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**IN THE MATTER OF US WEST
COMMUNICATIONS INC.'S COMPLIANCE
WITH SECTION 271 OF THE
TELECOMMUNICATIONS ACT OF 1996.**

DOCKET NO. T-00000A-97-0238

QWEST CORPORATION'S REVISED
APPLICATION FOR WAIVER FROM
INDEPENDENT AUDIT
REQUIREMENT OF DECISION NO
64836 AND PROPOSED SCOPE OF
AUDIT

Pursuant the Procedural Order in this matter dated September 12, 2005, Qwest Corporation ("Qwest") submits its Revised Application for Waiver from the Independent Audit Requirement of Decision No 64836, and Proposed Scope of Audit.

I. INTRODUCTION

As part of its review of Qwest's compliance with the requirements of § 271 of the 1996 Telecommunications Act, in Decision No. 64836 issued May 21, 2002, the Arizona Corporation Commission (the "Commission") found that Qwest met the requirements of Checklist Item No. 4 relating to access to local loop transmission unbundled from local switching and other services, subject to Qwest passing the relevant Operations Support Systems ("OSS") test, and subject to the further requirement for an audit of the loop qualification systems 18 months after -§271 approval:

1
2 IT IS FURTHER ORDERED that an audit shall be conducted by an independent
3 third party selected by the Commission 18 months after approval of Qwest
4 Corporation's Section 271 application, of Qwest's company records, back office
5 systems and databases to determine that Qwest is providing the same access to
6 loop qualification information to CLECs to which any Qwest employee has
7 access."¹

8 Qwest passed the OSS test² on March 29, 2003, leaving the post-order audit requirement as the
9 only remaining Checklist Item 4 matter from the original Arizona Section 271 proceeding.

10 Not long after the Commission issued its order in Decision No. 64836, the Regional
11 Oversight Commission ("ROC"), which was separately evaluating Qwest's OSS compliance in
12 connection with Qwest's Section 271 applications in other states, issued final reports concluding
13 that Qwest complies with the OSS requirements of Section 271 (the "ROC Reports").

14 In addition to the ROC Reports, considerable time and countless real CLEC transactions
15 have transpired since Decision No. 64836 was entered in 2002. Actual operational experience
16 after §271 approval demonstrates that there is no need for the Loop Qual Audit. Accordingly,
17 Qwest filed its Application for Waiver from the post-§271 requirement for an audit of
18 competitive local exchange carrier's access to Qwest's loop qualification data (the "Loop Qual
19 Audit").

20 Only one CLEC, Dieca Communications, Inc. d/b/a Covad Communications Company
21 ("Covad"), responded to Qwest's waiver application. Through a number of discussions between
22 Covad, the Arizona Corporation Commission Staff, and discovery conducted by the parties, it
23 has become apparent that Covad's concerns revolve around the accuracy, due to timing, of the
24 loop data that Covad accesses in a data file that is known as the Raw Loop Data Wire Center

25
26 ¹ Decision No. 64836, page 32, lines 2-5.

² Commission Decision No.'s 66224 and 66242.

1 download, which is a bulk extract of an entire wire center's loop data including the most recent
2 updates to the Loop Qualification Database ("LQDB") on the date the extract is created.³ The
3 data file is not one of the primary tools available to CLECs, by which Qwest makes available to
4 CLECs the same loop qualification information to which any Qwest employee has access. Those
5 primary loop qual tools provide up-to-date loop make up and loop qualification information. In
6 contrast, the loop information in the Raw Loop Data Wire Center data file that Covad, for its
7 own business purposes has determined to use, is in a "flat file," meaning that it is a snapshot of
8 loop information. Each wire center data file is refreshed on a rolling basis, in 20 business day
9 cycles. As such, on any given day, the bulk data file information may not contain the most
10 current information, for any given loop that was changed after the date of the last bulk extract.
11 Covad chooses to use the batch download data file as its primary method of obtaining loop make
12 up information from Qwest as a result of Covad's own, apparently unique business preferences,
13 methods, and routines.

14 Qwest has stated to Covad that Qwest's existing hardware and software, and information
15 technologies systems, do not provide bulk updates to the databases more frequently than the 20
16 business day refresh cycle, and cannot be made to do so without significant expense. Covad's
17 response is, in essence, "prove it." The nub of the controversy between Covad and Qwest is
18 Covad's position that Qwest can provide to Covad and other carriers up to date bulk loop make
19 up data. As Covad stated in response to Staff Data Requests,⁴ Covad cannot be sure with

20 _____
21 ³ Covad's Answers to Staff's First Set of Data Requests are attached as Exhibit A. As Covad states in answer AFF
22 1.6 a.: "... Covad would like to be able to access bulk loop qualification data at any time and on the same real time
23 basis as it is available to Qwest."

24 ⁴ Covad's Answers to Staff's Second Set of Data Requests are attached as Exhibit B. In Covad answer AFF 2.3,
25 Covad states:

26 It is Covad's position that Qwest may be able to provide to Covad and other carriers up to date bulk loop
qualification data. Covad cannot be sure with certainty that this is in fact the case, but believes that an
audit will demonstrate one way or another whether Qwest can provide Covad with real time bulk loop data
and whether Qwest currently provides itself with more up to date loop qualification data than it provides to
Covad or other carriers.

1 certainty that this is in fact the case but believes that an audit will demonstrate one way or
2 another whether Qwest can provide Covad with real time bulk loop data.

3 The question raised by Covad is quite narrow in comparison to the potentially large scope
4 the loop qual audit could encompass. Since the frequency of updating the bulk loop make up
5 data file is the central issue raised by the only party that has intervened in the waiver request,
6 there have not been any requests for loop qual audits raised by Covad or any CLECs in this or
7 any other state (as CLECs may do under the respective Statements of Generally Available
8 Terms), and the ROC OSS Tests have demonstrated Qwest's compliance with the requirements
9 of Section 271, Qwest believes that at most, a limited audit is all that is necessary or appropriate
10 to provide a check on Qwest's systems under Decision No. 64836. Accordingly, Qwest hereby
11 revises its Application for Waiver from the independent audit requirement of Decision No
12 64836. Rather than a waiver of the audit requirement, Qwest proposes an audit addressing the
13 update frequency of the Raw Loop Data Wire Center data file, as more fully stated below.
14 Qwest proposes a scope of audit that addresses the frequency of the updates, and the availability
15 of any bulk loop make-up information by Qwest personnel.

16

17 **II. PROPOSED SCOPE OF AUDIT**

18 Qwest proposes the following scope of audit:

19 A. The independent third party auditor will assess the process for updating the Loop
20 Qualification Database (LQDB) to verify that bulk updates to the database and therefore bulk
21 updates available to Qwest personnel are no more frequent than the 20 business day refresh cycle
22 experienced by Covad through its use of the Raw Loop Data Wire Center download.

23

24 B. The assessment will include review of:

25 1. existing Qwest documentation such as Qwest Information Technologies'
26 Software Component Specifications;

- 1 2. existing Qwest procedures for scheduling and running IT jobs that execute the
- 2 refresh of loop data in the LQDB and the creation of the Bulk RLD Wire
- 3 Center files;
- 4 3. existing Qwest procedures identifying the available methods for executing a
- 5 loop qualification.

6

7 C. At the conclusion of the assessment, the auditor will attest to:

- 8 1. the frequency of bulk updates to the source of all loop qualification/make-up
- 9 queries, i.e., LQDB;
- 10 2. availability of bulk loop qualification/make-up information by Qwest
- 11 personnel.

12

13 **III. DISCUSSION IN SUPPORT OF PROPOSED SCOPE OF AUDIT**

14 No party has brought forward any reason supporting a larger scope of audit. No CLEC

15 other than Covad has opposed Qwest's Waiver. No CLEC in any jurisdiction, including

16 Arizona, has requested an audit of Qwest's loop qualification/make-up OSS. No CLEC in any

17 jurisdiction has filed a complaint regarding the availability of loop qualification/make-up

18 information. The ROC OSS Tests, which were third party tests of Qwest's OSS, provided

19 independent confirmation that Qwest's OSS comply with the Act. And finally, in this waiver

20 proceeding, Covad, the only CLEC that has appeared, has only expressed concerns that center on

21 the bulk extract loop qual data file. More extensive auditing than that raised by the Covad issue

22 is unwarranted and should be waived.

23

24 A. ROC OSS Tests.

25

26 The ROC is comprised of the 14 state commissions regulating telecommunications in

1 Qwest's operating area. In connection with their evaluation of Qwest's compliance with the
2 network opening requirements of §271 of the Act, 13 of the 14 ROC member states (Arizona
3 excepted) agreed to pursue the collaborative OSS testing effort, of which the ROC Test 12 and
4 12.7 Reports were part.⁵ Overall, the ROC testing was undertaken to evaluate compliance with
5 the Act, which requires Qwest to provide non-discriminatory access to operations support
6 systems ("OSS"), with appropriate terms and conditions, to provide documentation and support
7 necessary for CLECs to access and use those systems, and to demonstrate operational readiness
8 and levels of performance.

9 The Consultants delivered their Final ROC Test 12 and 12.7 Reports on May 28, 2002.
10 The analysis and testing conducted by KPMG and HP was detailed and robust, and resulted in a
11 thorough independent evaluation of Qwest's loop qualification tools.

12 ROC Test 12.7 was designed to review "DSL loop qualification processes and procedures
13 developed and employed by Qwest to support both retail and wholesale customers. " The
14 consultant focused on whether "parity exists in the design implementation, and use of Qwest's
15 loop qualification process."⁶ KPMG determined that internal process flows are consistent for
16 both retail and wholesale operations and that back office systems provide consistent results for
17 both Wholesale and Retail queries. KPMG further determined that the same database, the Loop
18 Qualification Database ("LQDB") is the single source for all queries, and that the back office

19 _____
20 ⁵ The ROC Tests are more completely described as follows:

21 Test 12, PRE-ORDERING, ORDERING AND PROVISIONING FUNCTIONAL EVALUATION ("Test
22 12") performed and prepared by independent consultants KPMG Consulting, Inc. ("KPMG") and Hewlett Packard
23 Consulting ("HP") for purposes of consideration by the Regional Oversight Committee ("ROC") of Qwest's
24 compliance with the requirements of Section 271 of the Telecommunications Act of 1996. The Final Report on Test
25 12 is marked as Exhibit B attached hereto, and incorporated herein by reference.

26 Test 12.7, LOOP QUALIFICATION PROCESS EVALUATIONS ("Test 12.7") performed and prepared
by independent consultants KPMG Consulting, Inc. ("KPMG") and Hewlett Packard Consulting ("HP") for
purposes of consideration by the Regional Oversight Committee ("ROC") of Qwest's compliance with the
requirements of Section 271 of the Telecommunications Act of 1996. The Final Report on Test 12.7 is marked as
Exhibit C attached hereto, and incorporated herein by reference.

⁶ Exhibit B, Test 12.7 §1.0.

1 systems provide consistent results for both retail and wholesale queries. See Exhibit C, Figures
2 12.7-1 and 12.7-2.

3 Through Test 12 KPMG and HP were able to evaluate the functionality and systems
4 capabilities of Qwest's OSS for Wholesale pre-order, order, and post-order processing. KPMG
5 and HP submitted a variety of pre-order transactions via Qwest's OSS interfaces. In relationship
6 to the purposes of this proceeding, the most important test was "Obtain Loop Qualification
7 Information (RLDQ)." See, Exhibit B, Table 12-1. HP determined, subsequent to enhancement
8 of RLDQ by Qwest, that Qwest systems provide the required pre-order functionality, including
9 completion of Raw Loop Data Queries by telephone number or address. See, Exhibit C, Test
10 Cross-Reference 12-2-1.

11 HP found that the Raw Loop Data Query (RLDQ) enables CLECs to access raw loop
12 data for Qwest facilities. The data is broken out by segment and sub-segment of the loop. The
13 CLEC can perform a query for up to twenty-four customer telephone numbers. For each
14 working TN, the Raw Loop Data Query displays data for the entire loop, with a section for each
15 loop segment and a subsection for each sub-segment of the loop segment. Additionally, CLECs
16 can perform queries by customer address for assigned or unassigned loops. For assigned loops,
17 the query returns loop information for Qwest-provided TNs and CLEC UNE loops at the
18 customer address. For unassigned loops, the query returns raw loop information for spare loops
19 at the customer address. The Query also displays data for performing calculations and
20 determining whether the loop qualifies to carry DSL service. See, Exhibit C, Test 12-A,
21 §2.1.1.9.

22 B. The Proposed Scope of the Audit is Tailored to Examine the Question Raised by
23 Covad

24 As noted above, Covad, the only CLEC that has appeared in response to Qwest's
25 Application for Waiver, has raised a very narrow question. As Covad stated in its Response to
26

1 Data Request AFF 1.6 a. (Exhibit A hereto), "[C]ovad would like to be able to access bulk loop
2 qualification data at any time and on the same real time basis as it is available to Qwest." The
3 scope of the audit proposed by Qwest will test the bulk loop qual data file update process, and
4 determine whether data that Covad accesses is any different from that which Qwest employees
5 access.

6

7 **III. CONCLUSION**

8

9 The ROC Tests 12 and 12.7, which were a detailed, robust, and thorough independent
10 evaluation of Qwest's loop qualification tools, are conclusive evidence that Qwest's loop
11 qualification tools provide the same access to loop qualification information to CLECs to which
12 any Qwest employee has access. There is no evidence that another complete audit of Qwest's
13 systems is warranted now. The tailored audit proposal stated above is calculated to address the
14 concerns raised by the only party that has raised issues in this proceeding.

15

16 For the foregoing reasons, the audit proposed herein by Qwest is reasonable, and in the
17 public interest, and Qwest moves for an order of the Commission approving it as the scope of the
18 audit required under Decision 64836.

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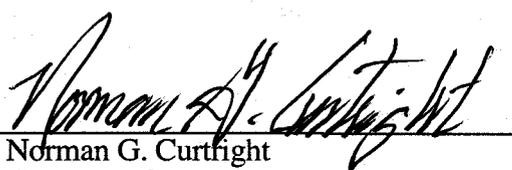
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RESPECTFULLY SUBMITTED this 20th day of September, 2005.

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Diane Kypar

EXHIBIT A

AFF 1.6 Pertaining to Covad's statement on page 3 of its May 11, 2005 filing - "Qwest provides a real time tool for its own use but not to its wholesale customers. This is blatantly discriminatory.":

- a. Please provide explicit examples of when Covad was prohibited from using Qwest's real-time, loop qualification tools.
- b. Please provide explicit examples of when Covad, or any wholesale customer, has been discriminated against by Qwest.
- c. Please cite and provide any documentation stating that Covad or any CLEC is prohibited from using Qwest's real-time, loop qualification tools.

ANSWER:

a. Covad understands that Qwest is able to provide to Covad and other carriers up to date bulk loop qualification data (i.e., real time bulk data). Qwest does not presently make this data available to Covad. Rather, Qwest provides bulk loop qualification data to Covad on a rolling basis only and, consequently, the data may not be accurate with respect to a particular loop. Hence, as Covad stated in its response, when Covad evaluates this kind of bulk data, it often receives a false negative or false positive with regard to a particular loop.

In order to resolve this matter with Qwest, Covad would like to be able to access bulk loop qualification data at any time and on the same real time basis as it is available to Qwest. At a minimum, Covad would like to be able to access bulk loop qualification data at any time and would like Qwest to update such data at least once per week (although daily would be preferable) so that it is as close to 'real time' information as possible. Covad will then be able to analyze this data using its own computer program to determine if a loop is qualified. Covad can run this program quickly and at minimal cost.

Qwest does have loop qualification tools that use real time data but these tools only allow Covad to submit a small number of telephone numbers at time for qualification (EDI interface and wholesale web based tool) and requires manual input.

Covad cannot use these tools to analyze loop data on a bulk basis. Rather, Covad is presently required to query the web based tool thousands of time each month. Doing so is burdensome, time consuming and expensive.

b. Covad objects to this data request because it is overly broad in scope. This data request seeks information outside the scope of Qwest's petition for a waiver of a loop qualification audit. The question whether Qwest has "discriminated" against Covad in some general way (outside the context of the loop qualification process) does not relate to whether Qwest should be required to conduct a loop qualification audit. Moreover, providing an answer to this question will not advance resolution of the matter. For these reasons, Covad does not provide an answer to this request.

c. See Covad's answer to data request 1.6.a.

AFF 1.7 Please explain if and how Covad uses the ADSL Loop Qualification Tool¹.

ANSWER:

Covad resorts to utilizing this tool when the bulk download raw loop information is not up to date.

AFF 1.8 Please explain if and how Covad uses the Raw Loop Data Tools².

ANSWER:

Covad uses this tool only after an order has been incorrectly accepted based on the evaluation of bulk data (i.e., false positive).

AFF 1.9 Please explain if and how Covad uses the POTS Conversion to Unbundled Loop Tool³.

¹ Qwest SGAT, FOURTEENTH REVISION, August 29, 2003 , 9.2.2.8.1

² Qwest SGAT, FOURTEENTH REVISION, August 29, 2003 , 9.2.2.8.2

³ Qwest SGAT, FOURTEENTH REVISION, August 29, 2003 , 9.2.2.8.3

EXHIBIT B

12. Test Results: Pre-Ordering, Ordering and Provisioning (POP) Functional Evaluation (Test 12)

1.0 Description

The POP Functional Evaluation was a comprehensive review of the functional elements of Pre-Ordering, Ordering, Provisioning, Pre-Order/Order Data Integration, and an analysis of Qwest's performance in comparison to its Retail systems. The objective of this test was to validate the existence, functionality, and behavior of Qwest interfaces and processes required for Pre-Ordering, Ordering, and provisioning transaction requests and responses. The POP functions tested were also validated against Qwest documentation that specifies those functions that are and are not available within the Qwest Operation Support Systems (OSS).

For this evaluation, KPMG Consulting was responsible for the administration of the testing process. Hewlett-Packard Consulting (HPC), which held the role of a pseudo-Competitive Local Exchange Carrier (P-CLEC), established the processes, systems, and facilities required to process the volume and mix of transactions for the tests specified in the *Master Test Plan (MTP)*.

As part of this process, HPC established connectivity to the Qwest Interconnect Mediated Access Electronic Data Interface (IMA EDI), the Interconnect Mediated Access Graphical User Interface (IMA GUI), and manual OSS interfaces. In general, the goal of HPC was to replicate to the fullest extent feasible, the responsibilities, behavior, and experiences of a CLEC attempting to conduct Wholesale business with Qwest within the 13 participating states of the Regional Oversight Committee (ROC).

The participating ROC states are divided into three regions: the Western Region, covering Washington and Oregon; the Central region, covering Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; and the Eastern Region, covering Iowa, Minnesota, Nebraska, North Dakota, and South Dakota.

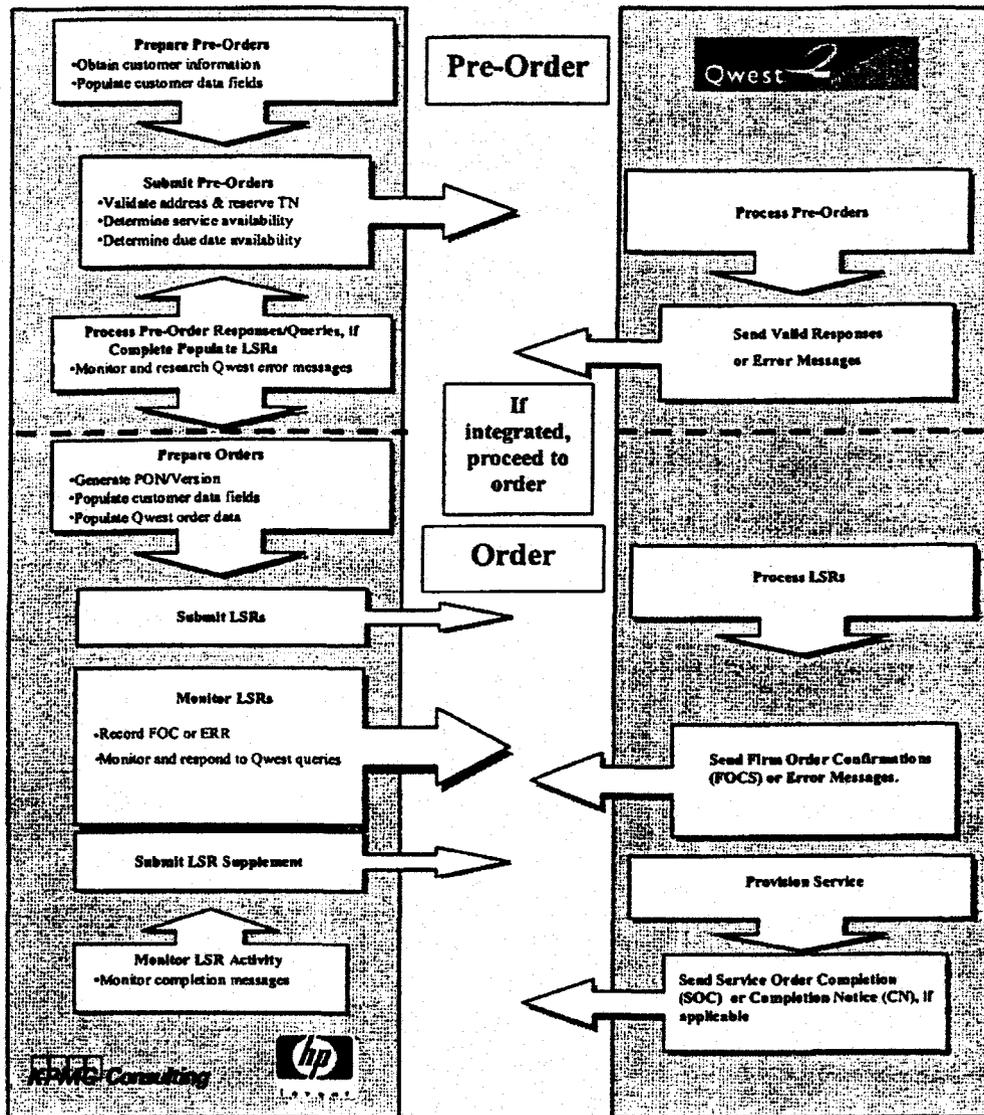
2.0 Method

This section summarizes the test execution method.

