service requested on the order is working at the end user location	Comparison of acknowledgment at the verification that the service ordered matches the service provisioned	Service does not match the service requested

CLEC Tracking #	USW Tracking #	Process Area	Process Subarea	Transaction Type	Testing Methodology	Transaction Detail	Inputs	Evaluation Measure	Evaluation Technique	Criteria Type	Expected Results	Purpose	Incident Criteria
RESL12 9001	RETL13 0001	Retail Party - New Connect POTS Service for Small Business Customer	Preorder - Step 1 of 6	Address Validation Query	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main Listing	Service Address	Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields
								Number of steps to create transactions	Observation Counting	Quantitative	Reasonably equivalent number of steps performed	Comparison of number of steps to enter trouble ticket	Percentage variance in required # steps
								Data validations on entries	Observation Counting & Percentage	Quantitative	Reasonably equivalent Percentage of fields/elements validated	Ensure accurate query entry first time so as to minimize rework and process delay	Percentage variance in # validations
								Timeliness of Response	Transaction Logging or Stopwatch	Quantitative	Reasonably equivalent elapsed time Between	Evaluate comparable response times	Percentage variance in elapsed time from trigger to response

(Note 1) Qualitative evaluation may utilize "Worse-Than, Equal-To, or Better-Than" comparative technique, with detailed justification, when comparison points are identified as excessively diverse in nature.

RESL12 9001	RETL13 0001	Retail Parity - New Connect POTS Service for Small Business Customer	Preorder - Step 2 of 6	IN Selection Query	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main Listing	Service Address, Service Type, # of Lines	Amount and Type of Information returned in transactions	Observation Counting	Qualitative (Note 1)	transaction trigger and response	receipt	
								Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Address Valid/not for ILEC serving area, Serving Wire Center	Comparable information received (i.e. same questions same answer)	Percentage variance in returned data
								Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of data content returned (if more than request, than always display the same)	Percentage variance in returned data
								Number of steps to create transactions	Observation Counting	Quantitative	Reasonably equivalent number of steps performed	Comparison of number of field entries required to perform query	Percentage variance in required # fields
								Data validations on entries	Observation Counting	Quantitative	Reasonably equivalent Percentage	Ensure accurate query entry first time	Percentage variance in # validations

RESL12 9001	RETL13 0001	Retail Parity - New Connec t POTS	Preor der - Step 5 of 6	Facilitie s Availabil ity Query	Test Cases performe d by both	One Line, No Features , Straight	Service Address, Service	Number of steps to create transactions	Observa tion Countin g	Quantiti vative	Reasonably equivalent number of steps performed	Comparison of number of steps to enter trouble ticket	Percentage variance in required # steps
								Data validations on entries	Observa tion, Countin g & Percent age	Quantiti vative	Reasonably equivalent Percentage of fields/elems nts validated	Ensure accurate query entry first time so as to minimize rework and process delay	Percentage variance in # validations
								Timeliness of Response	Transact ion Logging or Stopwat ch	Quantiti vative	Reasonably equivalent elapsed time Between transaction trigger and response	Evaluate comparable response times	Percentage variance in elapsed time from trigger to response receipt
								Amount and Type of Information returned in transactions	Observa tion Countin g	Qualiti vative (Note 1)	Features Available within Serving Wire Center	Comparable information received (i.e. same questions same answer)	Percentage variance in returned data
								Quality of returned- data content	Observa tion and Compari son	Qualitative (Note 1)	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data
								Number of fields required to generate query	Observa tion Countin g	Quantiti vative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields

RESL12 9001	RETL13 0001	Retail Parity - New Connect POTS Service for Small Business Customer	Preorder - Step 6 of 6	Due Date Interval Query There is no such query. An appointment scheduling query would be necessary if the facility check showed that a dispatch was required.	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main Listing	Service Address, Service Type, # of Lines, Dispatch Yes/No	Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data
								Number of fields required to generate query transaction	Observation Counting	Quantitative	Comparison of number of data field entries required to perform query	Percentage variance in required # fields
								Number of steps to create transactions	Observation Counting	Quantitative	Comparison of number of steps to enter trouble ticket	Percentage variance in required # steps