2.1 Business Process Description

Figure 12-1 provides an overview of the Qwest IMA EDI and IMA GUI Pre-Ordering and Ordering processes.

Figure 12-1: POP Functional Evaluation Transaction Overview



HPC prepared and submitted pre-Order and Local Service Request (LSR) Order transactions to Qwest. Qwest processed and returned Pre-Order responses, Firm Order Confirmations (FOCs), error messages, Service Order Completions (SOCs)/Completion Notices. HPC established and maintained the connectivity required for the submission of Orders and Pre-Orders via both IMA EDI and IMA GUI.

2.2 Scenarios

The following tables identify the Pre-Order and Order Scenarios that were used in this test. Pre-Order and Order Scenarios tested were drawn from the Scenarios defined in Appendix D of the

MTP. The Scenarios outline, at a high level, the specific products and services to be ordered, and activity types to be requested. These Scenarios were agreed upon by the ROC Technical Advisory Group (TAG).

Table 12-1: Pre-Order Test Scenarios

Activity	Residence	Business
Validate Customer Address (AVQ)	X	X
Obtain Customer Service Record (CSRQ)	X	X
Reserve Telephone Numbers (TNAQ & TNSQ)	X	X
Determine Product and Feature Availability (SAQ)	X	X
Perform Facility Availability Check (FAQ) ³	X	X
Schedule Appointment (AAQ & ASQ)	X	X
Obtain Loop Qualification Information (RLDQ) ⁴	X	X
Validate Customer CFA (CFAQ)	X	X
Obtain Directory Listings Information for an Existing UNE-L Customer ⁵	X	X
Obtain Design Layout Record (DLRQ) ⁶	X	X
Validate Meet Point (MPQ) ⁷	X	X
Cancel an Appointment or Reserved TN (CTQ) ⁸	X	X

Table 12-2: Resale Order Test Scenarios

Activity	Res. POTS	Bus. POTS	Centrex 21	Private Line	PBX
Migration from Qwest "as is"	X	X		X	X
Migration from Qwest "as specified"	X	X	X		
CLEC to CLEC migration	X	X			
New customer	X	X	X		
Add lines (L)/trunks (T)	X (L)	X (L)	X (L)		X (T)
Feature changes to existing customer	X	X	X		
Telephone number change	X	X			
Directory change	X	X			
Migrate customer with voice mail	X	X			
Moves	X	X	X		
Suspend/restore service	X	X			

³ Includes ADSL qualified facility availability.

⁴ RLDQ Pre-Order was only evaluated for functionality as a result of the outcome of Exception 2063.

⁵ The directory listing Pre-Order for an existing UNE-loop customer was only evaluated for functionality per MTP Change Request #13, which was approved by the ROC TAG on September 6, 2001.

⁶ The Design Layout Record Query (DLRQ) Pre-Order was only evaluated for functionality.

⁷ The Meet Point Query (MPQ) Pre-Order was only evaluated for functionality as part of the overall line splitting and line sharing functionality tests.

⁸ The Cancel Transaction Query (CTQ) Pre-Order was only evaluated for functionality.

Activity	Res. POTS	Bus. POTS	Centrex 21	Private Line	PBX
Disconnect (full and partial)	X	X		X	X
PIC/LPIC ⁹ changes	X	X	X		X

Table 12-3: UNE¹⁰ Platform (UNE-P) Order Test Scenarios

Activity	Residential POTS	Business POTS
Migration from Qwest "as specified"	X	X
Migrate from CLEC to CLEC	X	X
New customer	X	X
Add lines (L)/trunks (T)	X (L)	X (L)
Feature changes to existing customer	X	X
Telephone number change	X	X
Directory change	X	X
Full and partial migration with Directory Listing (DL) changes	X	X
Convert from Resale products to UNE-P products	X	X
Migrate an account with Qwest initiator ⁹ blocking	X	X
Migrate an account with pending service order	X	X
Establish new user with vanity telephone number (TN)		X
Moves	X	X
Suspend/restore service	X	X
Disconnect (full and partial)	X	X
Change PIC/LPIC	X	X
Migrate service to a line splitting arrangement ¹¹	X	X
Line splitting customer disconnects high speed data but maintains voice service	X	X

⁹ Primary Interexchange Carrier (PIC); Local Primary IntraLATA Carrier (LPIC).

¹⁰ Unbundled Network Elements.

¹¹ Line Splitting was only evaluated for functionality.

Table 12-4: UNE-Loop Order Test Scenarios

Activity	2-wire Analog Loop	ADSL Qualified Loop	2-wire non-loaded Loop	ISDN Capable Loop	DS1 Capable Loop	Stand-Alone LNP ¹²	UDIT ¹³	EEL ¹⁴	Dark Fiber	Line Sharing	Stand-Alone DL
Migrate lines from Qwest without Local Number Portability (LNP)	X	X	X	X	X			X		X	
Migrate lines from Qwest with LNP	X		X	X	X ¹⁵			X			
Migrate from CLEC to CLEC	X	X	X	X							
Purchase lines for a new customer	X	X	X	X	X			X			
Add new lines to existing customer	X	X	X	X	X			X			
Add new interoffice DS1/DS3 facilities							X		X		
Convert from Resale to UNE loop without LNP	X	X	X	X							
Convert from Resale to UNE loop with LNP	X			X							
Convert from UNE-P to UNE loop without LNP	X		X	X							
Convert from UNE-P to UNE loop with LNP	X			X							
Moves (outside)	X		X	X							
Disconnect (full)	X		X	X	X			X			
Add a new directory listing on existing account											X
Convert from line sharing arrangement to UNE-loop		X	X								
Port number from Qwest to CLEC without facilities						X					

¹²The timeliness of LNP orders was tested via IMA EDI because participating CLEC's user IDs and passwords were required to submit the Orders via IMA GUI.

¹³Unbundled Dedicated Interoffice Transport.

¹⁴Enhanced Extended Loop.

¹⁵KPMG Consulting was unsuccessful in gaining the cooperation of any CLEC operating in Qwest territory to support LNP testing for DS1-capable loops. As a result, KPMG Consulting did not test any LNP Scenarios for DS1-capable loops identified in Appendix D of the MTP.

2.3 Test Targets & Measures

The test targets were Qwest's Pre-Ordering and Ordering systems accessed via IMA EDI, IMA GUI, and manual OSS interfaces. Processes, sub-processes, and evaluation measures are summarized in the following table. The last column, "Test Cross-Reference," indicates where the particular measures are addressed in Section 3.1, "Results & Analysis."

Table 12-6: Test Target Cross Reference

Process	Sub-Process	Evaluation Measure	Test Cross-Reference
Pre-Order	Submit Pre-Order	Clarity, accuracy, and completeness of documentation	HPC Report
		Accessibility of GUI (excluding interoffice facilities)	HPC Report
		Accessibility of computer-to-computer interface (excluding interoffice facilities)	12-1-1
		Accuracy and completeness of functionality	12-2-1 – 12-2-3
	Receive Pre-Order Response	Timeliness of response	12-3-1 – 12-3-11, 12-4-1 – 12-4-11
		Completeness of response	HPC Report
		Clarity and accuracy of error messages	HPC Report
		Accuracy, responsiveness, and completeness of Help Desk Support	HPC Report
		Usability of information	HPC Report
		Consistency with Retail capability	12-11-3 – 12-11-4
Order	Submit Order	Clarity, accuracy, and completeness of documentation	HPC Report
		Accessibility of GUI (excluding interoffice facilities)	HPC Report
		Accessibility of computer-to-computer interface (excluding interoffice facilities)	12-1-1
		Accuracy and completeness of functionality	12-5-1 – 12-5-10, 12-10-1
	Receive Order Response	Timeliness of response	12-6-1 – 12-6-6, 12-7-1 – 12-7-9, 12-8-1 – 12-8-2, 12-9-1 – 12-9-6, 12-10-2 – 12-10-5

Process	Sub-Process	Evaluation Measure	Test Cross-Reference
		Completeness of response	HPC Report
		Clarity and accuracy of error messages	HPC Report
		Accuracy, responsiveness, and completeness of Help Desk Support	HPC Report
		Usability of information	HPC Report
		Consistency with Retail capability	12-11-1 – 12-11-4
Provisioning	Receive Notification of Jeopardy or Delay	Receipt of notification	12-9-1 – 12-9-3
	Receive Completion Notification	Receipt of notification	12-10-1
	Provisioning of Products, Services, and Features	Timeliness of provisioning	Test 14 Provisioning Evaluation
		Frequency of delay or rescheduling of provisioning	Test 14 Provisioning Evaluation
		Accuracy and completeness of provisioning	Test 14 Provisioning Evaluation
		Completeness and consistency of process	Test 14 Provisioning Evaluation

2.4 Evaluation Methods

To allow for service request submission, Qwest provided KPMG Consulting with test bed accounts that were provisioned according to KPMG Consulting's specifications. The Pre-order and Order Scenarios tested, which were drawn from the Scenarios defined in Appendix D of the MTP, outline, at a high level, the specific products and services that were ordered, and activity types that were requested. KPMG Consulting used test Scenario descriptions, test bed accounts, and Qwest ordering documentation to develop test cases and instances for each Scenario.

Each test case contained a detailed description of the case and described order requirements, including:

- Customer type (business or residential);
- Conversion activity (partial and full conversion)¹⁶;
- Disconnect;
- Feature changes;
- Flow-through designation; and
- Other information that was necessary to execute the test case.

As test administrator, KPMG Consulting provided HPC with a schedule of instances to be submitted that detailed priority, interface, and due date, when applicable, as well as the

¹⁶ In the case of a full conversion, all of a customer's lines are migrated to a new service provider. In the case of a partial conversion, some lines are migrated to a CLEC, while at least one line remains with Qwest.

corresponding account information for each test case instance. HPC then executed the Pre-Order and Order transactions using a variety of service delivery methods (e.g., Resale, UNE-P, UNE-Loop) and activity types (e.g., conversion "as is," conversion "as specified"), as defined by KPMG Consulting in the test scenario descriptions (see Tables 12-1, 12-2, 12-3, and 12-4).

KPMG Consulting analyzed data provided by HPC on transaction submissions and responses, and on Qwest provisioning activities. Where available, this information was collected and maintained electronically.

Both Access Service Request (ASR) and Local Service Request (LSR) Orders were tested.¹⁷ Erred as well as error-free transactions were tested. Not all Orders were processed through the physical provisioning process. Some Orders were dated well into the future to prevent provisioning, and others were canceled before provisioning activities commenced. Verification and validation of provisioning activities were performed in Test 14, Provisioning Evaluation.

KPMG Consulting conducted a comparative analysis between the experiences of the P-CLEC and those of real CLECs operating in the 13 participating ROC states. To this end, KPMG Consulting conducted site visits at three commercial CLEC service centers, and observed CLEC representatives submitting Pre-Orders and Orders via IMA GUI. KPMG Consulting also conducted a comparative analysis between the P-CLEC's transaction data and commercial CLEC data. In addition, KPMG Consulting involved CLECs in aspects of live transaction testing, such as Unbundled Dedicated Interoffice Transport (UDIT) submission, as well as the submission of Orders on accounts with pending activity.

KPMG Consulting also conducted a comparative analysis of Ordering and Pre-Ordering functionality for Qwest Retail and Wholesale services. By conducting interviews and observations at both Qwest and commercial CLEC call centers, KPMG Consulting examined and compared the Pre-Order and Order requirements, required customer information, standard intervals, and expedite procedures for various products and features in the Wholesale and Retail environments.

Other data collected for the POP Functional Evaluation included Qwest Network Disclosures documentation, Pre-Order and Order business rules, Qwest Service Interval Guides, Qwest technical publications and the *Qwest Service Performance Indicator Definitions (PID)*, Version 3.0, issued May 31, 2001.

2.4.1 EDI Functional Evaluation

As the P-CLEC, HPC used the *Local Service Ordering Guidelines (LSOG) 3 & 5 Business Rules* and Network Disclosures documentation to prepare Pre-Order and Order transactions. The Qwest business rules detail the form, field, and value information that is required to submit valid Pre-Order inquiries and Order requests. The Network Disclosures documentation details mapping of business field entries to EDI transaction sets, for transmission to Qwest via IMA EDI.

¹⁷ KPMG Consulting used a commercial CLEC operating in the Qwest territory in order to support ASR testing in the form of UDIT Orders. However, due to limited CLEC participation, KPMG did not have a sample size large enough to evaluate UDIT timeliness.

HPC used an internally developed application to populate pre-order and order transactions in the Formset Common Interchange Format (FCIF) file format. FCIF files were then translated into EDI format and transmitted to Qwest. Responses from Qwest were received by HPC in EDI format and translated into FCIF files.

HPC submitted stand-alone pre-orders and orders via IMA EDI so that KPMG Consulting could evaluate Qwest system functionality. When necessary, pre-orders were also submitted to obtain information required to validate customer information, or to receive input for a subsequent LSR. HPC analyzed pre-order and order field content and field formats to evaluate compliance with the Qwest business rules.

KPMG Consulting evaluated EDI order system availability throughout the duration of the POP Functional Evaluation. From April 11, 2001 through March 21, 2002, pre-order transactions were submitted (pinged) via EDI at a frequency of one every two minutes, during Qwest hours of operation.¹⁸ Every transaction for which a response was not received was counted against the availability percentage. Periods of planned Qwest system outages were excluded from this evaluation. Pre-order transactions used to conduct the system availability evaluation were separate and distinct from the POP Functional Evaluation.

2.4.2 GUI Functional Evaluation

To prepare Pre-Order and Order transactions, HPC used the *Local Service Ordering Guidelines (LSOG) 3 & 5 Business Rules* and various IMA GUI user guides. The Qwest business rules detail the form, field, and value information required to submit valid Pre-Order inquiries and Order requests.

HPC populated and then submitted various types of Pre-Order and Order transactions to Qwest. Both the IMA GUI and IMA EDI transactions submitted during the test were drawn from the same set of test case Scenarios. HPC captured information (e.g., date and time-stamp) pertaining to Order and Pre-Order submissions, and response postings.

HPC submitted stand-alone Pre-Orders and Orders via IMA GUI so that KPMG Consulting could evaluate Qwest system functionality. When necessary, Pre-Orders were submitted to obtain information to validate customer information or to provide required data for a subsequent LSR.

2.5 Analysis Methods

The POP Functional Evaluation included evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. The data collected were analyzed against these evaluation criteria, which are detailed in Section 3.1 below.

IMA EDI, IMA GUI, and manual transaction responses were examined for consistency with Qwest's Pre-Order and Order business process flow, as described in Section 2.1. KPMG

¹⁸ Before July 1, 2001, scheduled hours of operation were defined as 6:00 AM – 10:00 PM, Monday through Friday, excluding holidays. Saturday hours of operation were defined as 6:00 AM – 8:00 PM. There were no hours of operation on Sundays and Holidays. After July 1, 2001, scheduled hours of operation are defined as 6:00 AM – 12:00 midnight, Monday through Friday, excluding holidays. Saturday hours of operation are defined as 6:00 AM – 9:00 PM, and Sunday hours of operation are defined as 12:00 noon – 6:00 PM. There are no hours of operation on Holidays.

Consulting evaluated the accessibility of the IMA EDI interface, the timeliness of responses, and the accuracy and completeness of functionality for both IMA EDI and IMA GUI.

In its evaluation of test performance, KPMG Consulting applied the standards documented in *Qwest Service Performance Indicator Definitions (PID)*, Version 3.0, issued May 31, 2001, with one exception; KPMG Consulting applied the *Qwest Service Performance Indicator Definitions (PID)*, Version 4.0, issued October 22, 2001, for the retest of Exception 3085 and Exception 3086. If no defined PID standard was established, KPMG Consulting used its professional judgment to evaluate performance.

Results in Section 3.0 were calculated based on HPC's internal time-stamps, which may differ from the measurement points reported by Qwest. This difference is due to the fact that KPMG Consulting measures HPC's end-to-end response time, while Qwest measures processing time within its environment.

3.0 Results Summary

This section identifies the discrete evaluation criteria and test results.

3.1 Results & Analysis

The results of this test are presented in the table below. Definitions of evaluation criteria, possible results, and exceptions are provided in Section II. Qwest documentation regarding CLEC aggregate measures can be accessed at the following Web site address: <http://www.qwest.com/wholesale/results/roc.html>

Table 12-7: Evaluation Criteria and Results

Test Cross-Reference	Evaluation Criteria	Results	Comments
<i>Accessibility of Computer-to-Computer Interface</i>			
12-1-1	EDI Order transaction capability is consistently available during scheduled hours of operation.	Satisfied	<p>EDI Order transaction capability is consistently available during scheduled hours of operation.</p> <p>The PID (GA-2)-defined standard is 99.25% availability of the IMA EDI Interface for Order transaction capability during Qwest's scheduled hours of operation.</p> <p>EDI Order transaction capability was available for 99.9% of Qwest's scheduled hours of operation.</p> <p>EDI availability was evaluated using an automated system that transmitted an Order transaction to Qwest, via IMA EDI, every two minutes during Qwest's scheduled hours of operation. A transaction for which a Functional Acknowledgement (FA) was not received was counted against the availability percentage.</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
<i>Pre-Order Process Accuracy and Completeness</i>			
12-2-1	Qwest systems provide required Pre-Order functionality.	Satisfied	<p>Qwest systems provide required Pre-Order functionality to process 14 of 14 Pre-Order transaction types.</p> <p>During initial testing, HPC was unable to validate addresses (AVQs) by telephone number (TN) in IMA GUI and IMA EDI Releases 6.0 and 7.0. This problem was limited to new TNs established by CLECs in Qwest's system. HPC issued Exception 2055.</p> <p>Qwest stated that it updated its PREMIS database to support Wholesale and Retail accounts. In addition, Qwest completed a two-stage effort to identify and add Wholesale data that was not present.</p> <p>During subsequent testing, HPC encountered the same database problems and issued an addendum to the Exception.</p> <p>Qwest subsequently completed a system fix, as well as issued a notifier to its Service Delivery Coordinators (SDCs) to ensure that the PREMIS database would be maintained correctly in the future.</p> <p>In a second retest, HPC did not uncover any additional issues. See Exception 2055 for additional information. Exception 2055 is closed.</p> <p>Also during testing, HPC was unable to complete Raw Loop Data Queries (RLDQs) by TN or address in IMA GUI and IMA EDI Releases 6.0 and 7.0. HPC issued Exception 2063.</p> <p>Qwest stated that it updated its systems to give Release 7.0 the same functionality as Release 8.0. Upon retest, HPC was able to perform the RLDQ successfully. See Exception 2063 for additional information. Exception 2063 is closed.</p> <p>See Table 12-1 for additional transaction details¹⁹.</p>

¹⁹ Table 12-1 includes all 14 Pre-Order types as outlined in the MTP. Reserve Telephone Numbers (TNAQ & TNSQ) and Schedule Appointment (AAQ & ASQ) are grouped together for presentation purposes.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-2-2	Pre-Order time-outs before receiving a response via IMA GUI are within the PID benchmark.	Satisfied	Pre-Order time-outs before receiving a response via IMA GUI are within the PID benchmark. The PID (PO-1C)-defined standard allows for 0.50% of Pre-Order queries transmitted in the reporting period to time out ²⁰ before receiving a response. Of 4,058 transactions submitted, none (0.0%) timed out. See Table 12-8 for additional transaction details.
12-2-3	Pre-Order time-outs before receiving a response via IMA EDI are within the PID benchmark.	Satisfied	Pre-Order time-outs before receiving a response via IMA EDI are within the PID benchmark. The PID (PO-1C)-defined standard allows for 0.50% of Pre-Order queries transmitted in the reporting period to time out before receiving a response. Of 17,486 transactions submitted, 74 (0.4%) timed out. See Table 12-8 for additional transaction details.
<i>IMA GUI Pre-Order Timeliness</i>			
12-3-1	Qwest systems provide timely responses to Address Validation Queries (AVQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to AVQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average AVQ Pre-Order response receipt within 10 seconds. For 1,091 AVQ responses received, the average response time was 2.8 seconds. See Table 12-8 for additional transaction details.
12-3-2	Qwest systems provide timely responses to Telephone Number Availability Queries (TNAQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to TNAQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average TNAQ Pre-Order response receipt within 10 seconds. For 126 TNAQ responses received, the average response time was 2.4 seconds. See Table 12-8 for additional transaction details.