RESL13 3001	RETL13 4001	Retail Parity - Conversion of POTS Service As Specified for Small Business Customer	Preorder - Step 2 of 2	Due Date Interval Query There is no such query. An appointment scheduling query would be necessary if the facility check showed that a dispatch was required. If a dispatch is not required then the due	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main Listing - Additional Listing	Service Address, Service Type, # of Lines, Dispatch Yes/No	Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data	
								Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields

	<p>Address Validation on Should also be done for this scenario as a matter of good practice.</p>
	<p>Service and Feature Availability should also be done for this scenario so that the CLEC can translate the USOC's in the CSR to English Language Description</p>

RESL13 7001	RETL13 8001	Retail Parity - Conversion of POTS Service As Is for Small Business customer	Preorder - Step 2 of 2	<u>Due Date Interval Query</u> <u>There is no such query.</u> <u>An appointment scheduling query would be necessary if the facility check showed</u>	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main and Addition at Listing	Service Address, Service Type, # of Lines, Dispatch Yes/No	Amount and Type of Information returned in transactions	Observation Counting	Qualitative (Note 1)	Current Customer Service Record for identified Customer/TN	Comparable information received (i.e. same questions same answer)	Percentage variance in returned data
								Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data
								Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields

that a dispatch was required. If a dispatch is not required then the due date is the standard interval.

Number of steps to create transactions	Observation Counting	Quantitative	Reasonably equivalent number of steps performed	Comparison of number of steps to enter trouble ticket	Percentage variance in required # steps
Data validations on entries	Observation Counting & Percentage	Quantitative	Reasonably equivalent Percentage of fields/elements validated	Ensure accurate query entry first time so as to minimize rework and process delay	Percentage variance in # validations
Timeliness of Response	Transaction Logging or Stopwatch	Quantitative	Reasonably equivalent elapsed time Between transaction trigger and response	Evaluate comparable response times	Percentage variance in elapsed time from trigger to response receipt
Amount and Type of	Observation	Qualitative	Next Available	Comparable information	Percentage variance in

Information returned in transactions	Counting	(Note 1)	Due Date for query input	received (i.e. same questions same answer)	returned data
<p><u>Address Validation</u> Should also be done for this scenario as a matter of good practice.</p>					
<p><u>Service and Feature Availability</u> should also be done for this scenario so that the CLEC can translate the USOC's</p>					

RESL14 1001	RETL14 2001	Retail Parity - Change Order for POTS Service for a Small Business Customer	Preorder - Step 2 of 2	<u>Due Date Interval Query</u> There is no such query. An appointment scheduling query would be	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main Listing - Delete Addition al Listing	Service Address, Service Type, # of Lines, Dispatch Yes/No	Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent elapsed time Between transaction trigger and response	Evaluate comparable response times	Percentage variance in elapsed time from trigger to response receipt
								Amount and Type of Information returned in transactions	Observation Counting	Qualitative (Note 1)	Current Customer Service Record for identified Customer/TN	Comparable information received (i.e. same questions same answer)	Percentage variance in returned data
								Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data
								Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields

Amount and Type of Information returned in transactions	Quality of returned data content	Observation Counting	ch	Qualitative (Note 1)	transaction trigger and response	receipt
Quality of returned data content	Observation and Comparison	Qualitative (Note 1)	Next Available Due Date for query input	Comparable information received (i.e. same questions same answer)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data
Address Validation Should also be done for this scenario as a matter of good practice.	Service and Feature Availability should also be done					