²⁰ A time-out transaction is defined as any Pre-Order transaction for which the response time duration is greater than or equal to 200 seconds.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-3-3	Qwest systems provide timely responses to Customer Service Record Queries (CSRQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to CSRQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average CSRQ Pre-Order response receipt within 12.50 seconds. For 839 CSRQ responses received, the average response time was 4.8 seconds. See Table 12-8 for additional transaction details.
12-3-4	Qwest systems provide timely responses to Appointment Availability Queries (AAQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to AAQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average AAQ Pre-Order response receipt within 10 seconds. For 58 AAQ responses received, the average response time was 3.1 seconds. See Table 12-8 for additional transaction details.
12-3-5	Qwest systems provide timely responses to Facility Availability Queries (FAQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to FAQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average FAQ Pre-Order response receipt within 25 seconds. For 270 FAQ responses received, the average response time was 15.4 seconds. See Table 12-8 for additional transaction details.
12-3-6	Qwest systems provide timely responses to Service Availability Queries (SAQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to SAQs submitted via IMA GUI. The PID (PO-1A)-defined standard is average SAQ Pre-Order response receipt within 25 seconds. For 30 SAQ responses received, the average response time was 6.2 seconds. See Table 12-8 for additional transaction details.
12-3-7	Qwest systems provide timely responses to Qualified ADSL Facility Availability Queries (FAQs-ADSL) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to FAQs-ADSL submitted via IMA GUI. The PID (PO-1A)-defined standard is average FAQ-ADSL Pre-Order response receipt within 20 seconds. For 29 FAQ-ADSL responses received, the average response time was 10.5 seconds. See Table 12-8 for additional transaction details.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-3-8	Qwest systems provide timely responses to Connecting Facility Assignment Queries (CFAQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to CFAQs submitted via IMA GUI. In the absence of an established PID, KPMG Consulting assigned a benchmark that average CFAQ Pre-Order responses are received within 25 seconds. For 780 CFAQ responses received, the average response time was 11.4 seconds. See Table 12-8 for additional transaction details.
12-3-9	Qwest systems provide timely responses to Appointment Selection Queries (ASQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to ASQs submitted via IMA GUI. In the absence of an established PID, KPMG Consulting assigned a benchmark that average ASQ Pre-Order responses are received within 10 seconds. For 39 ASQ responses received, the average response time was 1.8 seconds. See Table 12-8 for additional transaction details.
12-3-10	Qwest systems provide timely responses to Telephone Number Selection Queries (TNSQs) submitted via IMA GUI.	Satisfied	Qwest systems provide timely responses to TNSQs submitted via IMA GUI. In the absence of an established PID, KPMG Consulting assigned a benchmark that average TNSQ Pre-Order responses are received within 10 seconds. For 109 TNSQ responses received, the average response time was 0.8 seconds. See Table 12-8 for additional transaction details.
12-3-11	Qwest systems provide timely Pre-Order error message responses via IMA GUI.	Diagnostic	Qwest systems provide timely Pre-Order error message responses via IMA GUI. KPMG Consulting did not assign an evaluation result for this criterion because the related Pre-Order error message timeliness PID (PO-1D) is defined as "diagnostic" only. The average response time of 2.4 seconds for 655 Pre-Order error messages received is provided as diagnostic information only. See Table 12-9 for additional transaction details.

Test Cross-Reference	Evaluation Criteria	Results	Comments
<i>IMA EDI Pre-Order Timeliness²¹</i>			
12-4-1	Qwest systems provide timely responses to Address Validation Queries (AVQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to AVQs submitted via IMA EDI. The PID (PO-1B)-defined standard is average AVQ Pre-Order response receipt within 10 seconds. For 6,908 AVQ responses received, the average response time was 4.0 seconds. ²² See Table 12-9 for additional transaction details.
12-4-2	Qwest systems provide timely responses to Telephone Number Availability Queries (TNAQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to TNAQs submitted via IMA EDI. The PID (PO-1B)-defined standard is average TNAQ Pre-Order response receipt within 10 seconds. For 1,299 TNAQ responses received, the average response time was 4.3 seconds. ²³ See Table 12-8 for additional transaction details.
12-4-3	Qwest systems provide timely responses to Customer Service Record Queries (CSRQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to CSRQs submitted via IMA EDI. The PID (PO-1B)-defined standard is average CSRQ Pre-Order response receipt within 12.50 seconds. For 4,326 CSRQ responses received, the average response time was 6.4 seconds. ²⁴ See Table 12-8 for additional transaction details.
12-4-4	Qwest systems provide timely responses to Appointment Availability Queries (AAQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to AAQs submitted via IMA EDI. The PID (PO-1B)-defined standard is average AAQ Pre-Order response receipt within 10 seconds. For 275 AAQ responses received, the average response time was 5.0 seconds. See Table 12-8 for additional transaction details.
12-4-5	Qwest systems provide timely responses to Facility	Satisfied	Qwest systems provide timely responses to FAQs submitted via IMA EDI.

²¹ Pre-Order responses received prior to August 22, 2001 were excluded from the timeliness evaluation due to problems experienced with the Templar Interactive Agent (IA). See Observations 3002, 3003, 3004, 3005, and 3006 for additional information.

²² AVQ time-out transactions were excluded from the timeliness evaluation, as defined by the PID.

²³ TNAQ time-out transactions were excluded from the timeliness evaluation, as defined by the PID.

²⁴ CSRQ time-out transactions were excluded from the timeliness evaluation, as defined by the PID.

Test Cross-Reference	Evaluation Criteria	Results	Comments
	Availability Queries (FAQs) submitted via IMA EDI.		The PID (PO-1B)-defined standard is average FAQ Pre-Order response receipt within 25 seconds. For 1,050 FAQ responses received, the average response time was 15.8 seconds. ²⁵ See Table 12-8 for additional transaction details.
12-4-6	Qwest systems provide timely responses to Service Availability Queries (SAQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to SAQs submitted via IMA EDI. The PID (PO-1B)-defined standard is average SAQ Pre-Order response receipt within 25 seconds. For 137 SAQ responses received, the average response time was 16.9 seconds. ²⁶ See Table 12-8 for additional transaction details.
12-4-7	Qwest systems provide timely responses to Qualified ADSL Facility Availability Queries (FAQs-ADSL) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to FAQs-ADSL submitted via IMA EDI. The PID (PO-1B)-defined standard is average FAQ-ADSL Pre-Order response receipt within 20 seconds. For 84 FAQ-ADSL responses received, the average response time was 9.4 seconds. See Table 12-8 for additional transaction details.
12-4-8	Qwest systems provide timely responses to Connecting Facility Assignment Queries (CFAQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to CFAQs submitted via IMA EDI. In the absence of an established PID, KPMG Consulting assigned a benchmark that average CFAQ Pre-Order responses are received within 25 seconds. For 19 CFAQ responses received, the average response time was 9.8 seconds. See Table 12-8 for additional transaction details.
12-4-9	Qwest systems provide timely responses to Appointment Selection Queries (ASQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to ASQs submitted via IMA EDI. In the absence of an established PID, KPMG Consulting assigned a benchmark that average ASQ Pre-Order

²⁵ FAQ time-out transactions were excluded from the timeliness evaluation, as defined by the PID.

²⁶ SAQ Pre-Orders include pre-Templar responses.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			responses are received within 10 seconds. For 249 ASQ responses received, the average response time was 3.7 seconds. See Table 12-8 for additional transaction details.
12-4-10	Qwest systems provide timely responses to Telephone Number Selection Queries (TNSQs) submitted via IMA EDI.	Satisfied	Qwest systems provide timely responses to TNSQs submitted via IMA EDI. In absence of an established PID, KPMG Consulting assigned a benchmark that average TNSQ Pre-Order responses are received within 10 seconds. For 1,157 TNSQ responses received, the average response time was 2.2 seconds. See Table 12-8 for additional transaction details.
12-4-11	Qwest systems provide timely Pre-Order error message responses via IMA EDI.	Diagnostic	Qwest systems provide timely Pre-Order error message responses via IMA EDI. KPMG Consulting did not assign an evaluation result for this criterion because the related Pre-Order error message timeliness PID (PO-ID) is defined as "diagnostic" only. For 1,554 Pre-Order responses received, the average response time of 5.4 seconds is provided as diagnostic information only. See Table 12-9 for additional transaction details.
<i>Order Process Accuracy and Completeness</i>			
12-5-1	Qwest systems or representatives provide required Order transaction functionality.	Satisfied	Qwest systems or representatives provide required Order transaction functionality. Qwest systems or representatives provide appropriate functionality to process the Order Scenario types evaluated during the course of this test. See Tables 12-2 through 12-4 for additional transaction details.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-5-2	Qwest systems provide Functional Acknowledgements (FAs) in response to LSRs submitted via IMA EDI.	Satisfied	Qwest systems provide FAs in response to LSRs submitted via IMA EDI. In the absence of an established PID, KPMG Consulting assigned a benchmark that of 95% of IMA EDI Orders must receive FAs. Of 9,963 LSRs submitted, 9,912 (99.5%) received the expected FA. See Table 12-14 for additional transaction details.
12-5-3	Qwest provides expected initial Order responses for LSRs submitted via IMA GUI.	Satisfied	Qwest provides expected initial Order responses for LSRs submitted via IMA GUI. In the absence of an established PID, KPMG Consulting established a benchmark that 95% of IMA GUI Orders submitted must receive responses (i.e., Firm Order Confirmations or error responses) for LSRs. Of 491 LSRs submitted, 490 (99.8%) received the expected response. See Table 12-15 for additional transaction details.
12-5-4	Qwest provides expected initial Order responses for LSRs submitted via IMA EDI.	Satisfied	Qwest provides expected initial Order responses for LSRs submitted via IMA EDI. In the absence of an established PID, KPMG Consulting established a benchmark that 95% of IMA EDI Orders submitted must receive responses (i.e., Firm Order Confirmations or error responses) for LSRs. Of 9,656 LSRs submitted, 9,588 (99.3%) received the expected response. ²⁷ During initial testing, HPC experienced several problems with receiving expected Order responses and, as a result, issued Exceptions 2029, 2031, 2032, 2033, 2034, 2036, and 2037. Each Exception identified issues surrounding missing Order responses and/or receiving Order responses in the incorrect sequence. In each case, Qwest implemented

²⁷ Non-flow through resale and UNE-P Orders submitted prior to the resolution of Observation 3001 were excluded from the calculation. See Observation 3001 for additional information.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			system fixes and additional training, as appropriate. HPC continued to monitor these issues and found no recurrences of these problems. See Exceptions 2029, 2031, 2032, 2033, 2034, 2036, and 2037 for additional information on these issues. Exceptions 2029, 2031, 2032, 2033, 2034, 2036, and 2037 are closed. See Table 12-15 for additional transaction details.
12-5-5	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA GUI.	Diagnostic	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA GUI. KPMG Consulting did not assign a result for this criterion because the percentage of rejected LSRs submitted by CLECs (PO-4A) is defined as "diagnostic" only. Therefore, the percentages given below are provided as diagnostic information only. For the Eastern Region, of 198 LSRs submitted, 50 (25.3%) were rejected. For the Central Region, of 120 LSRs submitted, 27 (22.5%) were rejected. For the Western Region, of 173 LSRs submitted, 35 (20.2%) were rejected. See Table 12-16 for additional transaction details.
12-5-6	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA EDI.	Diagnostic	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA EDI. KPMG Consulting did not assign a result for this criterion because the percentage of rejected LSRs submitted by CLECs (PO-4B) is defined as "diagnostic" only. Therefore, the percentages provided below are given as diagnostic information only. For the Eastern Region, of 3,335 LSRs submitted, 1,119 (33.6%) were rejected. For the Central Region, of 3,258 LSRs submitted, 1,318 (40.5%) were rejected. For the Western Region, of 3,063 LSRs submitted, 982 (32.1%) were rejected. See Table 12-16 for additional transaction details.
12-5-7	Qwest systems or representatives provide rejections in response to LSRs	Diagnostic	Qwest systems or representatives provide rejections in response to LSRs submitted via facsimile.

Test Cross-Reference	Evaluation Criteria	Results	Comments
	submitted via facsimile.		<p>KPMG Consulting did not assign an evaluation result for this criterion because the percentage of rejected LSRs submitted by CLECs (PO-4C) is defined as "diagnostic" only.</p> <p>Of 86 LSRs submitted, 30 (34.9%) received unplanned reject responses. These results are provided as diagnostic information only.</p> <p>See Table 12-16 for additional transaction details.</p>
12-5-8	Qwest systems or representatives provide FOC Due Dates consistent with valid CLEC Due Date Requests.	Satisfied	<p>Qwest systems or representatives provide FOC Due Dates consistent with valid CLEC Due Date requests.</p> <p>In the absence of an established PID, KPMG Consulting assigned a benchmark that 95% of FOC Due Dates received are consistent with valid CLEC Due Date requests.</p> <p>A sample of 150 FOCs was examined to determine whether Qwest provides FOC Due Dates consistent with CLEC requests. Eleven transactions were subsequently excluded from the evaluation due to an invalid due date request identified on the LSR.</p> <p>Of the remaining 139 FOCs, 136 (97.8%) had the same due dates that were requested on the corresponding LSR.</p>
12-5-9	Qwest adheres to the original confirmed Due Date provided on the Firm Order Confirmation (FOC).	Diagnostic	<p>Qwest adheres to the original confirmed Due Date provided on the Firm Order Confirmation (FOC).</p> <p>KPMG Consulting did not assign an evaluation result for this criterion because Qwest adherence to original confirmed FOC Due Dates (PO-15) is defined as "diagnostic" only.</p> <p>Of 6,318 Orders evaluated, Qwest averaged .01 due date changes per Order.</p> <p>This data represents due date changes that were visible to the P-CLEC, and does not include Qwest internal SOP due date changes that had no impact on the P-CLEC's committed date. These results are provided as diagnostic information only.</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-5-10	Qwest is able to account for LSRs received electronically.	Diagnostic	Qwest is able to account for LSRs received electronically. KPMG Consulting did not assign an evaluation result for this criterion because LSR accountability by Qwest (PO-10) is defined as "diagnostic" only. Of 10,454 LSRs submitted, 10,454 (100%) were accounted for by Qwest. ²⁸ These results are provided as diagnostic information only.
<i>IMA GUI Order Timeliness</i>			
12-6-1	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to UNE-P and Resale flow-through LSRs submitted via IMA GUI.	Satisfied	Qwest systems provide timely FOCs in response to UNE-P and Resale, flow-through LSRs submitted via IMA GUI. The PID (PO-5A-1)-defined standard is 95% of FOCs returned within 20 minutes. For the Eastern Region, of 30 FOCs received, 30 (100%) were returned within 20 minutes. For the Central Region, of 25 FOCs received, 24 (96.0%) were returned within 20 minutes. For the Western Region, of 30 FOCs received, 30 (100%) were returned within 20 minutes. See Table 12-10 for additional transaction details.
12-6-2	Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to UNE-P and Resale non-flow-through LSRs submitted via IMA GUI.	Satisfied	Qwest systems or representatives provide timely FOCs in response to UNE-P and Resale non-flow-through LSRs submitted via IMA GUI. The PID (PO-5B-1)-defined benchmark is 90% of FOCs returned within 24 to 72 hours, depending on product type. For the Eastern Region, of 37 FOCs received, 36 (97.3%) were returned within the required time period. For the Central Region, of 11 FOCs received, 11 (100%) were returned within the required time period. For the Western Region, of 28 FOCs received, 28 (100%) were returned within the required time period. See Table 12-11 for additional transaction details.

²⁸ Front-end rejects were excluded from the LSR Accountability calculation as defined by the PID.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-6-3	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop, flow-through LSRs submitted via IMA GUI.	Satisfied	<p>Qwest systems provide timely FOCs in response to Unbundled Loop, flow-through LSRs submitted via IMA GUI. The PID (PO-5A-1)-defined standard is 95% of FOCs returned within 20 minutes.</p> <p>For the Eastern Region, of 22 FOCs received, 22 (100%) were returned within 20 minutes.</p> <p>For the Central Region, of 18 FOCs received, 18 (100%) were returned within 20 minutes.</p> <p>For the Western Region, of 23 FOCs received, 23 (100%) were returned within 20 minutes.</p> <p>See Table 12-10 for additional transaction details.</p>
12-6-4	Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop non-flow-through LSRs submitted via IMA GUI.	Satisfied	<p>Qwest systems or representatives provide timely FOCs in response to Unbundled Loop, non-flow-through LSRs submitted via IMA GUI. The PID (PO-5B-1)-defined standard is 90% of FOCs returned within 24 to 72 hours, depending on product type.</p> <p>For the Eastern Region, of 54 FOCs received, 49 (90.7%) were returned within the required time period.</p> <p>For the Central Region, of 37 FOCs received, 34 (91.9%) were returned within the required time period.</p> <p>For the Western Region, of 55 FOCs received, 54 (98.2%) were returned within the required time period.</p> <p>See Table 12-11 for additional transaction details.</p>
12-6-5	Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA GUI.	Satisfied	<p>Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA GUI. The PID (PO-3A-1)-defined standard for LSRs received via IMA GUI and rejected manually is receipt within 12 hours.</p> <p>For 38 manual reject responses received, the average response time was 7.7 hours.</p> <p>See Table 12-12 for additional transaction details.</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-6-6	Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA GUI.	Satisfied	Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA GUI. The PID (PO-3A-2)-defined standard for LSRs received via IMA GUI and auto-rejected is receipt within 18 seconds. Of 74 automated reject responses received, the average response time was 4.8 seconds. See Table 12-12 for additional transaction details.
<i>IMA EDI Order Timeliness</i>			
12-7-1	Qwest systems provide timely Functional Acknowledgements (FAs) in response to IMA EDI LSRs.	Satisfied	Qwest systems provide timely FAs in response to IMA EDI LSRs. In the absence of an established PID, KPMG Consulting assigned a benchmark of average response time for FAs within 18 seconds. During initial testing, KPMG Consulting observed that several FAs for Orders submitted via IMA EDI were received within an average of 7.9 hours. During testing, Qwest notified the P-CLEC that the CLEC interactive agent was not responding to Qwest's interactive agent. KPMG Consulting issued Exception 3032. Qwest subsequently implemented a recovery process in the interactive agent to eliminate this type of delay. KPMG Consulting's retesting found that FAs were received in less than 18 seconds. During subsequent testing, KPMG Consulting observed that of 5,853 FAs received, the average response time was 13.6 seconds. See Exception 3032 for additional information. ²⁹ Exception 3032 is closed. See Table 12-13 for additional transaction details.
12-7-2	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to UNE-P and Resale flow-through LSRs	Satisfied	Qwest systems provide timely FOCs in response to UNE-P and Resale flow-through LSRs submitted via IMA EDI. The PID (PO-5A-2)-defined standard is

²⁹ Functional Acknowledgements received prior to the resolution of Exception 3032 were excluded from the timeliness evaluation.

Test Cross-Reference	Evaluation Criteria	Results	Comments
	submitted via IMA EDI.		<p>95% of FOCs returned within 20 minutes.</p> <p>For the Eastern Region, of 907 FOCs received, 898 (99.0%) were returned within 20 minutes.</p> <p>For the Central Region, of 771 FOCs received, 758 (98.3%) were returned within 20 minutes.</p> <p>For the Western Region, of 903 FOCs received, 902 (99.9%) were returned within 20 minutes.</p> <p>See Table 12-10 for additional transaction details.</p>
12-7-3	Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to UNE-P and Resale non-flow-through LSRs submitted via IMA EDI.	Satisfied	<p>Qwest systems or representatives provide timely FOCs in response to UNE-P and Resale non-flow-through LSRs submitted via IMA EDI.</p> <p>The PID (PO-5B-2)-defined standard is 90% of FOCs returned within 24 to 72 hours, depending on product type.</p> <p>During initial testing, KPMG Consulting observed that several FOC responses for Resale PBX Orders submitted via IMA EDI exceeded the established PID-defined standard. For 39 Orders received, 11 (28.0%) were returned in a time greater than 48 hours after the Orders had been submitted. KPMG Consulting issued Exception 3061.</p> <p>Qwest stated that the causes for the delay in providing FOCs included routing issues and missed FOC commitments by representatives.</p> <p>Qwest acknowledged the disaggregation of PO-5B by interface, product level, and transaction type. Qwest indicated that it would rely on the aggregate Resale and UNE-P non-flow-through timeliness evaluation to demonstrate its ability to provide timely FOCs.</p> <p>During subsequent testing, KPMG Consulting observed that FOC responses for UNE-P and Resale non-flow-through Orders submitted via IMA EDI met the PID-defined standard.</p> <p>For the Eastern Region, of 432 FOCs received, 415 (96.1%) were received within the required time period.</p> <p>For the Central Region, of 354 FOCs</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>received, 338 (95.5%) were received within the required time period.</p> <p>For the Western Region, of 411 FOCs received, 394 (95.9%) were received within the required time period.</p> <p>See Exception 3061 for additional information. Exception 3061 is closed/unresolved.</p> <p>See Table 12-11 for additional transaction details.</p>
12-7-4	<p>Qwest systems provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop flow-through LSRs submitted via IMA EDI.</p>	Satisfied	<p>Qwest systems provide timely FOCs in response to Unbundled Loop flow-through LSRs submitted via IMA EDI. The PID (PO-5A-2)-defined standard is 95% of FOCs returned within 20 minutes.</p> <p>For the Eastern Region, of 259 FOCs received, 258 (99.6%) were received within 20 minutes.</p> <p>For the Central Region, of 283 FOCs received, 282 (99.7%) were received within 20 minutes.</p> <p>For the Western Region, of 216 FOCs received, 215 (99.5%) were received within 20 minutes.</p> <p>See Table 12-10 for additional transaction details.</p>
12-7-5	<p>Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop non-flow-through LSRs submitted via IMA EDI.</p>	Satisfied	<p>Qwest systems or representatives provide timely FOCs in response to Unbundled Loop non-flow-through LSRs submitted via IMA EDI. The PID (PO-5B-2)-defined standard is 90% of FOCs returned within 24 to 72 hours, depending on product type.</p> <p>For the Eastern Region, of 530 FOCs received, 515 (97.2%) were received within the required time period.</p> <p>For the Central Region, of 483 FOCs received, 476 (98.6%) were received within the required time period.</p> <p>For the Western Region, of 504 FOCs received, 493 (97.8%) were received within the required time period.</p> <p>See Table 12-11 for additional transaction details.</p>
12-7-6	<p>Qwest systems provide timely Firm Order Confirmations (FOCs) in response to LNP flow-through LSRs submitted</p>	Satisfied	<p>Qwest systems provide timely FOCs in response to LNP flow-through LSRs submitted via IMA EDI.</p> <p>The PID (PO-5A-2)-defined standard is</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
	via IMA EDI.		95% of FOCs returned within 20 minutes. Of 69 FOCs received, 69 (100%) were returned within 20 minutes. See Table 12-10 for additional transaction details.
12-7-7	Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to LNP non-flow-through LSRs submitted via IMA EDI.	Satisfied	Qwest systems or representatives provide timely FOCs in response to LNP, non-flow-through LSRs submitted via IMA EDI. The PID (PO-5B-2)-defined standard is 90% of FOCs returned within 24 hours. Of 47 FOCs received, 46 (97.9%) were returned within 24 hours. See Table 12-11 for additional transaction details.
12-7-8	Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA EDI.	Satisfied	Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA EDI. The PID (PO-3B-1)-defined standard for LSRs received via IMA EDI and rejected manually is receipt within 12 hours. During initial testing, KPMG Consulting observed LSRs received via IMA EDI and rejected manually that exceeded the established PID-defined benchmark. Of 235 manual reject responses received, 63 (26.8%) were returned with an average response time of 16.2 hours. KPMG Consulting issued Exception 3020. Qwest took the following measures to address the issue: <ul style="list-style-type: none"> • Increased the Interconnect Service Center (ISC) headcount along with process improvements to help achieve in today/out today measures; • Established standard reject reasons and intervals and updated the relevant documentation both internally and externally; • Performed analysis on top reject reasons and identified and implemented system enhancements to reduce the number of manual rejects; and • Conducted additional training in

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>the centers around reject reasons and intervals.</p> <p>During subsequent testing, KPMG Consulting observed that for 285 manual reject responses received, the average response time was 6.1 hours. See Exception 3020 for additional information.³⁰ Exception 3020 is closed.</p> <p>See Table 12-12 for additional transaction details.</p>
12-7-9	Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA EDI.	Satisfied	<p>Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA EDI. The PID (PO-3B-2)-defined standard for LSRs received via IMA EDI with automated rejections is receipt within 18 seconds.</p> <p>During initial testing, KPMG Consulting found that automated rejections received via IMA EDI were not satisfying the PID-defined benchmark. For 1,033 BPL errors, the average response time was 19.1 seconds. KPMG Consulting issued Exception 3105.</p> <p>Qwest stated that KPMG Consulting's calculations included the time the rejections took to move through HPC's systems, while the PID definition included only the time the transaction moved through Qwest's systems. Qwest calculated that the rejections took an average of 2.3 seconds to move through HPC's systems. By subtracting the 2.3 seconds from KPMG Consulting's average of 19.1 seconds, Qwest calculated that its automated rejections met the PID-defined standard with a 16.8-second average. In addition, Qwest presented an alternate calculation, which included HPC internal processing time, but excluded 3 outlier transactions. By excluding the 3 outliers, Qwest calculated that its rejections also met the standard with a 13.4-second average. KPMG Consulting did not exclude the 3</p>

³⁰ Manual rejections received prior to the resolution of Exception 3020 were excluded from the timeliness evaluation.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>outliers from its calculations.</p> <p>At the conclusion of testing, KPMG Consulting determined that for 1,478 automated reject responses received, the average response time was 16.8 seconds.^{31 32}</p> <p>See Exception 3105 for additional information. Exception 3105 is closed.</p> <p>See Table 12-12 for additional transaction details.</p>
<i>Manual Order Timeliness</i>			
12-8-1	Qwest representatives provide timely Firm Order Confirmations (FOCs) in response to LSRs submitted via facsimile.	Satisfied	<p>Qwest representatives provide timely FOCs in response to LSRs submitted via facsimile.</p> <p>The PID-defined standard is 90% of FOCs returned within the standard FOC interval by product category for PID PO-5B plus 24 hours.</p> <p>During initial testing, KPMG Consulting observed that FOCs LSRs received via facsimile were not satisfying the PID-defined benchmark. Of 32 FOCs received on manual LSRs, 6 (18.8%) were received in a time greater than the standard FOC interval plus 24 hours from Order submission. KPMG Consulting issued Exception 3117.</p> <p>Qwest identified a gap in its process for releasing FOCs in Interconnect Imaging Solutions (IIS), the system Qwest uses for this type of Order. According to Qwest, the SDCs who processed these Orders did not complete the final step of the process that releases the FOCs. Qwest implemented enhanced quality reviews, coaching, and continued monitoring of the release process.</p> <p>During subsequent testing, KPMG Consulting found that of 23 FOCs received, 22 (95.7%) were returned within standard FOC interval by product category for PID PO-5B plus 24 hours.</p> <p>See Exception 3117 for additional information. Exception 3117 is closed.</p>

³¹ Forty-nine transactions were excluded from the timeliness evaluation due to invalid start/stop times, as defined by the PID.

³² Automated rejections that were received prior to the resolution of Exception 3021 were excluded from the timeliness evaluation.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			See Table 12-11 for additional transaction details.
12-8-2	Qwest representatives provide timely LSR Rejections (Errors) in response to LSRs submitted via facsimile.	Satisfied	Qwest representatives provide timely LSR Rejections (Errors) in response to LSRs submitted via facsimile. The PID (PO-3C)-defined standard for LSRs submitted via facsimile and rejected is receipt within 24 hours. Of 30 manual reject responses received, the average response time was 6.5 hours. See Table 12-12 for additional transaction details.
Jeopardy Notification			
12-9-1	Qwest provides Jeopardy Notices in advance of the due date for Resale products and services.	Unable to Determine	Qwest provides Jeopardy Notices in advance of the due date for Resale products and services. The PID (PO-8)-defined standard is parity with Retail service. During the evaluation period, Qwest did not issue any Jeopardy Notices for Resale products and services in response to test bed transactions or commercial observations. Therefore, KPMG Consulting's results are inconclusive.
12-9-2	Qwest provides Jeopardy Notices in advance of the due date for UNE-P products.	Unable to Determine	Qwest provides Jeopardy Notices in advance of the due date for UNE-P products. The PID (PO-8)-defined standard is parity with retail service. During the evaluation period, Qwest did not issue any Jeopardy Notices for UNE-P products and services in response to test bed transactions or commercial observations. Therefore, KPMG Consulting's results are inconclusive.
12-9-3	Qwest provides Jeopardy Notices in advance of the due date for Unbundled Loop products.	Satisfied	Qwest provides Jeopardy Notices in advance of the due date for Unbundled Loop products. The PID (PO-8)-defined standard is parity with Retail service. In the Eastern region, for 25 Jeopardy Notices received, the average response time was 4.3 days in advance of the due date, compared to an average of 3.9 days for Retail. In the Central region, for 12 Jeopardy

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>Notices received, the average response time was 5.4 days in advance of the due date, compared to an average of 8.6 days for Retail.</p> <p>In the Western region, for 12 Jeopardy Notices received, the average response time was 6.3 days in advance of the due date, compared to an average of 3.6 days for Retail.</p> <p>The initial results from the dual statistical test described in the MTP Appendix G indicated parity performance for the Eastern and Western regions, but a conflicting result for the Central region. This issue was presented to the ROC TAG for consideration on March 21, 2002, and the TAG concluded the issue should be closed as a pass³³.</p>
12-9-4	Qwest systems or representatives provide timely Jeopardy notices for Resale products and services.	Not Satisfied	<p>Qwest systems or representatives provide timely Jeopardy notices for Resale products and services.</p> <p>The PID (PO-9)-defined standard is parity with Retail service.</p> <p>During testing, KPMG Consulting identified 8 missed resale Orders for which no jeopardy notice was received by the P-CLEC. The dual statistical test for the PO-9 PID resulted in a "no decision" for this PID. Per the MTP guidelines, KPMG Consulting submitted this issue to the attention of the TAG, whose discussion resulted in an impasse. Subsequently, the Steering Committee determined that Qwest should receive a failure for this PID.</p>
12-9-5	Qwest systems or representatives provide timely Jeopardy notices for UNE-P.	Not Satisfied	<p>Qwest systems or representatives provide timely Jeopardy notices for UNE-P.</p> <p>The PID (PO-9)-defined standard is parity with Retail service.</p> <p>During testing, KPMG Consulting identified 11 missed UNE-P Orders for which no jeopardy notice was received by the P-CLEC. The dual statistical test for the PO-9 PID resulted in a "no decision" for this PID. Per the MTP guidelines, KPMG Consulting submitted this issue to the attention of</p>

³³ See Observation 3104 for additional information.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			the TAG, whose discussion resulted in an impasse. Subsequently, the Steering Committee determined that Qwest should receive a failure for this PID.
12-9-6	Qwest systems or representatives provide timely Jeopardy notices for Unbundled Loop products.	Satisfied	<p>Qwest systems or representatives provide timely Jeopardy Notices for Unbundled Loop products. The PID (PO-9)-defined standard is parity with Retail service.</p> <p>In the Eastern region, for 49 Order due dates missed, the percentage of Jeopardy Notices received in advance of the due date was 14%, compared to 10% for Retail.</p> <p>In the Central region, for 2 Order due dates missed, the percentage of Jeopardy Notices received in advance of the due date was 100%, compared to 19% for Retail.</p> <p>In the Western region, for 12 Order due dates missed, the percentage of Jeopardy Notices received in advance of the due date was 8%, compared to 8% for Retail.</p> <p>The initial results from the dual statistical test described in MTP Appendix G indicated parity performance for the Eastern and Central regions, but a conflicting result for the Western region. This issue was presented to the ROC TAG for consideration on March 21, 2002, and the TAG concluded the issue should be closed as a pass³⁴.</p>
<i>Completion Notification</i>			
12-10-1	Qwest systems or representatives provide Service Order Completions (SOCs) in response to completed Orders.	Satisfied	<p>Qwest systems or representatives provide SOC's in response to completed Orders.</p> <p>In the absence of an established PID, KPMG Consulting assigned a benchmark of 95% of expected SOC receipt. Of 5,274 LSRs submitted for which a SOC was expected, 5,243 (99.4%) received the expected response. During initial testing, HPC observed several problems regarding completion notifications and, therefore, issued Exceptions 2035 and 2068.</p>

³⁴ See Observation 3104 for additional information.

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>In Exception 2035, HPC said that when ordering UNE-Loop products, Qwest sent Status Update (SU) notifications indicating that HPC's Order had completed and been "Posted to be billed" for Orders that had either a) received an ISC-generated FATAL reject or b) had not received a completion notification. As a result of the Exception, Qwest indicated that a system defect had been fixed and personnel training had been conducted to prevent the situation from re-occurring. Upon retest, HPC did not experience further problems of this kind, and the Exception was closed. See Exception 2035 for additional information.</p> <p>HPC also experienced problems with missing completion notifications during testing, and consequently, issued Exception 2068. In response, Qwest categorized the Orders with missing completion notifications into 14 distinct categories and addressed each category separately. Upon retest, HPC did not experience problems with missing completion notifications. See Exception 2068 for additional information. Exception 2068 is closed. See Table 12-19 for additional transaction details.</p>
12-10-2	Qwest systems or representatives provide timely Service Order Completions (SOCs) in response to LSRs submitted via IMA GUI.	Diagnostic	<p>Qwest systems or representatives provide timely SOC's in response to LSRs submitted via IMA GUI. KPMG Consulting did not assign an evaluation result for this criterion because SOC timeliness (PO-6A) is defined as "diagnostic" only. KPMG Consulting did not have GUI SOC receipt time data, which is a critical component for the calculation of this PID. Therefore, KPMG Consulting was unable to test this evaluation criterion.</p>
12-10-3	Qwest systems or representatives provide timely Service Order Completions (SOCs) in response to LSRs submitted via IMA EDI.	Diagnostic	<p>Qwest systems or representatives provide timely SOC's in response to LSRs submitted via IMA EDI. KPMG Consulting did not assign an evaluation result for this criterion because SOC timeliness (PO-6B) is</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
			defined as "diagnostic" only. This calculation cannot be performed solely using P-CLEC data. Qwest Service Order dates and times were derived using Qwest provided data. This data was used to calculate the result for this performance measure. For 3,927 SOCs received, the average response time was 262 minutes.
12-10-4	Qwest systems or representatives provide timely Billing Completion Notifications (BCNs) in response to LSRs submitted via IMA GUI.	Diagnostic	Qwest systems or representatives provide timely BCNs in response to LSRs submitted via IMA GUI. KPMG Consulting did not assign an evaluation result for this criterion because Billing Completion Notification timeliness (PO-7A) is defined as "diagnostic" only. ³⁵ GUI BCN data was not available to KPMG Consulting for the calculation of this PID. Therefore, KPMG Consulting was unable to test this evaluation criterion.
12-10-5	Qwest systems or representatives provide timely Billing Completion Notifications (BCNs) in response to LSRs submitted via IMA EDI.	Diagnostic	Qwest systems or representatives provide timely BCNs in response to LSRs submitted via IMA EDI. KPMG Consulting did not assign an evaluation result for this criterion because Billing Completion Notification timeliness (PO-7B) is defined as "diagnostic" only. ³⁶ Of 4,806 BCNs expected, 4,010 (83.4%) were received on time. This included 557 BCNs not received, which, for this analysis, were counted as late. Qwest acknowledged that it uncovered a BCN transmission process issue. Qwest advised that the problem was corrected in late February 2002. KPMG Consulting confirmed that it received timely BCNs on 102 out of 102 (100%) of the Orders issued subsequent to this fix.

³⁵ The PID defines timely BCNs as those made available (for CLECs) or posted in the billing system (for Qwest Retail) in five business days.

³⁶ The PID defines timely BCNs as those made available (for CLECs) or posted in the billing system (for Qwest retail) in five business days.

Test Cross-Reference	Evaluation Criteria	Results	Comments
<i>Consistency with Retail Capability</i>			
12-11-1	Product and feature offerings are defined and documented for both Retail and Wholesale services.	Satisfied	<p>Product and feature offerings are defined and documented for both Retail and Wholesale services.</p> <p>Qwest product and feature offerings can be accessed at the following Web site addresses:</p> <p>UNE-P – http://www.qwest.com/wholesale/pcat/une.html</p> <p>Resale – http://www.qwest.com/wholesale/pcat/resalegeneral.html</p> <p>Retail (Business) – http://www.qwest.com/smallbusiness/products/index.html</p> <p>Retail (Residential) – http://www.qwest.com/residential/products/index.html</p> <p>Qwest made several clarifications to their product and feature ordering documentation in response to questions from HPC during the transaction portion of this test.</p> <p>KPMG Consulting reviewed the product and feature offerings available on Qwest's wholesale and Retail Web sites and found them to be defined and documented.</p>
12-11-2	Product and feature offerings are comparable for both Retail and Wholesale services.	Satisfied	<p>Product and feature offerings are comparable for both Retail and Wholesale services.</p> <p>In response to issues observed by KPMG Consulting during initial testing, Qwest made additions to its resale product and feature documentation regarding the availability of Business Complete a Call and Call Queuing.</p> <p>KPMG Consulting reviewed and compared the product and feature offerings on Qwest's Wholesale and Retail Web sites. KPMG Consulting subsequently found Qwest's product and feature offerings for resale and UNE-P to be comparable to those for Retail operations.³⁷</p>

³⁷ As there is no retail analog for UNE-L Wholesale services, this comparison could not be made.

Test Cross-Reference	Evaluation Criteria	Results	Comments
12-11-3	Pre-Order and Order capabilities are functionally equivalent for both Retail and Wholesale services.	Satisfied	<p>Pre-Order and Order capabilities are functionally equivalent for both Retail and Wholesale services.</p> <p>KPMG Consulting compared the Ordering capabilities for the following products/features:</p> <ul style="list-style-type: none"> • New Line / New TN; • Call Waiting; • Caller ID; • Number Blocking; • Custom / Vanity Number; and • DSL. <p>The Pre-Order transactions examined in this comparison were those which were used to submit an Order for the products and features listed above, specifically³⁸:</p> <ul style="list-style-type: none"> • Validate Customer Address (AVQ); • Obtain Customer Service Record (CSR); • Reserve Telephone Numbers (TNAQ & TNSQ); • Determine Product and Feature Availability (SAQ); • Perform Facility Availability Check (FAQ); • Schedule Appointment (AAQ & ASQ); • Obtain Loop Qualification Information (RLDQ); and • Cancel an Appointment or Reserved TN (CTQ). <p>KPMG Consulting conducted on-site interviews with and observations of various Qwest representatives in Retail residential and small business centers, as well as similar interviews and observations at CLEC Order centers. KPMG Consulting also reviewed the ordering processes used by HPC in its role as the P-CLEC.</p> <p>During observations, KPMG Consulting observed that Qwest Retail representatives did not consistently</p>

³⁸ Those Pre-Order types for which there is no Retail analog were not included in the scope of this test. These include: Validate Customer CFA (CFAQ), Obtain Directory Listing for an Existing UNE-L Customer, Obtain Design Layout Record, and Validate Meet Point (MPQ).

Test Cross-Reference	Evaluation Criteria	Results	Comments
			<p>adhere to the procedure for due date expedites as described on Qwest's Wholesale Web site (http://www.qwest.com/wholesale/clecs/exesclover.html). KPMG Consulting formally identified this issue on March 20, 2002.</p> <p>In response, Qwest indicated its intent to monitor and address improper due date expedites and to enhance the functionality of its Retail Ordering systems to require supervisor authorization for all expedites.</p> <p>In the context of the abovementioned products and features, KPMG Consulting examined the Pre-Order and Order requirements, required customer information, standard intervals, and expedite procedures in the Wholesale and Retail environments and found them to be functionally equivalent.</p>
12-11-4	Qwest-produced measures of Pre-Order/Order performance results for HPC transactions are consistent with KPMG Consulting-produced HPC measures.	Unable to Determine	<p>During the course of KPMG Consulting's comparative analysis of Qwest-produced HPC measures to KPMG Consulting-produced HPC measures, KPMG Consulting formally identified a discrepancy in the reporting of Firm Order Confirmations (FOCs) for PID PO-5. For Test 12, this comparative analysis involved the PO family measures.</p> <p>Based on the completion of the Liberty Consulting re-audit of the PID measures and the resolution of the observation associated with the PO-5 discrepancy, KPMG Consulting concluded that Qwest satisfactorily addressed this issue.</p> <p>Due to human error issues identified in Exception 3120 and Observation 3110 regarding manual processing of data intended for use in PID reporting, KPMG Consulting identified a need for additional retesting.</p> <p>Without further retesting specifically designed to assess the impact of human error on the accuracy and completeness of Qwest's PID reporting, KPMG Consulting is unable to conclude that Qwest satisfied this evaluation criterion. On a focus call held May 24, 2002, Qwest elected not to conduct any</p>

Test Cross-Reference	Evaluation Criteria	Results	Comments
			additional retesting. See Exception 3120 for additional information on these issues. Exception 3120 is closed; Observation 3310 is closed/unresolved.