RESL14 5001	RETL14 6001	Retail Parity - Total Disconnect POTS	Preorder - Step 2 of 2	<u>Due Date Interval Query</u> The standard	Test Cases performed by both ILEC	One Line, No Features, Straight Line	Service Address, Service	<table border="1"> <tr> <td>Data validations on entries</td> <td>Observation, Counting & Percentage</td> <td>Quantitative</td> <td>performed</td> <td>Ensure accurate query entry first time so as to minimize rework and process delay</td> <td>Percentage variance in # validations</td> </tr> <tr> <td>Timeliness of Response</td> <td>Transaction Logging or Stopwatch</td> <td>Quantitative</td> <td>Reasonably equivalent elapsed time Between transaction trigger and response</td> <td>Evaluate comparable response times</td> <td>Percentage variance in elapsed time from trigger to response receipt</td> </tr> <tr> <td>Amount and Type of Information returned in transactions</td> <td>Observation Counting</td> <td>Qualitative (Note 1)</td> <td>Current Customer Service Record for identified Customer/TN</td> <td>Comparable information received (i.e. same questions same answer)</td> <td>Percentage variance in returned data</td> </tr> <tr> <td>Quality of returned-data content</td> <td>Observation and Comparison</td> <td>Qualitative (Note 1)</td> <td>Comparable data content returned (if more than request, than always display the same)</td> <td>Comparable data content returned (if more than request, than always display the same)</td> <td>Percentage variance in returned data</td> </tr> <tr> <td>Number of fields required to generate query transaction</td> <td>Observation Counting</td> <td>Quantitative</td> <td>Reasonably equivalent number of field entries performed</td> <td>Comparison of number of data field entries required to perform query</td> <td>Percentage variance in required # fields</td> </tr> </table>	Data validations on entries	Observation, Counting & Percentage	Quantitative	performed	Ensure accurate query entry first time so as to minimize rework and process delay	Percentage variance in # validations	Timeliness of Response	Transaction Logging or Stopwatch	Quantitative	Reasonably equivalent elapsed time Between transaction trigger and response	Evaluate comparable response times	Percentage variance in elapsed time from trigger to response receipt	Amount and Type of Information returned in transactions	Observation Counting	Qualitative (Note 1)	Current Customer Service Record for identified Customer/TN	Comparable information received (i.e. same questions same answer)	Percentage variance in returned data	Quality of returned-data content	Observation and Comparison	Qualitative (Note 1)	Comparable data content returned (if more than request, than always display the same)	Comparable data content returned (if more than request, than always display the same)	Percentage variance in returned data	Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields
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Number of fields required to generate query transaction	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of data field entries required to perform query	Percentage variance in required # fields																																	