Table 12-8: Pre-Order Response Timeliness & Time-Outs Received

Pre-Order Type	Interface Type	Total Transactions Sent	Pre-Order Responses Received	Error Responses Received	No Response/Time-outs	Percentage Time-outs/No Responses Received (PID Allows 0.50%)	Average Pre-Order Response Time	PID Base/KPMG Consulting Benchmark
All Types	EDI	17,486	15,858	1,554	74	0.42%	-	0.5% (PID)
	GUI	4,058	3,403	655	0	0.0%	-	
AAQ	EDI	302	275	27	-	-	5.02 sec.	10 sec. (PID)
	GUI	59	58	1	-	-	3.07 sec.	
ASQ	EDI	261	249	12	-	-	3.72 sec.	10 sec. (KPMG Consulting)
	GUI	40	39	1	-	-	1.85 sec.	
AVQ	EDI	7,054	6,908	125	21	0.3%	4.00 sec.	10 sec. (PID)
	GUI	1,138	1,091	47	-	-	2.83 sec.	
CFAQ	EDI	27	19	8	-	-	9.79 sec.	25 sec. (KPMG Consulting)
	GUI	925	780	145	-	-	11.40 sec.	
CSRQ	EDI	4,891	4,326	559	6	0.12%	6.40 sec.	12.5 sec. (PID)
	GUI	1,220	839	381	-	-	4.79 sec.	
CTQ	EDI	227	185	31	11	4.8%	2.90 sec.	Functionality Evaluation Only
	GUI	23	23	-	-	-	0.61 sec.	
DLRQ	EDI	65	31	34	-	-	11.00 sec.	Functionality Evaluation Only
	GUI	5	2	3	-	-	8.50 sec.	
FAQ	EDI	1,509	1,050	438	21	1.4%	15.80 sec.	25 sec. (PID)
	GUI	313	270	43	-	-	15.40 sec.	
FAQ-ADSL	EDI	115	84	31	-	-	9.36 sec.	20 sec. (PID)
	GUI	34	29	5	-	-	10.50 sec.	
MPQ	EDI	150	110	27	13	8.66%	40.56 sec.	Functionality Evaluation Only
	GUI	2	2	-	-	-	46.50 sec.	
RLDQ	EDI	111	28	83	-	-	5.93 sec.	Functionality Evaluation Only
	GUI	24	5	19	-	-	3.20 sec.	
SAQ	EDI	138	137	1	-	-	16.90 sec.	25 sec. (PID)
	GUI	32	30	2	-	-	6.23 sec.	
TNAQ	EDI	1,385	1,299	84	2	0.14%	4.28 sec.	10 sec. (PID)
	GUI	127	126	1	-	-	2.42 sec.	
TNSQ	EDI	1,251	1,157	94	-	-	2.20 sec.	10 sec. (KPMG Consulting)
	GUI	116	109	7	-	-	0.77 sec.	

Table 12-9: Pre-Order Error Message Response Timeliness

Response Type	Interface Type	Average Response Time	Number of Error Responses
Pre-Order Error	GUI	2.43 seconds	655
	EDI	5.37 seconds	1,554

Table 12-10: Firm Order Confirmation (FOC) Timeliness on Flow Through

Region	Product Type	Interface Type	Number of FOCs Received	Number of On-Time FOCs Received	Number/Percentage of FOCs Received On Time	PID Base
All	LNP	EDI	69	69	100%	95% returned within 20 minutes
Eastern	Resale/UNE-P	EDI	907	898	99.01%	
		GUI	30	30	100%	
	UNE-Loop	EDI	259	258	99.61%	
		GUI	22	22	100%	
Central	Resale/UNE-P	EDI	771	758	98.31%	95% returned within 20 minutes
		GUI	25	24	96.00%	
	UNE-Loop	EDI	283	282	99.65%	
		GUI	18	18	100%	
Western	Resale/UNE-P	EDI	903	902	99.89%	
		GUI	30	30	100%	
	UNE-Loop	EDI	216	215	99.54%	
		GUI	23	23	100%	

Figure 12-2: EDI Resale and UNE-P Flow Through

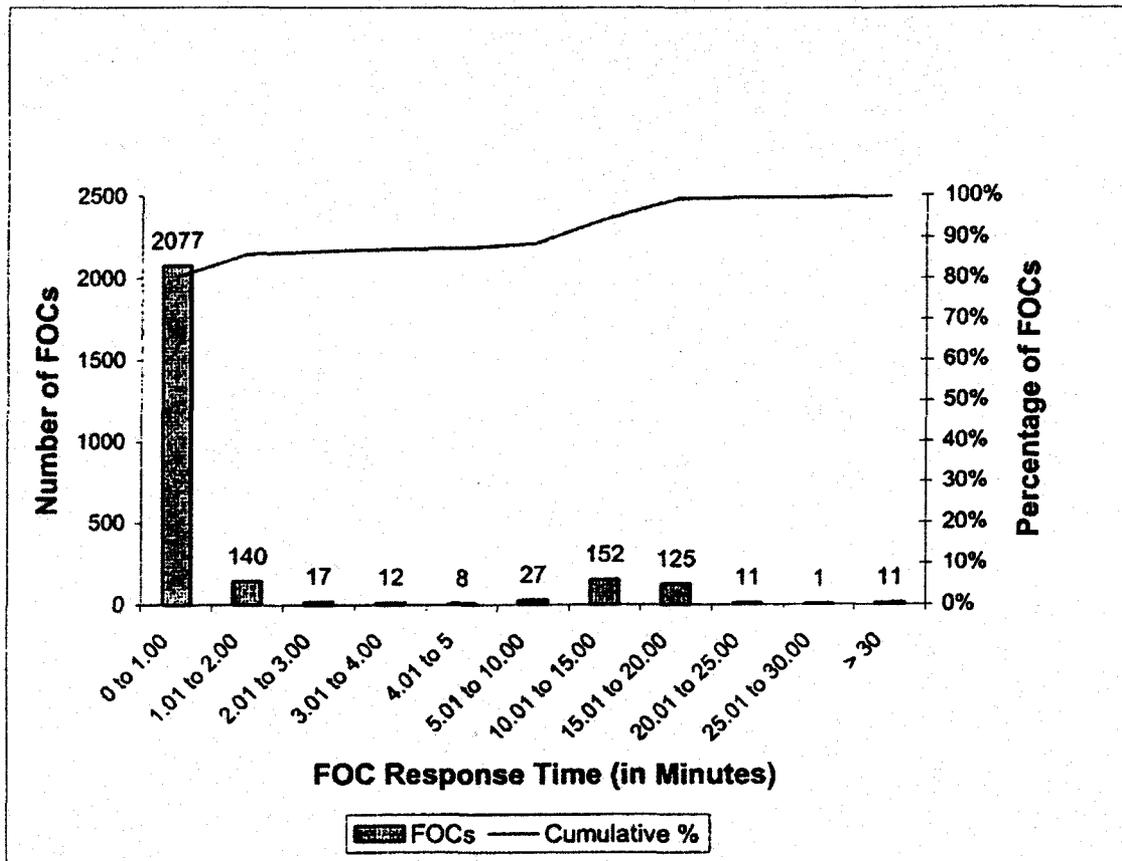


Figure 12-3: GUI Resale & UNE-P Flow Through

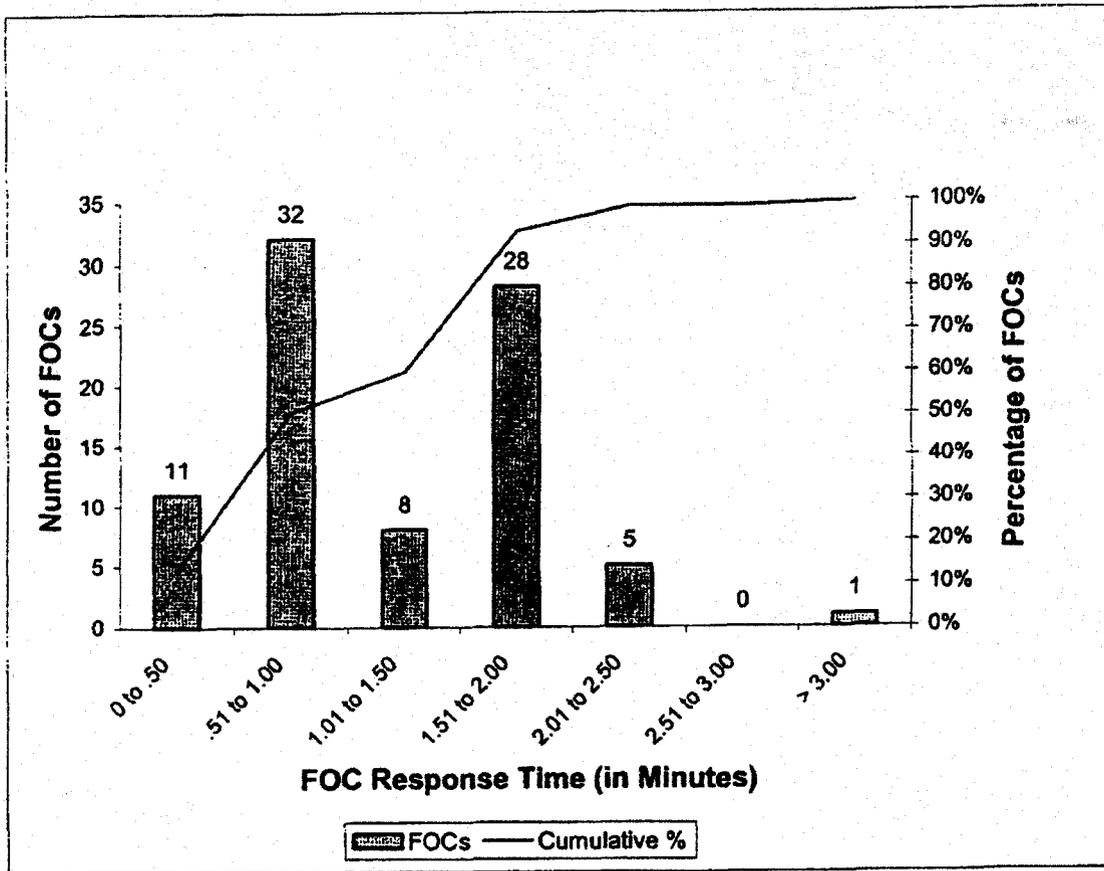


Figure 12-4: EDI UNE-Loop Flow Through

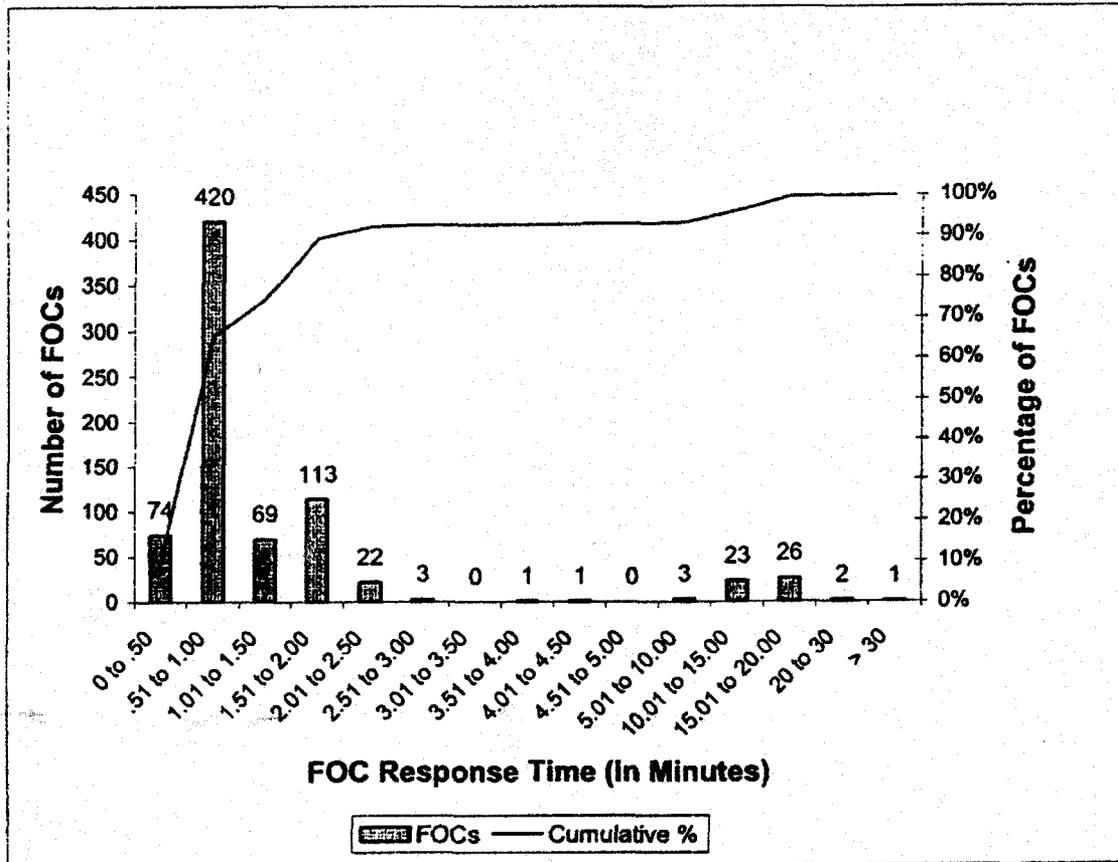


Figure 12-5: GUI UNE-Loop Flow Through

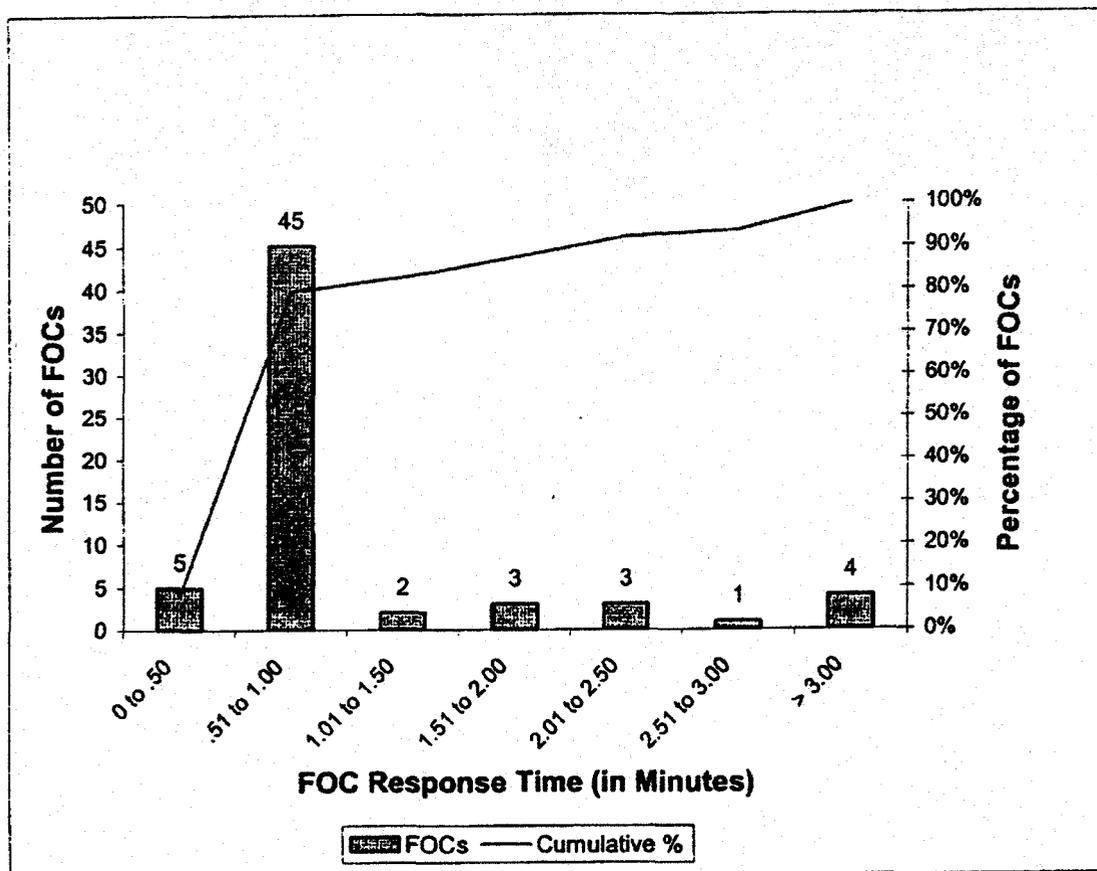


Figure 12-6: EDI LNP Flow Through

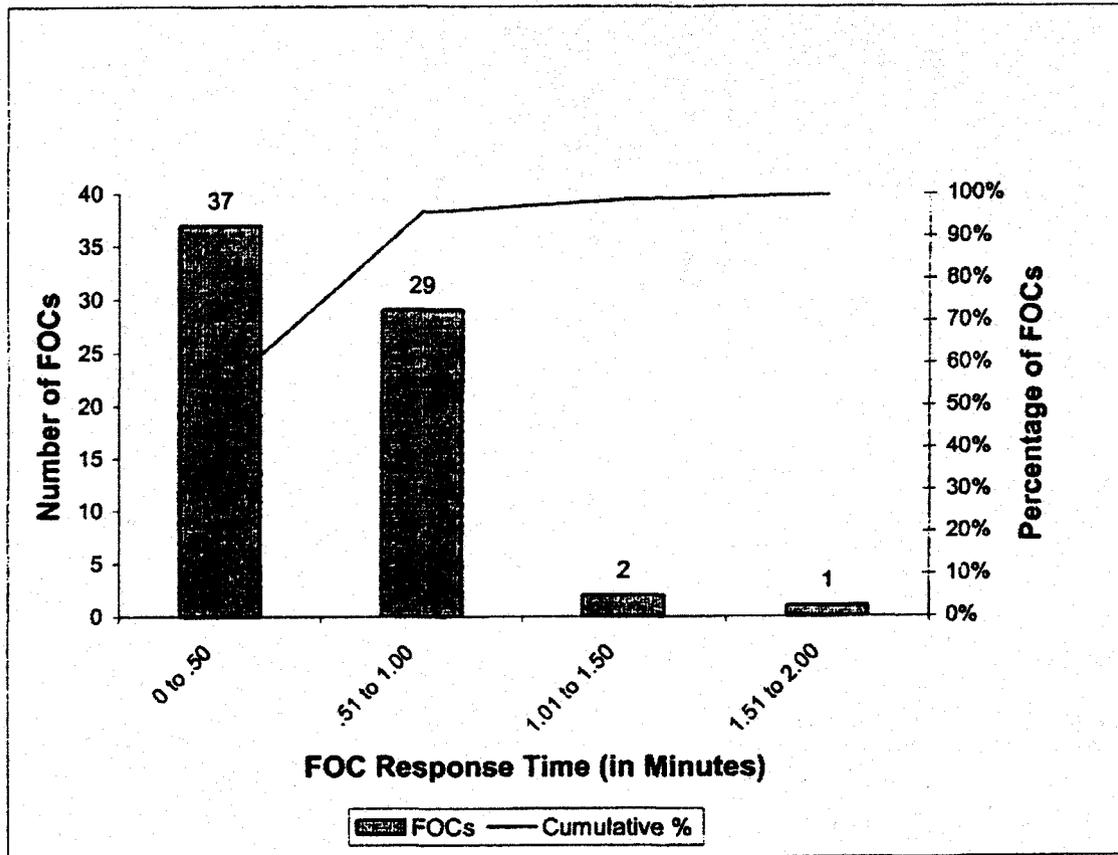


Table 12-11: Firm Order Confirmation (FOC) Timeliness on Non-Flow Through

Region	Product Type	Interface Type	Number of FOCs Received	Number of On-Time FOCs Received	Percentage of FOCs Received on Time	PID Base
All	LNP	EDI	47	46	97.87%	90% returned within 24 hours
All	All	Manual	23	22	95.65%	90% within standard FOC interval plus 24 hours
Eastern	Resale/UNE-P	EDI	432	415	96.06%	90% within standard FOC interval
		GUI	37	36	97.29%	
	UNE-Loop	EDI	530	515	97.16%	
		GUI	54	49	90.74%	
Central	Resale/UNE-P	EDI	354	338	95.48%	
		GUI	11	11	100.00%	
	UNE-Loop	EDI	483	476	98.55%	
		GUI	37	34	91.89%	
Western	Resale/UNE-P	EDI	411	394	95.86%	
		GUI	28	28	100.00%	
	UNE-Loop	EDI	504	493	97.81%	
		GUI	55	54	98.18%	

Figure 12-7: EDI Resale & UNE-P Non-Flow Through

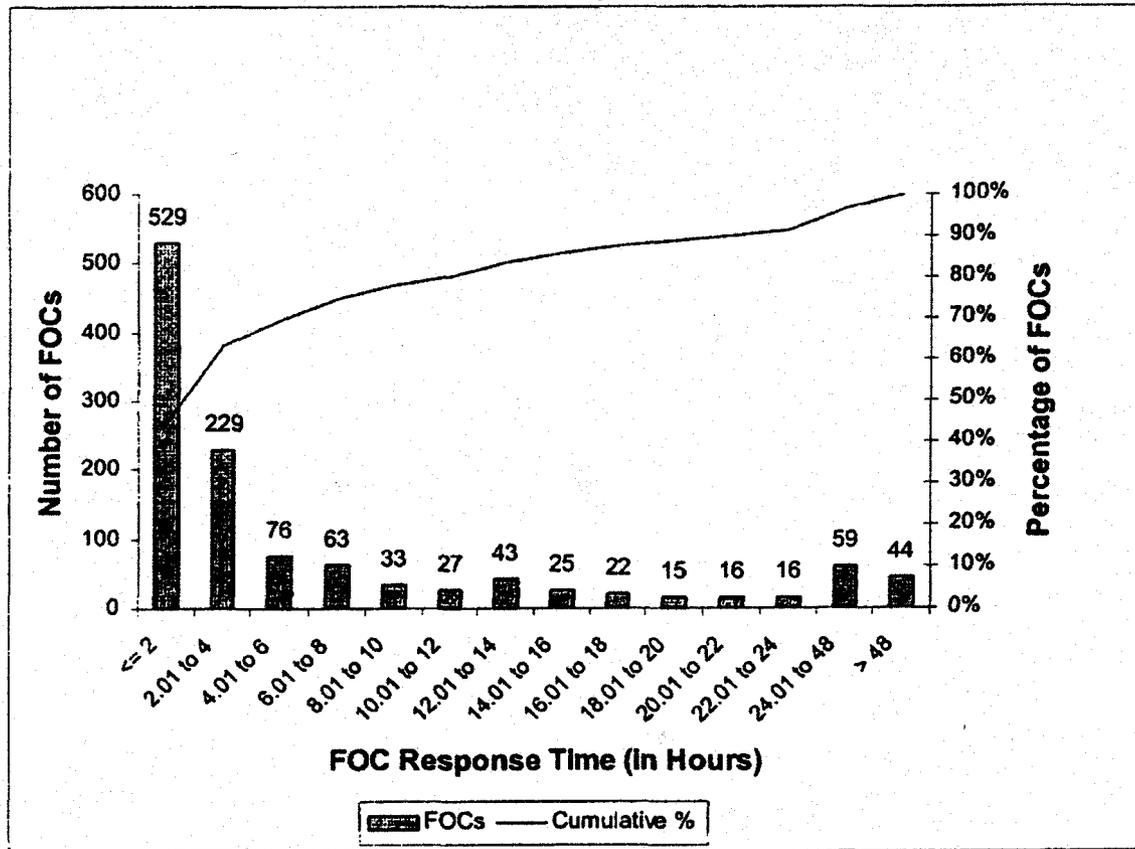


Figure 12-8: GUI Resale & UNE-P Non-Flow Through

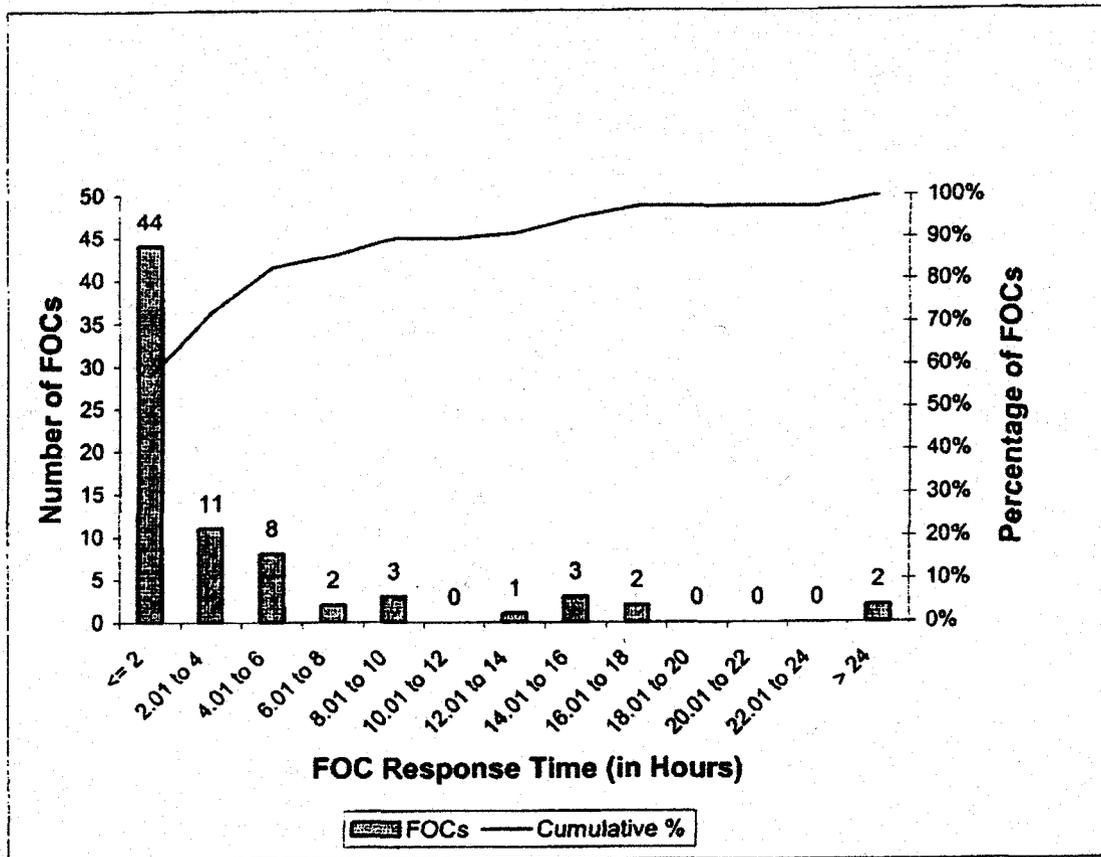


Figure 12-9: EDI UNE-Loop Non-Flow Through

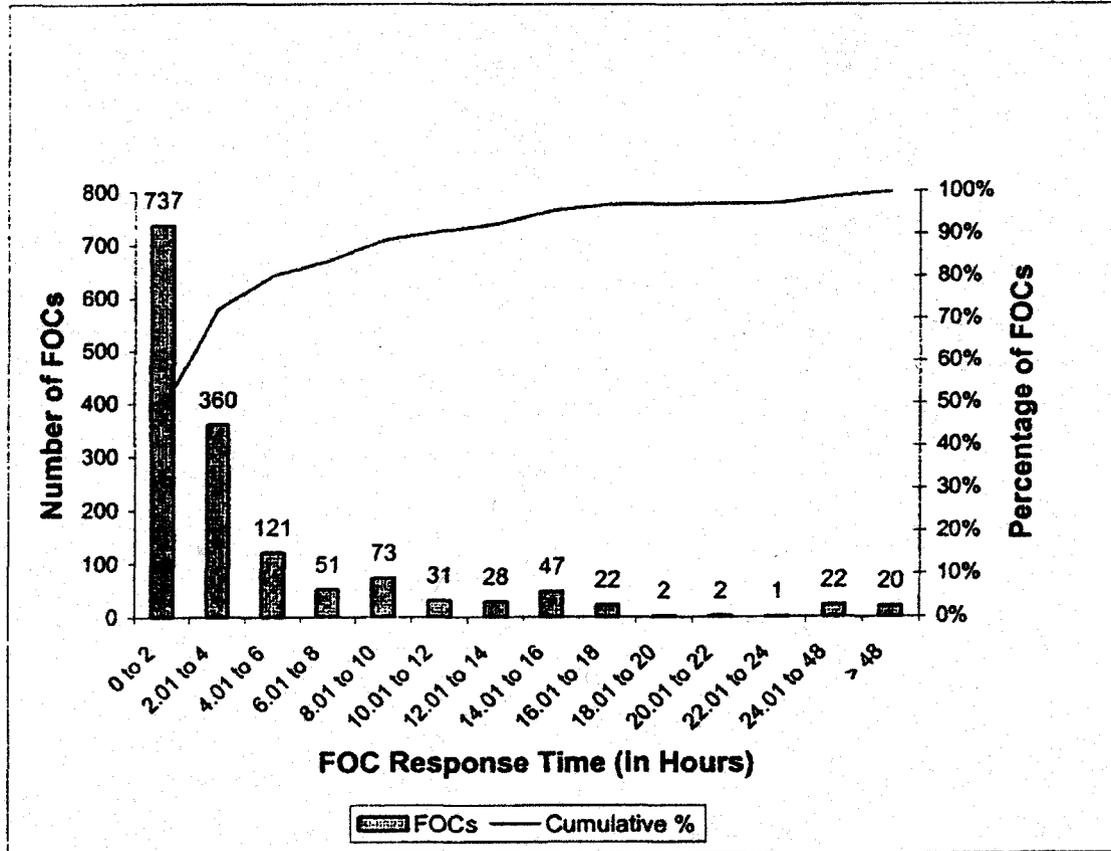


Figure 12-10: GUI UNE-Loop Non-Flow Through

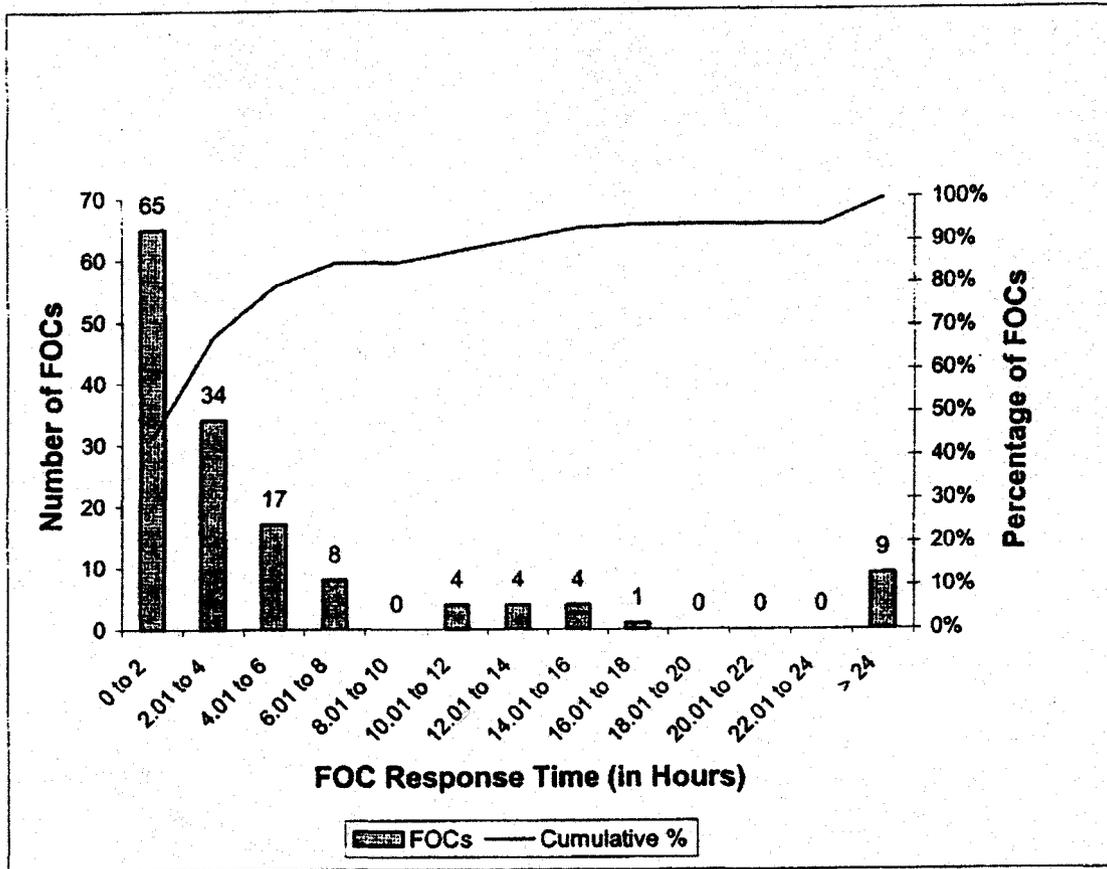


Figure 12-11: EDI LNP Non-Flow Through

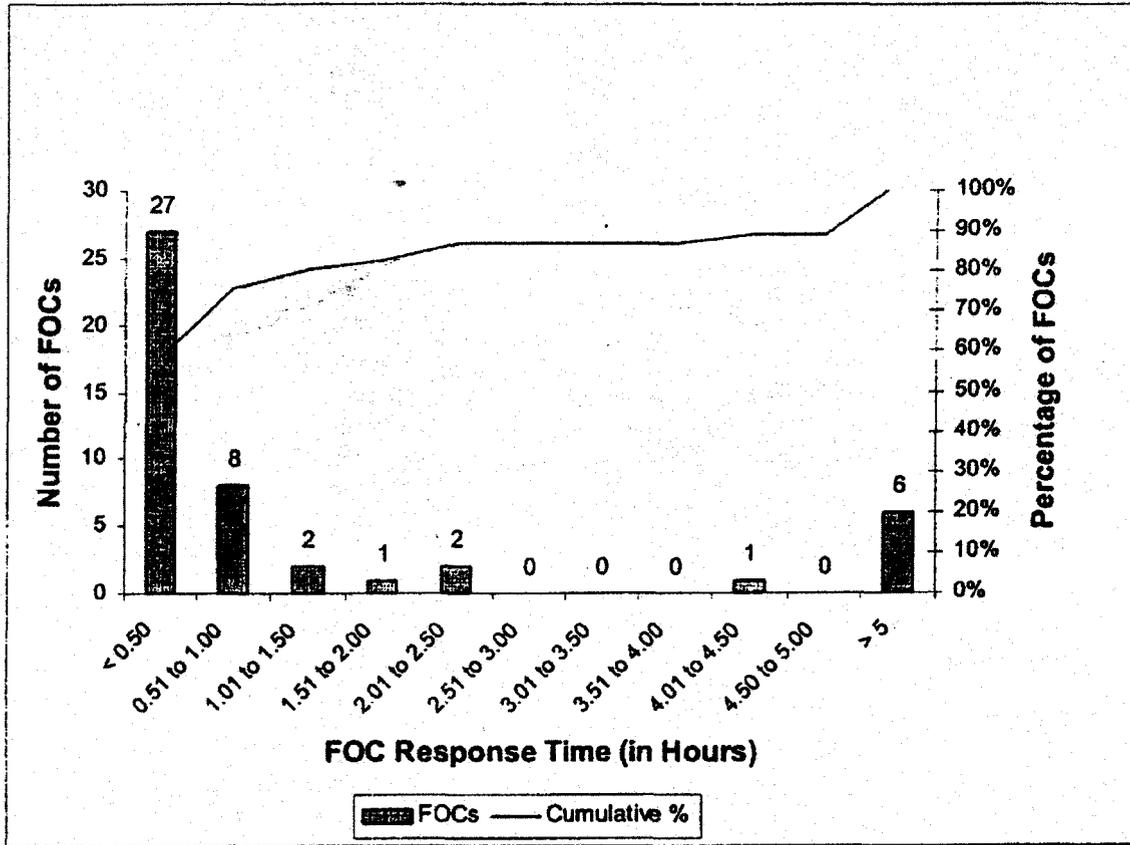


Table 12-12: Local Service Rejection Notice Interval Timeliness

Product Type	PID Base	Interface Type	Average Response Time	Number of Error Responses
LSR received via EDI and rejected manually (ISC Errors)	Returned within 12 hrs.	EDI	6.10 hrs.	285 ³⁹
LSR received via GUI and rejected manually (ISC Errors)		GUI	7.65 hrs.	38
LSR received via EDI and auto rejected (Auto reject)	Returned within 18 sec.	EDI	16.75 sec.	1,478 ^{40 41}
LSR received via GUI and auto rejected (Auto reject)		GUI	4.75 sec.	74
LSR received via facsimile and manually rejected	Returned within 24 hrs.	Manual	6.53 hrs.	30

³⁹ Manual rejections received prior to the resolution of Exception 3020 were excluded from the timeliness evaluation.
⁴⁰ Automated rejections received prior to the resolution of Exception 3021 were excluded from the timeliness evaluation.
⁴¹ Forty-nine transactions were excluded from the timeliness evaluation due to invalid start/stop times, as defined by the PID.