	Service for a Small Business Customer		<p>Interval should be used as the due date for this scenario</p>	and Pseudo-CLEC	Main Listing	Type, # of Lines, Dispatch Yes/No	<table border="1"> <tr> <td data-bbox="232 1078 541 1228">Number of steps to create transactions</td> <td data-bbox="541 1078 700 1228">Observation Counting</td> <td data-bbox="700 1078 918 1228">Quantitative</td> <td data-bbox="918 1078 1166 1228">Reasonably equivalent number of steps performed</td> <td data-bbox="1166 1078 1321 1228">Comparison of number of steps to enter trouble ticket</td> <td data-bbox="232 517 541 1078"></td> <td data-bbox="541 517 700 1078">Percentage variance in required # steps</td> </tr> <tr> <td data-bbox="232 866 541 1078">Data validations on entries</td> <td data-bbox="541 866 700 1078">Observation, Counting & Percentage</td> <td data-bbox="700 866 918 1078">Quantitative</td> <td data-bbox="918 866 1166 1078">Reasonably equivalent Percentage of fields/elements validated</td> <td data-bbox="1166 866 1321 1078">Ensure accurate query entry first time so as to minimize rework and process delay</td> <td data-bbox="232 713 541 866"></td> <td data-bbox="541 713 700 866">Percentage variance in # validations</td> </tr> <tr> <td data-bbox="232 517 541 866">Timeliness of Response</td> <td data-bbox="541 517 700 866">Transaction Logging or Stopwatch</td> <td data-bbox="700 517 918 866">Quantitative</td> <td data-bbox="918 517 1166 866">Reasonably equivalent elapsed time Between transaction trigger and response</td> <td data-bbox="1166 517 1321 866">Evaluate comparable response times</td> <td data-bbox="232 351 541 517"></td> <td data-bbox="541 351 700 517">Percentage variance in elapsed time from trigger to response receipt</td> </tr> <tr> <td data-bbox="232 217 541 517">Amount and Type of Information returned in transactions</td> <td data-bbox="541 217 700 517">Observation Counting</td> <td data-bbox="700 217 918 517">Qualitative (Note 1)</td> <td data-bbox="918 217 1166 517">Next Available Due Date for query input</td> <td data-bbox="1166 217 1321 517">Comparable information received (i.e. same questions same answer)</td> <td data-bbox="232 34 541 217"></td> <td data-bbox="541 34 700 217">Percentage variance in returned data</td> </tr> </table>	Number of steps to create transactions	Observation Counting	Quantitative	Reasonably equivalent number of steps performed	Comparison of number of steps to enter trouble ticket		Percentage variance in required # steps	Data validations on entries	Observation, Counting & Percentage	Quantitative	Reasonably equivalent Percentage of fields/elements validated	Ensure accurate query entry first time so as to minimize rework and process delay		Percentage variance in # validations	Timeliness of Response	Transaction Logging or Stopwatch	Quantitative	Reasonably equivalent elapsed time Between transaction trigger and response	Evaluate comparable response times		Percentage variance in elapsed time from trigger to response receipt	Amount and Type of Information returned in transactions	Observation Counting	Qualitative (Note 1)	Next Available Due Date for query input	Comparable information received (i.e. same questions same answer)		Percentage variance in returned data
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RESL13 7001	RETL13 8001	Retail Parity Conversion - As Is for a Small Business POTS Customer	Order - Step 1 of 1	Order Generation	Test Cases performed by both ILEC and Pseudo-CLEC	One Line, No Features, Straight Line Main and Additional Listing	Customer Service Record and due date	Number of fields required to generate order	Observation Counting	Quantitative	Reasonably equivalent number of field entries performed	Comparison of number of field entries required to perform query	Percentage variance in required # fields
								Number of fields auto-populated/pick-listed by pre-order transactions	Observation Counting	Quantitative	Reasonably equivalent number of fields auto-populated/pick-listed	Comparison of number of field entries auto-populated/pick-listed from pre-order transactions	Greater-Than-or-Equals 25% difference in pre-populated/pick-listed # fields
								Number of steps/screens to generate order creation transaction	Observation Counting	Quantitative	Reasonably equivalent number of steps performed	Comparison of number of steps to enter trouble ticket	Percentage variance in required # steps
								Data validations on entries	Observation Counting & Percentage	Quantitative	Reasonably equivalent Percentage of fields/elements validated	Ensure accurate query entry first time so as to minimize rework and process delay	Percentage variance in returned data
								Order Due Date Interval	Observation and Company	Qualitative (Note)	Reasonably equivalent date interval	Ensure comparable order due date	Percentage variance in returned

SDIR10 2F001	PON	Functionality Test	Add main Bus listing for ported TN	Order Completion - Step 4 of 5	Validate SOC information	Test cases performed by Pseudo-CLEC	Validly associated order and test script	Compare the due date on the FOC to the due completion date on the SOC	Observation and comparison	Qualitative	The due completion date should match the order number due date on the order	Comparison of acknowledgement at the completion date on the SOC to the due date on the FOC	<u>number on the FOC</u> Due date could not be located in daily due date control log tracking expected notifications, and no documented reason given for change of due date. The completion date on the SOC does not match the due date on the order and test script.
SDIR10 2F001	PON	Functionality Test	Add main Bus listing for ported TN	Order Completion - Step 5 of 5	Validate SOC information that the order was completed as installed. The SOC does not recap installation	Test cases performed by CGT	Director update report	The update requested is displayed on the directory update report	Observation and comparison	Qualitative	The update requested is displayed on the directory update report	Comparison of acknowledgement that the directory report matches the request	The directory listing report does not have the update requested on the LSR

SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 4 of 11	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	LSR passed the IMA up-front edits	Yes/No	Qualitative	No Errors	Ensure all data from pre-ordering was accepted by gateway edit checks	Input data from pre-ordering was rejected by gateway edit checks
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 5 of 11	Receipt of FOC	Test cases performed by Pseudo-CLEC	None	FOC received in 20 minutes [Supplemental orders to U S WEST do not flow through. This should be a 24 hour FOC interval]	Yes/No	Qualitative	FOC was not returned within 20 <u>24</u> minutes <u>hours</u>	Comparison of FOC receipt to expected results	FOC was not returned within 20 <u>24</u> minutes <u>hours</u>
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 6 of 11	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	Pseudo-CLEC PON matches the PON on the FOC	Observation and comparison	Qualitative	Pseudo-CLEC PON matches the PON on the FOC	Determine if Pseudo-CLEC order information returned on the FOC	PON does not match
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 7 of 11	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The U S WEST order number was received	Observation and comparison	Qualitative	The U S WEST order number was received	Determine the order was canceled in U S WEST's ordering systems	No order number received

SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 8 of 11	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The number of U S WEST circuit Ids matches the number of circuit ordered	Observation and comparison	Qualitative	The number of U S WEST circuit Ids matches the number of circuit ordered	Evaluate the number of circuits was not changed during the order processing	Number of circuits on FOC does not match number of circuits on order
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 9 of 11	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The due date on the FOC matches the due date scheduled through Pre-Order	Observation and comparison	Qualitative	The due date returned in the FOC match the due date scheduled during Pre-Order	Evaluate the due date was not changed during order creation	Due date on FOC does not match TN on order
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 10 of 11	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The remarks on the FOC state the order request was canceled	Observation and comparison	Qualitative	The remarks on the FOC state the order request was canceled	Evaluate the remarks state the order was canceled	No remarks were found on the FOC
SUPP09 6001	PON	Functionality Test	Cancel for migration of 2 Bus. UNE loops	Ordering - Step 11 of 11	Validate service was not migrated	Call Friendly on day of original conversion and verify the migration did not take place and that the	Call to Friendly by CGT	The service was not migrated and the customer maintained its service.	Call to Friendly	Qualitative	The service was not migrated and the customer maintained its services	Evaluate the order was canceled	Service was migrated or the customer otherwise lost service on the day of the original conversion.

	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 2 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	Manually entered order data	Data entry progressed without problems	Yes/No	Qualitative	The order is complete and error free	Ensure the order will process	Receive an error notification from the gateway
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 3 of 10	Order transaction preparation	Test cases performed by Pseudo-CLEC	Validated service address was transferred from the address validation query	CLEC CFA is vacant and can be automatically transferred to the Loop Form on the LSR	Yes/No	Qualitative	CLEC CFA is vacant and can be automatically transferred to the Loop Form on the LSR	Evaluate that the CLEC CFA is vacant in the U S WEST systems and is properly transferred to the loop form	CFA information is error or not returned
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 4 of 10 [Steps 4 and 5 should probably be reversed]	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	Order submission acknowledgment was received	Yes/No	Qualitative	Notification from the gateway that the order was transmitted and received	Ensure the order passed to the gateway	No acknowledgment received
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 5 of 10	Order submitted	Test cases performed by Pseudo-CLEC	Error free order	LSR passed the IMA up-front edits	Yes/No	Qualitative	No Errors	Ensure all data from pre-ordering was accepted by gateway edit checks	Input data from pre-ordering was rejected by gateway edit checks
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 6 of 10	Receipt of FOC	Test cases performed by Pseudo-CLEC	None	FOC interval	Yes/No	Quantitative	FOC was not returned the next business day when order submitted by 3-p.m. within 20 minutes	Comparison of FOC receipt to expected results	FOC was no returned the next business day when order submitted by 3-p.m. within 20 minutes

xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 7 of 10	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	Pseudo-CLEC PON matches the PON on the FOC	Observation and comparison	Qualitative	Pseudo-CLEC PON matches the PON on the FOC	Determine if Pseudo-CLEC can match up order information returned on the FOC	PON does not match
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 8 of 10	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The U.S. WEST order number was received	Observation and comparison	Qualitative	The U.S. WEST order number was received	Determine the order was issued in U.S. WEST's ordering systems	No order number received
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 9 of 10	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The number of U.S. WEST circuit IDs matches the number of circuit ordered	Observation and comparison	Qualitative	The number of U.S. WEST circuit IDs matches the number of circuit ordered	Evaluate the number of circuits was not changed during the order processing	Number of circuits on FO does not match number of circuits on order
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Ordering - Step 10 of 10	Validate FOC information	Test cases performed by Pseudo-CLEC	Valid FOC, associated order and test script	The due date on the FOC matches the due date scheduled through Pre-Order Appointment Scheduling transaction	Observation and comparison	Qualitative	The due date returned in the FOC matches the due date scheduled during Pre-Order	Evaluate the due date was not changed during order creation	Due date on FOC does not match the due date on order
START													
ORDER COMPLETION TEST CASE													
xDSL19 ASF101	PON	Functionality Test	Install new Bus xDSL-qualified UNE loop	Order Completion - Step 2-1 of 54	Validate SOC information	Test cases performed by Pseudo-CLEC	Valid SOC, associated order and test script	Compare PON on the SOC with the PON on the original order	Observation and comparison	Qualitative	The PON should match the PON on the order and test script	Comparison of acknowledged PON on the SOC to the PON on the order and test script	The PON on the SOC does not match the PON on the order and test script could not be located in daily due date control log tracking

CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of AT&T and TCG Phoenix' Comments Regarding TSD Version 2.5, Docket No. T-00000A-97-0238, were sent via overnight delivery this 15th day of May, 2000, to:

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

and that a copy of the foregoing was sent via overnight delivery this 15th day of May, 2000 to the following:

Carl J. Kunasek, Chairman
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Jerry Porter
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

James M. Irvin, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Patrick Black
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

William A. Mundell, Commissioner
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Hercules Alexander Dellas
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

David Motycka
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

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

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

Jerry Rudibaugh
Hearing Officer
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

and that a copy of the foregoing was sent via United States Mail, postage prepaid, this 15th day of May, 2000 to the following:

Andrew Crain
Charles Steese
U S WEST Communications, Inc.
1801 California Street, #5100
Denver, CO 80202

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

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

Michael M. Grant
Gallagher and Kennedy
2600 North Central Ave.
Phoenix, AZ 85004-3020

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

Douglas Hsiao
Rhythms NetConnections
7337 So. Revere Parkway, #100
Englewood, CO 80112

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

Michael W. Patten
Brown & Bain, P.A.
P. O. Box 400
2901 North Central Ave.
Phoenix, AZ 85001-0400

Scott Wakefield
Stephen Gibelli
Residential Utility Consumer Office
2828 North Central Ave., #1200
Phoenix, AZ 85004

Darren Weingard
Stephen H. Kukta
Sprint Communications Company L.P.
1850 Gateway Drive, 7th Floor
San Mateo, CA 94404-2467

Karen Johnson
Electric Lightwave, Inc.
4400 NE 77th Ave
Vancouver, WA 98662

Carrington Phillip
Fox Communications, Inc.
1400 Lake Hearn Drive, N.E.
Atlanta, GA 30319

Daniel Waggoner
Davis Wright Tremaine
2600 Century Square
1502 Fourth Avenue
Seattle, WA 98101-1688

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

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

Richard M. Rindler
Morton J. Posner
Swidler & Berlin Shereff Friedman, LLP
3000 K Street, N.W. – Suite 300
Washington, D.C. 20007-5116

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

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

Alaine Miller
NEXTLINK Communications, Inc.
500 108th Avenue NE, Suite 2200
Bellevue, WA 98004

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

Richard Smith
Director of Regulatory Affairs
Cox Communications
2200 Powell Street, Suite 795
Emeryville, CA 94608

Jim Scheltema
Blumenfeld & Cohen
1615 MA Ave., Suite 300
Washington, DC 20036

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

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

Phonda Muuietta