Figure 12-12: EDI (ISC) Manual Rejects

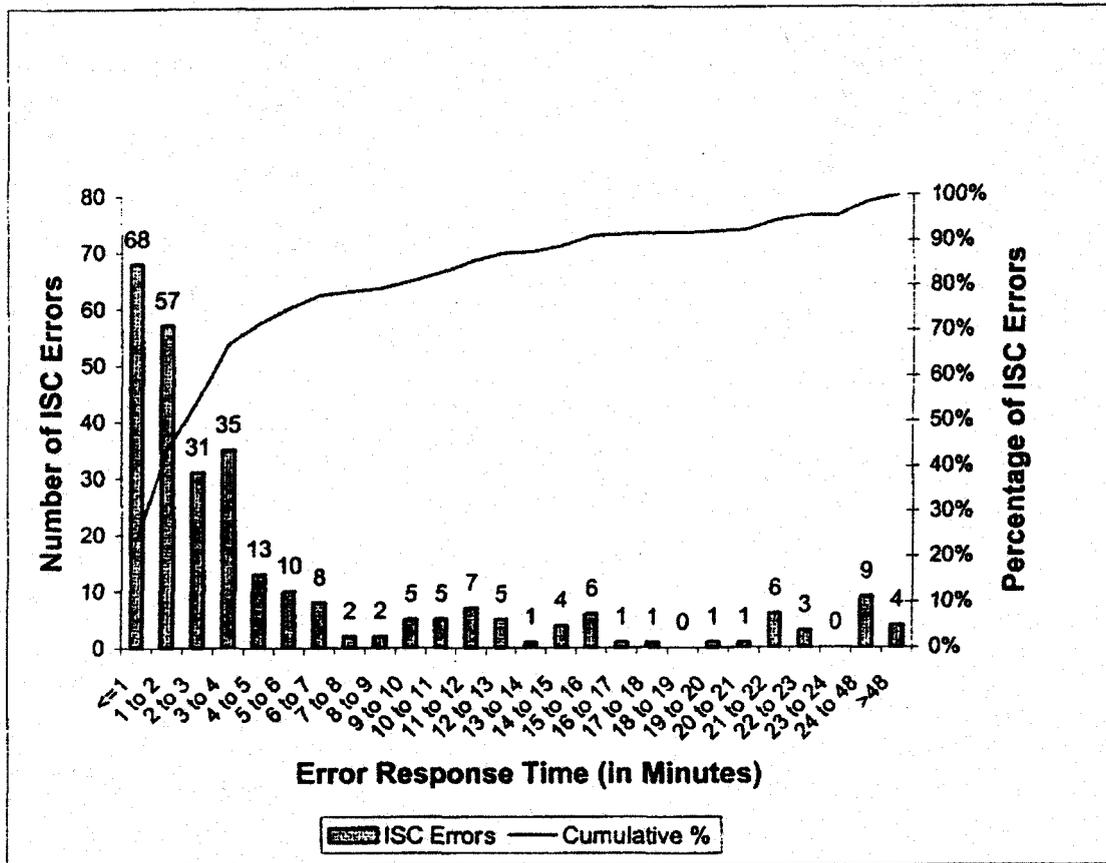


Figure 12-13: GUI (ISC) Manual Rejects

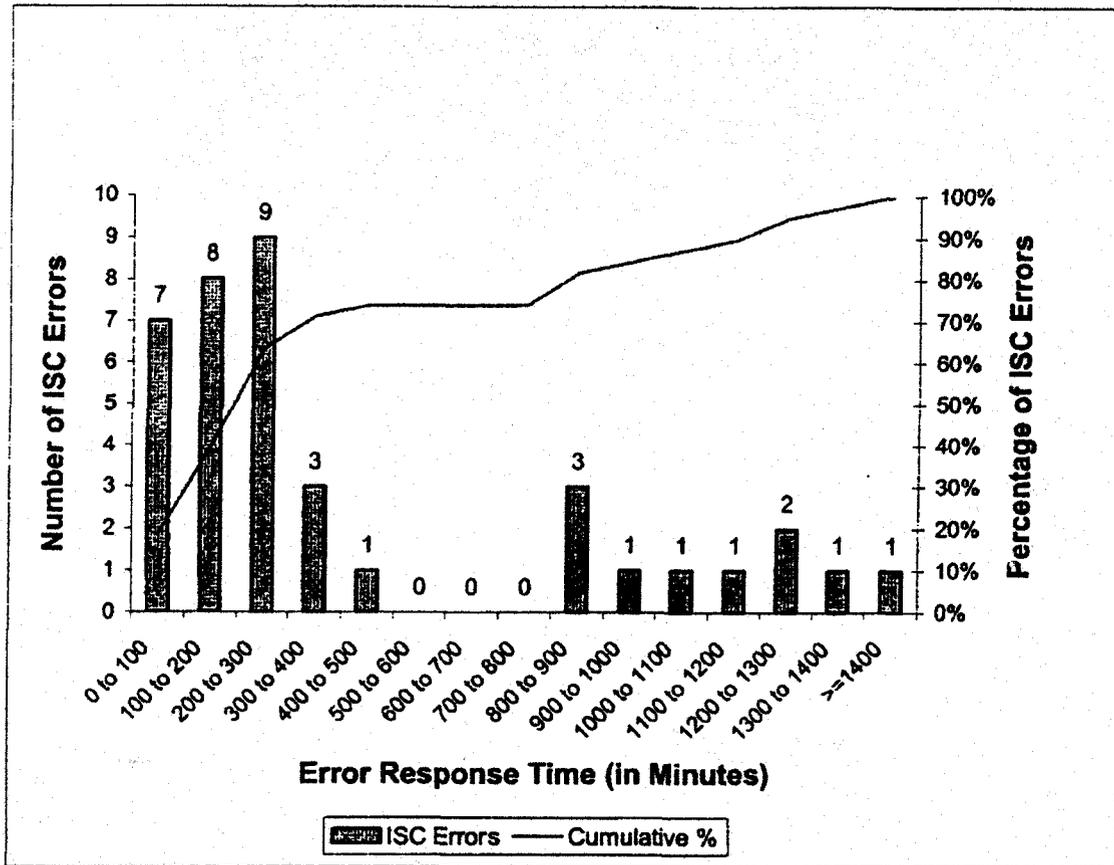


Figure 12-14: EDI (BPL) Auto-Rejects

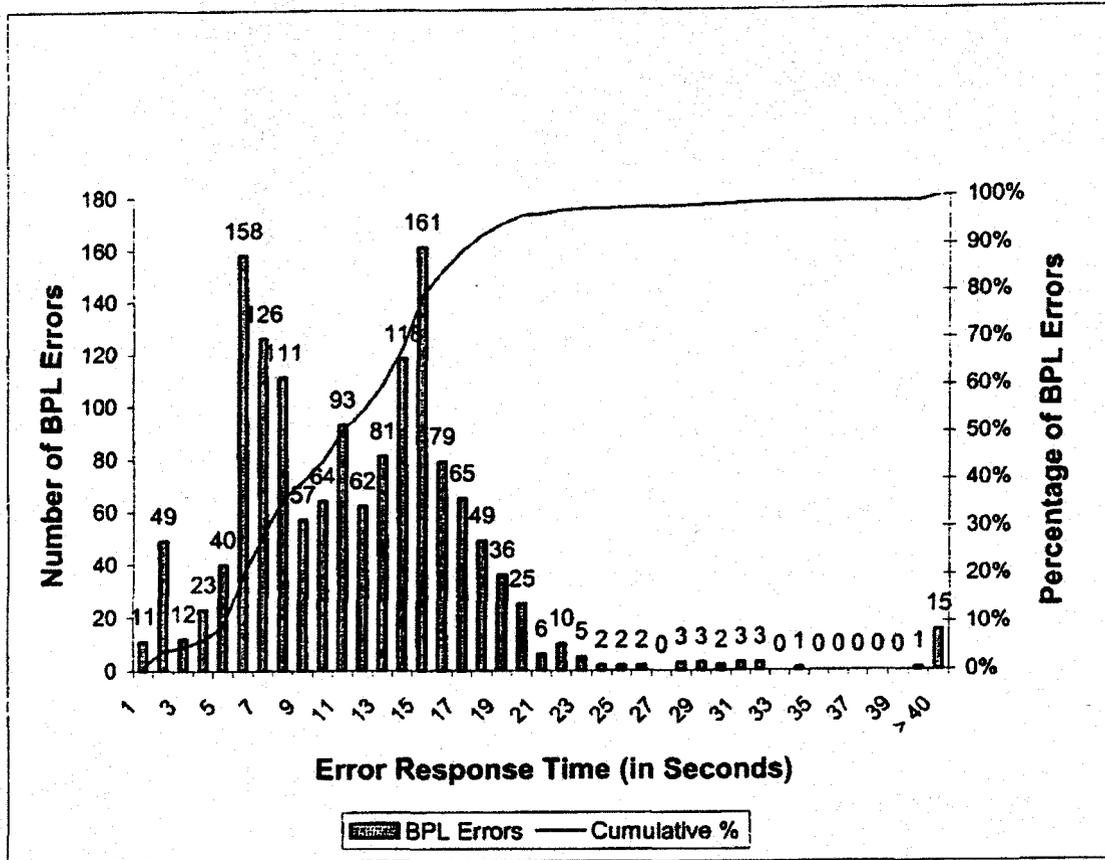


Figure 12-15: GUI (BPL) Auto-Rejects

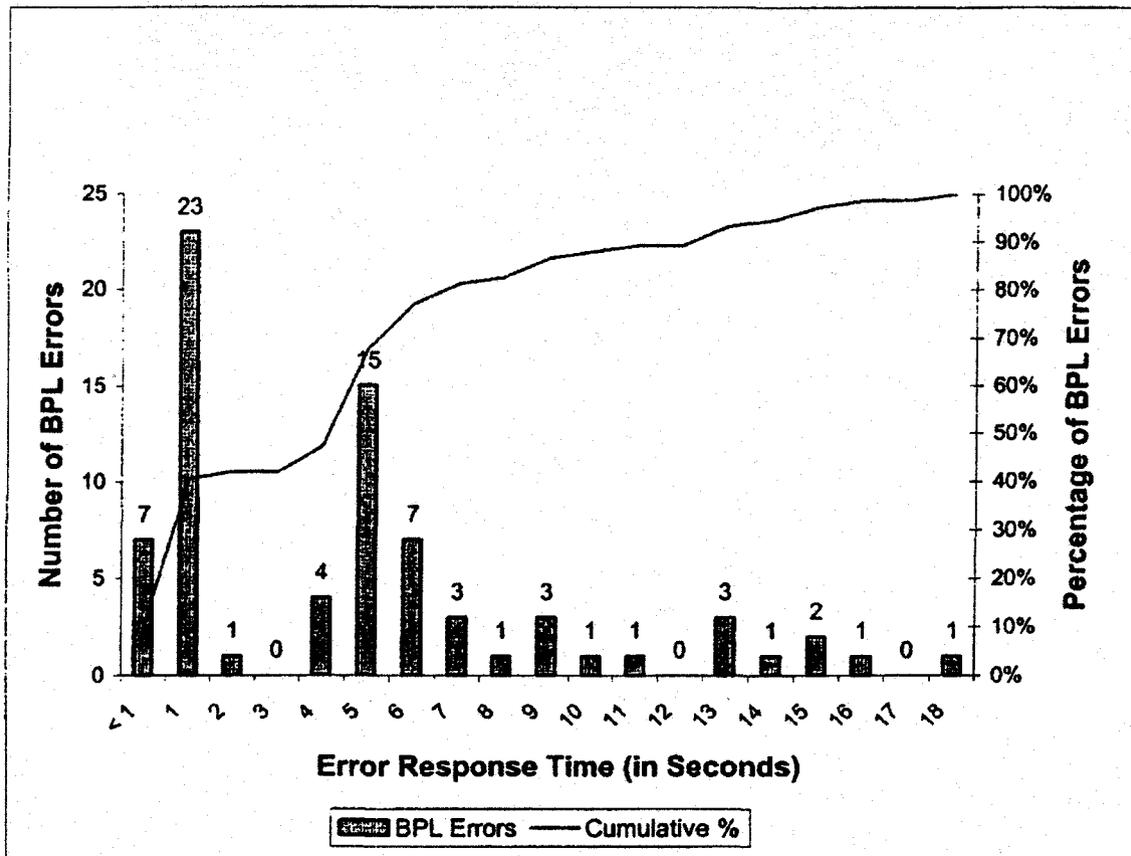


Table 12-13: Functional Acknowledgement Timeliness

	KPMG Consulting Benchmark	Average Response Time (sec)	Number of Responses
FA ^{42 43}	95% returned 18 seconds	13.56 seconds	5,853

⁴² In the absence of an established PID, KPMG Consulting established a benchmark of 95% of orders received FAs within 18 seconds.

⁴³ Functional Acknowledgements received prior to the resolution of Exception 3032 were excluded from the timeliness evaluation.

Figure 12-16: Functional Acknowledgment (FA) Timeliness

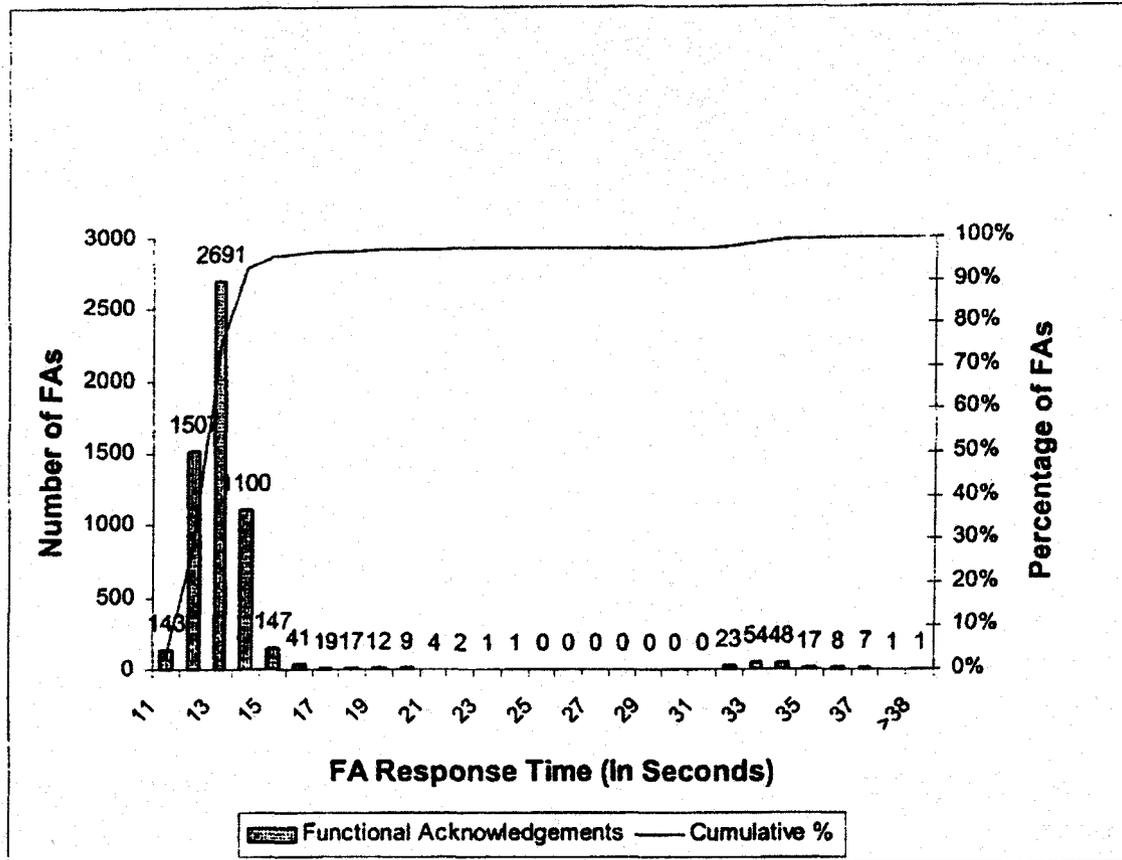


Table 12-15: Expected Order Responses

Flow through/ Non-Flow through	Product Type	Interface Type	Total Transactions Sent	Number of FOC Responses Received	Number of Error Responses	No Response	KPMG Consulting Benchmark	Percentage of Expected Responses Received
All	All Types	EDI	9,656 ⁴⁴	6,169	3,419	68	95%	99.30%
		GUI	491 ⁴⁵	378	112	1	95%	99.79%
		Manual	86	56	30	-	95%	100%
Flow through	All Types	EDI	4947 ⁴⁶	3408	1522	17	95%	99.65%
		GUI	178 ⁴⁷	152	26	-	95%	100%
	Resale/UNE-P	EDI	3501	2581	917	3	95%	99.91%
		GUI	106	85	21	-	95%	100%
	LNP	EDI	88	69	19	-	95%	100%
		GUI	4	4	-	-	95%	100%
	UNE-Loop ⁴⁸	EDI	1358	758	586	14	95%	98.96%
		GUI	68	63	5	-	95%	100%
Non-Flow through	All Types	EDI	4709 ⁴⁹	2761	1897	51	95%	98.92%
		GUI	313 ⁵⁰	226	86	1	95%	99.68%
	Resale/UNE-P	EDI	2401	1197	1174	30	95%	98.75%
		GUI	103	76	27	-	95%	100%
	LNP	EDI	56	47	9	-	95%	100%
		GUI	5	4	1	-	95%	100%
	UNE-Loop	EDI	2252	1517	714	21	95%	99.11%
		GUI	205	146	58	1	95%	99.51%

⁴⁴ Non-flow through resale and UNE-P orders submitted prior to the resolution of Observation 3001 were excluded from the calculation. See Observation 3001 for additional information.

⁴⁵ Seven orders were excluded because of invalid start/stop times. Five orders were excluded because of version errors by the P-CLEC.

⁴⁶ Six orders (4 Resale/UNE-P, 1 UNE-Loop, and 1 LNP) were excluded because of invalid start/stop times, as defined by the PID.

⁴⁷ Two orders were excluded because of invalid start/stop times, as defined by the PID. In addition, one order was excluded because of an invalid test case.

⁴⁸ Two FOCs for UNE-L 2 Wire Analog (Central Region) orders and one FOC for UNE-Loop 2 Wire Analog (Eastern Region) order were counted based on expected flow through indicator rather than on actual flow through indicator. KPMG Consulting did not receive the actual flow through indicator by the cut-off date.

⁴⁹ Non-flow through resale and UNE-P orders submitted prior to the resolution of Observation 3001 were excluded. See Observation 3001 for additional information.

⁵⁰ One order was excluded because of invalid start/stop times, as defined by the PID. In addition, one order was excluded because of an invalid test case.

Table 12-16: Rejected Percentage of LSRs

Region	Interface	Total Reject Percentage	Total Submitted	Number of Rejects
All	Facsimile	34.88%	86	30
Eastern	GUI	25.25%	198	50
	EDI	33.55%	3,335	1,119
Central	GUI	22.50%	120	27
	EDI	40.45%	3,258	1,318
Western	GUI	20.23%	173	35
	EDI	32.06%	3,063	982

Table 12-17: Rejects Received after FOC Received

Interface	Total Reject after FOC Percentage	Total Submitted	Number of Rejects after FOC
GUI	5.10%	490	25
EDI	0.94%	9,656	91
Facsimile	0%	56	0

Table 12-18: Work Completion Notifications Received

KPMG Consulting Benchmark	KPMG Consulting Percentage	Total Orders Submitted Expecting Completion	Number of Completions Received	Orders Missing Completion
95%	99.41%	5,274	5,243	31

12-A. Test Results: POP Functional Evaluation (Test 12)

1.0 Description

The POP Functional Evaluation analyzed Qwest's wholesale pre-order, order, and post-order processes. To evaluate these processes, the P-CLEC submitted transactions over Qwest's wholesale interfaces and recorded the results. The interfaces included:

- Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI);
- IMA Graphical User Interface (GUI); and,
- Manual processes, where applicable.

HP evaluated Qwest functionality provided to CLECs for wholesale pre-order, order, and post-order processing, and assessed how effectively CLECs can use Qwest's Operations Support Systems (OSS) interfaces. The primary focus was on transaction submissions, and receipt of pre-order, order, and post-order responses.

2.0 Method

This section summarizes Qwest's published CLEC-impacting system functionality and processes. The P-CLEC used the published materials as its guidelines when conducting the test execution and analysis.

2.1 Business Process Description

CLECs perform pre-ordering, ordering, and post-ordering functions, to order Unbundled Network Element (UNE) or Resale products and services. Pre-order transactions enable the CLEC to obtain information necessary for the preparation of orders, and prevent delays when processing Local Service Requests (LSRs). For ordering products and services, CLECs prepare and submit LSRs, either electronically or manually, to Qwest. The post-order phase includes errors, jeopardies, status inquiries, status updates, Firm Order Confirmations (FOCs), and Service Order Completions (SOCs).

2.1.1 Pre-Order Transaction Processing

CLECs perform a set of pre-ordering transactions designed to prevent delays when processing an LSR for UNE or Resale products and services. Prior to submitting an LSR, the CLEC completes pre-order functions via Qwest's web-based IMA GUI or an application-to-application EDI interface. For CLECs that order products manually, Qwest's Interconnect Service Center (ISC) can assist with the completion of most pre-order functions.

Pre-order transactions are product specific, and include: Address Validation, Appointment Availability, Appointment Selection, Customer Service Record (CSR) Query, Telephone Number (TN) Reservation, Facility Availability Query, Service Availability Query, Loop Qualification, Connecting Facility Assignment (CFA) Validation, Design Layout Record (DLR) Query, Raw Loop Data Query, Meet Point Query, and Cancellations for Appointments and TN Reservations. Each of these transactions is explained in the segments that follow.



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2.1.1.1 Address Validation

The Address Validation (AVQ) function enables a CLEC to match a customer address (provided by the CLEC) to an address in Qwest's OSS. A valid customer address is required to submit LSRs for products and services. If the customer address on the LSR does not match, the order will be rejected. CLECs can validate up to ten addresses in a work session. For some types of customer addresses, such as residential or small business customers, CLECs may perform address validations by using the customer's existing TN.

2.1.1.2 Customer Service Record (CSR) Query

CLECs may perform a CSR Query (CSRQ) to review a customer's current account (i.e., the products and services to which a customer currently subscribes) when the customer requests existing service changes, or requests a service provider change. Though a CSR Query is not required for all orders, the function enables CLECs to avoid account problems when transferring customers from one provider to another. Reviewing the customer's CSR also allows the CLEC to determine the current status (e.g., "live," "suspend," etc.) of the account.

2.1.1.3 Telephone Number (TN) Reservation

The TN Reservation process allows the CLEC to reserve TNs from a bank of available numbers stored in Qwest's OSS. A TN Reservation is required to order new service, add an additional line to an existing customer account, or change a customer's existing TN. The process is in two steps: 1.) performing the Telephone Number Availability (TNAQ) and, 2.) performing the Telephone Number Selection (TNSQ). Qwest will reject orders that require a TN if the CLEC does not first reserve a number through the TN Reservation pre-order function.

To cancel the TN reservation, the CLEC performs the Cancellation Query (CTQ) for telephone reservations.

2.1.1.4 Facility Availability Query

CLECs use the Facility Availability Query (FAQ) to verify in Qwest's OSS whether facilities currently exist or if new facilities are required to provision a customer's service request. CLECs can use the Facility Availability Query to confirm facilities exist when requesting Design Services, High Capacity Service, POTS conversions to Unbundled Loops, and POTS and ISDN facilities.

CLECs use FAQ to determine if a facility can handle the type and volume of ISDN lines requested, to determine if the loop is qualified to carry DSL traffic, or to determine if the line is qualified for ADSL loop compatibility. The Loop Qualification function is a query only and does not reserve the queried facilities.

2.1.1.5 Service Availability Query

The Service Availability Query (SAQ) function enables the CLEC to confirm that a Qwest Central Office (CO) supports the products, services, and carriers requested by customers served by that CO. Using information from the CLEC's contract and the state in which the services are requested, the



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Service Availability Query function identifies and displays the Universal Service Order Codes (USOCs) that can be resold. If an LSR is submitted with invalid USOCs, the order may be rejected.

2.1.1.6 Appointment Reservation

The Appointment Reservation process allows a CLEC to reserve an appointment date and time for a technician to install requested services at the end-user's premise. The process is in two steps: 1.) performing the Appointment Availability Query (AAQ), and 2.) performing the Appointment Selection (ASQ). To cancel the Appointment reservation, the CLEC performs the Cancellation Query (CTQ) for appointment reservations.

2.1.1.7 Connecting Facility Assignment (CFA) Validation

CLECs use the CFA Validation (CFAQ) pre-order function to determine the CFA availability at a particular location. CLECs can perform a query by cable group, which displays a list of all valid CFAs in a cable group, and identifies both available and unavailable CFAs. CLECs can also query a single CFA to receive information about a particular slot within a cable group.¹

2.1.1.8 Design Layout Record (DLR) Query

A DLR contains technical information describing a Qwest-provided circuit's facilities and terminations. Using the DLR Query (DLRQ) function, a CLEC can input a Circuit ID for which it has control or ownership, and submit a request for the DLR of the circuit. The function allows the CLEC to view the DLR on the screen, and e-mail or print the information.

2.1.1.9 Raw Loop Data Query

The Raw Loop Data Query (RLDQ) enables CLECs to access raw loop data for Qwest facilities. The data is broken out by segment and sub-segment of the loop. The CLEC can perform a query for up to twenty customer TNs. For each working TN, the Raw Loop Data Query displays data for the entire loop, with a section for each loop segment and a subsection for each sub-segment of the loop segment. Additionally, CLECs can perform queries by customer address for assigned or unassigned loops. For assigned loops, the query returns loop information for Qwest-provided TNs and CLEC UNE loops at the customer address. For unassigned loops, the query returns raw loop information for spare loops at the customer address. The Query also displays data for performing calculations and determining whether the loop qualifies to carry DSL service.

2.1.1.10 Meet Point Query

The Meet Point Query (MPQ) pre-order function supports Qwest's Shared Loop service. CLECs can use the Meet Point Query to retrieve a list of between one and five individual meet points, or a range of meet points. IMA does not limit the size of the range. However, due to Qwest system limitations, IMA

¹ Within IMA GUI, if a CLEC queries for a single CFA, the response provides information on the requested CFA along with a list of up to nine subsequent CFAs. Within IMA EDI, the query returns only the information for the specified CFA.



only returns the first ten meet points in a specified range. To see additional meet points in the specified range, the CLEC must adjust the range and submit a new query.

2.1.2 Order Transaction Processing

Qwest offers various ordering methods to submit service requests for UNE, Resale, or Interconnection products and services with associated features and functions. The order process starts with the CLEC's submission of a service request to Qwest. Service requests can be submitted electronically or manually. Electronic access can be achieved three different ways. First, CLECs can dial up and log on to Qwest's wholesale ordering systems from local computers. Second, CLECs can connect directly via a dedicated circuit using IMA EDI. Third, CLECs can use web access to IMA GUI. CLECs without electronic capabilities may order manually via facsimile transmission of service requests.

2.1.2.1 Ordering Interface Options

CLECs may use Telecommunications Information Access Ordering (TELIS) and IMA for the electronic submission of service requests. TELIS allows CLECs to electronically submit Access Service Requests (ASRs) to order interconnection trunking and facilities between it and Qwest.² IMA allows CLECs to submit LSRs via a web-based GUI or through an application-to-application EDI interface. Manual ordering is performed via the submission of facsimiles to Qwest's service centers.

2.1.2.1.1 IMA EDI

CLECs using EDI are able to exchange business information from computer to computer in a pre-defined electronic format. CLECs submit pre-order queries and LSRs electronically to the Qwest IMA EDI interface. Responses to CLEC transactions are returned in an electronic format and may be posted directly to the CLEC's computer systems.

EDI uses clearly specified fields and formatting, eliminating the need for CLECs to enter service request information into multiple systems, and allows for automation of the CLEC's systems. CLECs that use EDI to submit pre-order, order, and post-order transactions to Qwest may choose to integrate their internal systems to eliminate the need to re-enter data from pre-order transaction responses into other pre-order queries or order transactions.³

2.1.2.1.2 IMA GUI

Qwest's IMA GUI allows CLECs to process pre-order, order, and post-order transactions through a series of browser-based screens. The information is exchanged in data file format. IMA GUI does not require the CLEC to develop its own software, and enables the CLEC to access Qwest's OSS via web-based applications.

² Due to the scope of the test, the P-CLEC did not submit ASR orders for products and services. As such, the P-CLEC did not use or evaluate Qwest's TELIS application.

³ As part of its testing activities, HP analyzed the pre-order, order, and post-order integration capabilities of Qwest's IMA 7.0 and IMA 8.0 Releases. The results of HP's analysis are documented in Appendices HP-B and HP-C, respectively.



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2.1.2.1.3 Manual Facsimile Ordering

CLECs that do not have access to Qwest's electronic interfaces may submit LSRs to Qwest via facsimile. A confirmation of receipt will be returned to the CLEC's fax machine. If the appropriate forms or fields are not complete or accurate, the service request will be returned, via a Notice of Rejection, with an explanation of what is needed to process the request. Qwest returns FOCs on manual orders via fax. Order completions are identified on the CLEC's Loss and Completion Reports.

2.1.2.2 Order Process Flows

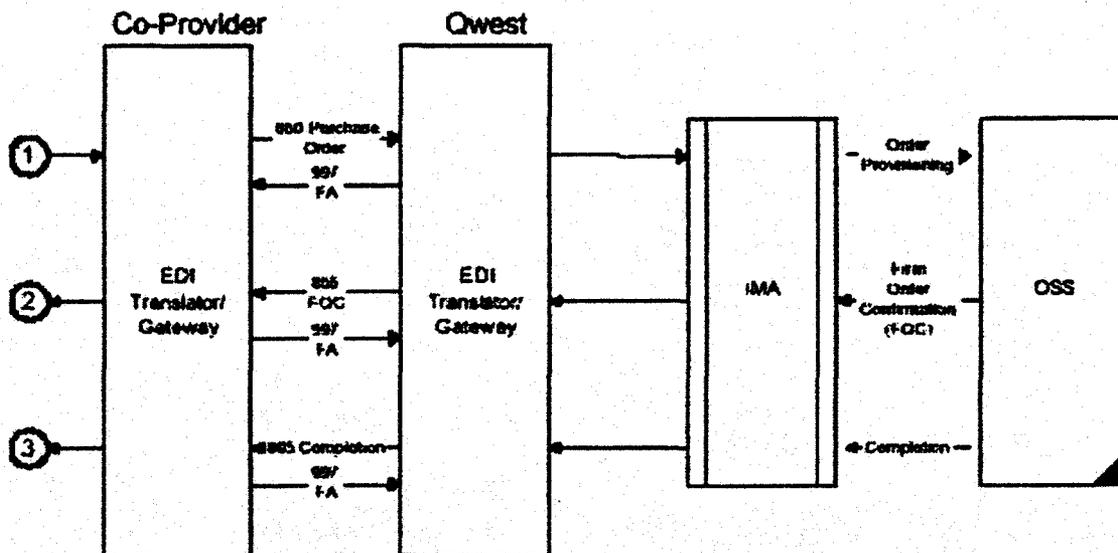
Once CLECs perform the necessary pre-ordering functions and submit LSRs, the orders will follow one of the following order flows: Normal, Exception, Supplemental, and Jeopardy. It is also possible to follow combinations of the flows, depending on the presence and severity of errors.

2.1.2.2.1 Normal Order Flow

If a CLEC submits an LSR that complies with all of Qwest's product requirements and business rules, Qwest processes the order completely. This scenario, called the Normal Order Flow, is error-free, has no jeopardy situations, and no supplemental orders are issued against the original LSR. The processing of the LSR generates a FOC and, eventually, a SOC.

Figure 12A-1.1, below, represents the Normal Order Flow for an LSR submitted via IMA EDI.

Figure 12A-1.1: Normal Order Flow⁴



⁴ This diagram is taken from Qwest IMA 8.0 Disclosure, Appendix I - Generic Order Flow Business Model, dated February 18, 2002. Available at: <http://www.qwest.com/disclosures/netdisclosure409/8/appendixi.pdf>.



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1. A Purchase Order is initiated by the CLEC, translated by the CLEC's Translator/Gateway to an 850 Purchase Order, and passed to the Qwest Translator/Gateway. Qwest's translator performs a syntax check and returns a positive 997 Functional Acknowledgment (FA) to the CLEC. The translator then maps the 850 Purchase Order to an application file format Interconnect Mediated Access (IMA). The IMA gateway is a middleware that performs order content edits and interacts with the Service Order Processor (SOP) in the Operating Support System (OSS). When the resulting service request passes all SOP edits, it becomes a pending order.
2. After the SOP accepts the pending order, a Firm Order Confirmation (FOC) message is sent to IMA. The IMA gateway formats and forwards the FOC message to the EDI Translator/Gateway, where the message is mapped into an 855 FOC and transported to the CLEC's Translator/Gateway. A 997 Functional Acknowledgment will be returned to Qwest to confirm the receipt.
3. Upon completion of the service order request, the SOP generates a Completion Notification to IMA. The IMA formats and forwards the Completion Notification to the Translator/Gateway where the message is mapped to an 865 Completion and transported to the CLEC. A 997 (FA) will be returned to Qwest to confirm the receipt.

2.1.2.2.2 Exception Order Flow

If an LSR fails IMA edits, it follows the Exception Order Flow, and Qwest's systems return the order to the CLEC with one or more error codes. The CLEC must correct the LSR before Qwest systems can process the order to completion. In most cases, a CLEC can either resubmit the request with the same PON and an incremented version number, submit a corrected LSR with a new PON, or call the service center to discuss the errors. When all errors are corrected or cleared, Qwest systems return a FOC to the CLEC. The order then follows the Normal Order Flow. If the resubmitted LSR contains errors, it reverts back to the Exception Order Flow for further correction.

There are three categories of errors or rejects that can occur during the processing of a CLEC's LSR: non-fatal, fatal, and Central Office embargoes. Non-fatal errors are errors that an ISC representative may be able to correct with the CLEC's approval. Fatal Errors, or Fatal Rejects, occur when Qwest does not have enough data, or does not have the correct data, to process a CLEC's service request. Also, if the CLEC's LSR does not conform to certain business rules, the LSR will receive a Business Process Layer (BPL) Fatal error. An LSR that receives a Fatal Error must be re-submitted by the CLEC to be processed and provisioned. The third error category is Central Office embargoes. IMA validates whether the Desired Due Date (DDD) of the LSR falls within a published embargo period for the specified Central Office/Switch by NPA-NXX or CLLI code, and, if it does, IMA rejects with a message detailing the dates of the embargo.

In the Exception Order Flow, orders can receive Fatal or Non-fatal rejections. Fatal errors prevent the order from processing, whereas Non-fatal errors can be fixed and reprocessed. The two types of Fatal errors are system generated and manually generated. To correct a system-generated Fatal error, the CLEC must submit a corrected LSR with the original PON. Or, the CLEC may submit an entirely new PON. Manually generated fatal errors require that the CLEC submit a corrected LSR with the original PON and an incremented version number.

As with Fatal errors, the CLEC can correct Non-fatal errors by sending a revised LSR with the original PON and incremented version number. The CLEC may instead choose to call the ISC to discuss the Non-fatal errors. When discussing the errors with an ISC representative, the representative may choose to request a supplemental order or take a verbal correction from the CLEC. When the ISC



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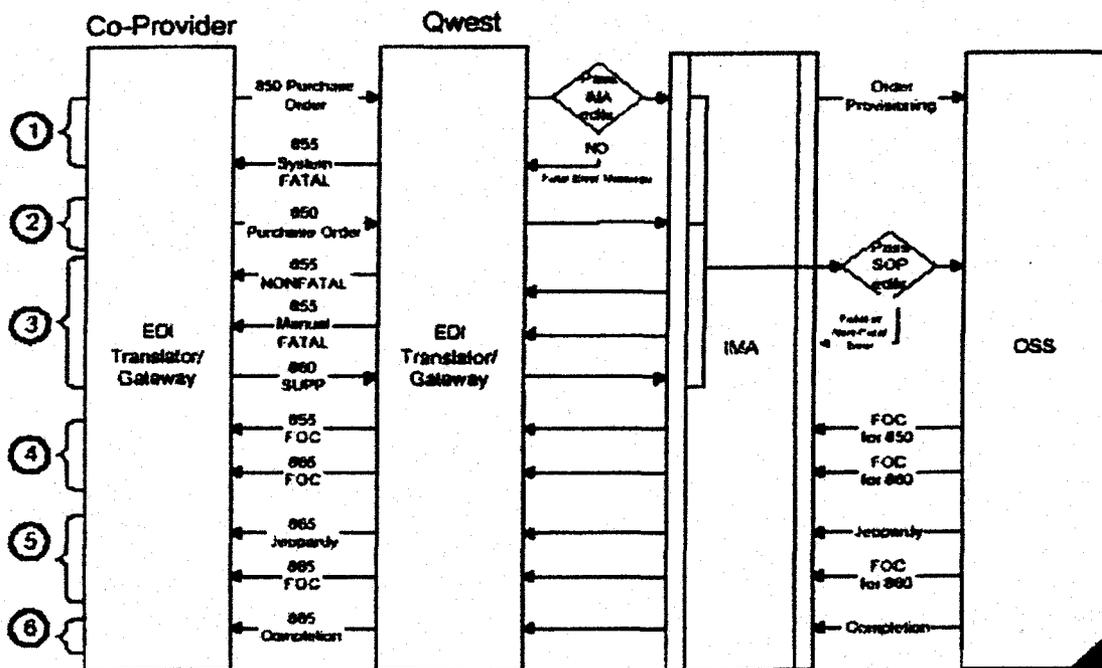
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representative accepts a verbal correction from the CLEC, Qwest returns a FOC to the CLEC with the CFLAG field marked and the corrections noted in the remarks section of the LSR. If the CLEC does not respond to a Non-fatal error received prior to the generation of a FOC within two ISC business hours, or received after generation of a FOC within four ISC business hours, the ISC will send a manually generated Fatal error to the CLEC, and the LSR follows the Exception Order Flow.

Figure 12A-1.2, below, represents the Exception Order Flow for an LSR submitted via IMA EDI.

Figure 12A-1.2: Exception Order Flow³



1. If an 850 Purchase Order fails IMA edits, an 855 System Fatal is returned to the CLEC with one or more fatal error codes.
2. The CLEC, having received the 855 System Fatal, needs to correct the 850 Purchase Order with the same PON and version or submit a new PON, and re-send the 850 Purchase Order as an original request.
3. If an 850 Purchase Order receives a Manual Fatal, the CLEC should resubmit the request with the same PON and an incremented version. If an 850 Purchase Order receives a non-fatal error, the CLEC can either resubmit the request with the same PON and an incremented version or call the service center to discuss the error(s).
4. When the 850 Purchase Order or 860 Supplemental (SUP) is posted to the SOP, an 855 FOC or an 865 FOC will be returned to the CLEC. This confirmation means the SOP has accepted the 850 Purchase Order or 860 Supplemental (SUP) and provisioning of the service has begun.

³ This diagram is taken from Qwest IMA 8.0 Disclosure, Appendix I – Generic Order Flow Business Model, dated February 18, 2002. Available at: <http://www.qwest.com/disclosures/netdisclosure409/8/appendixi.pdf>.



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5. If an error is detected after the FOC is sent, or if there is a problem meeting the commitment on the local service request, an 865 Jeopardy Notice will be sent. If the jeopardy is caused by Qwest conditions, Qwest will negotiate a new due date and send a new FOC. If the jeopardy is caused by non-Qwest conditions, the CLEC must submit a supplemental request to correct the condition with the same PON and incremented version number as the original request. If this jeopardy caused the due date to be missed, the supplemental request must include a revised due date.
6. Upon completion of the service order request, an 865 Completion notice will be sent.

2.1.2.2.3 Supplemental Order Flow

When the CLEC has a need to change an order, it issues a Supplemental LSR, and the order follows the Supplemental Order Flow. CLECs must submit Supplemental LSRs with the original PON and an incremented version number. If the CLEC sends a Supplement prior to receiving a response for the original transaction, the Supplement replaces the original LSR. Consequently, the CLEC receives a FOC on the Supplemental order only. For every Supplemental order that is submitted, Qwest returns a FOC only if the Supplement passes all edits before the receipt of a subsequent Supplemental order. Supplemental orders follow the same steps as the Exception Order Flow or the Normal Order Flow, depending on any errors present in the LSR.

CLECs can submit three types of Supplemental orders to Qwest: cancels, due date changes, and "others." First, a Supplement of "1-Cancel" indicates that Qwest should cancel the pending service request in its entirety. A Supplement of "2 -New Desired Due Date" indicates the pending service request requires only a change in the requested delivery date of the service. A Supplement of "3-Other" indicates CLEC is requesting any other change, or a combination of changes, for the pending service request.

Figure 12A-1.3, below, represents the Supplemental Order Flow for an LSR submitted via IMA EDI.

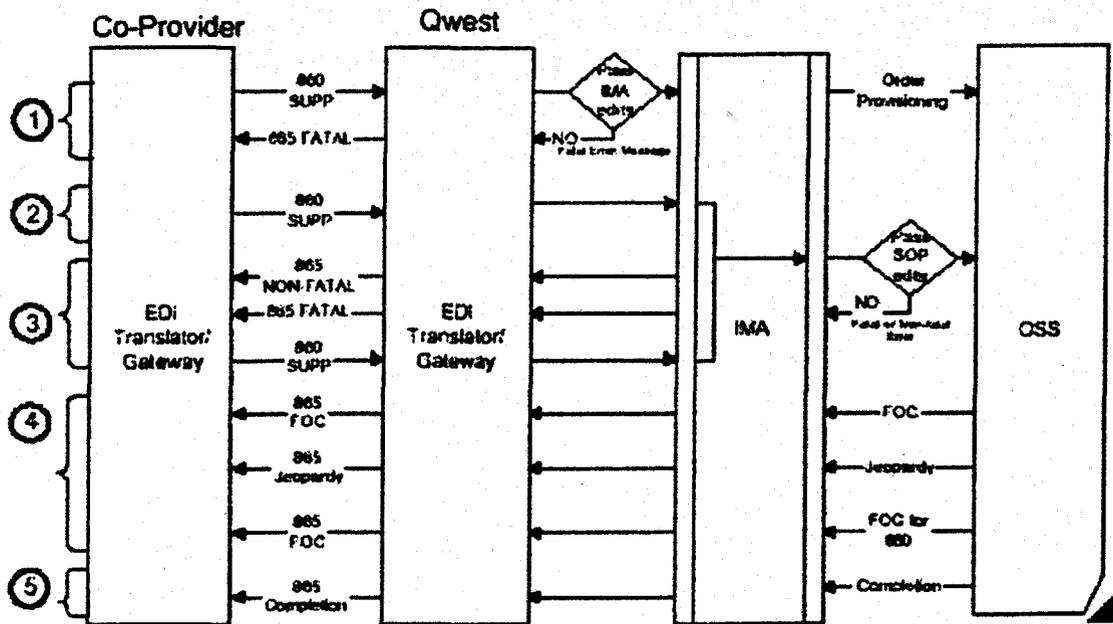


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Figure 12A-1.3: Supplemental Order Flow⁶

1. If the 860 Supplemental (SUP) fails the IMA edits, an 865 System Fatal Error, 865 FATAL, will be returned to the CLEC with one or more fatal error codes.
2. The CLEC should resolve the errors and re-submit the 860 Supplemental (SUP). While an 860 Supplemental (SUP) is in progress, the CLEC should wait until the current 860 Supplemental (SUP) is confirmed (865 FOC) or an error is received (865 FATAL or 865 Non-Fatal) before issuing another 860 Supplemental (SUP).
3. If an 860 Purchase Order receives a non-fatal error, the CLEC can either resubmit the request with the same PON and an incremented version or call the service center to discuss the error(s). If an 860 Purchase Order receives a Manual Fatal error, the CLEC should resubmit the request with the same PON and an incremented version.
4. When the 860 Supplemental (SUP) is posted to the SOP, an 865 FOC will be returned to the CLEC. This confirmation indicates that the SOP has accepted the 860 Supplemental (SUP), and provisioning of the service has begun.

If Qwest has a problem meeting the commitment on the local service request, and the CLEC has chosen to receive notification via IMA EDI, a Jeopardy Notification will be issued. If this occurs, an 865 Jeopardy Notification is sent. If the jeopardy is caused by Qwest conditions, Qwest will negotiate a new due date and send a new FOC. If the jeopardy is caused by non-Qwest conditions, the CLEC must submit a supplemental request to correct the condition with the same PON and incremented version number as the original request. If this jeopardy caused the due date to be missed, the supplemental request must include a revised due date. If an error is found after the FOC is sent, an 865 Jeopardy will be sent.

5. Upon completion of the service order request, an 865 Completion notice will be sent.

⁶ This diagram is taken from Qwest IMA 8.0 Disclosure, Appendix I – Generic Order Flow Business Model, dated February 18, 2002. Available at: <http://www.qwest.com/disclosures/netdisclosure409/8/appendixi.pdf>.



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2.1.2.2.4 Jeopardy Order Flow

If an error is detected on a CLEC's LSR after Qwest sends the FOC, or if Qwest estimates it will miss its commitment on the LSR, Qwest sends a Jeopardy Notice to the CLEC. If Qwest conditions caused the jeopardy, Qwest negotiates a new due date and sends a new FOC. If non-Qwest conditions caused the jeopardy, the CLEC must submit a Supplemental LSR, with the original PON and incremented version number, to correct the condition. If the jeopardy causes the due date to be missed, the Supplemental LSR must include a revised due date. If Qwest determines the jeopardy is caused by the CLEC, the CLEC has 30 days to submit its Supplemental LSR or the order will be canceled.

Figure 12A-1.3, above, includes a depiction of the Jeopardy Order Flow for an LSR submitted via IMA EDI. The Jeopardy Order Flow is illustrated in references 4 and 5.

2.2 Scenarios

The POP Functional Evaluation used the scenarios identified in the MTP, Appendix D. The P-CLEC submitted pre-order and order transactions based upon test cases developed by the Test Administrator from the Appendix D scenarios.

2.3 Test Targets & Measures

The test target was to evaluate the functionality of Qwest's wholesale OSS interfaces in supporting CLECs' pre-ordering, ordering, and post-ordering requirements. Processes, sub-processes, and evaluation measures are summarized in the following table. The last column, "Test Cross-Reference," indicates where the particular measures are addressed in section 3.1, "Results & Analysis."

Table 12A-1.1: Test Target Cross-Reference

Process	Sub-Process	Evaluation Measure	Test Cross-Reference
Interface Availability	IMA EDI	Availability of Interface	12-1-1
	IMA GUI	Availability of Interface	12-1-2
Pre-order	IMA EDI	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-2-1 to 12-2-3
	IMA GUI		
Resale	IMA EDI	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-3-1 to 12-3-3
	IMA GUI		
	Manual		
UNE-P/UNE-C	IMA EDI	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-4-1 to 12-4-3
	IMA GUI		
	Manual		



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Process	Sub-Process	Evaluation Measure	Test Cross-Reference
Unbundled Loops	IMA EDI IMA GUI Manual	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-5-1 to 12-5-3
Line Sharing/Shared Loop	IMA EDI IMA GUI Manual	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-6-1 to 12-6-3
Unbundled Dark Fiber	Manual	Completeness of Response, Clarity and Accuracy of Error Messages, Usability of Information	12-7-1 to 12-7-3

2.4 Evaluation Methods

During the period from March 2001 to April 2002, HP, in its role as the P-CLEC, submitted various pre-order, order, and post-order transactions to compile a data set of transaction responses from Qwest.

Table 12-1.2, below, provides a breakdown of the pre-order, order, and post-order transactions that the P-CLEC submitted via Qwest's interface options – IMA EDI, IMA GUI, and Manual ordering.⁷ Due to the schedule of the P-CLEC's transaction testing activities, the P-CLEC processed its electronic transactions in various IMA Releases, and prepared manual orders under both LSOG3 and LSOG5 ordering guidelines.⁸

Table 12A-1.2: P-CLEC Pre-Order/Order Transactions

Product Type	IMA EDI			IMA GUI			Manual	
	6.0	7.0	8.0	6.x	7.x	8.x	LSOG3	LSOG5
Pre-Order								
Address Validation (AVQ)	X	X		X	X	X		
Appointment Availability (AAQ)	X	X		X	X			
Appointment Selection (ASQ)	X	X		X	X			

⁷ The product categories within Table 12-1.2 include both order and post-order activities that the P-CLEC performed. Because the P-CLEC's testing activities dealt with the complete lifecycle of LSR processing, HP is evaluating both order and post-order activities as one element.

⁸ Table 12A-1.2 reflects only the manual order forms that the P-CLEC submitted to Qwest for processing. The P-CLEC prepared manual order forms under LSOG3 for its manual ordering transactions. However, the P-CLEC did not submit these LSOG3 manual orders due to open Observations and Exceptions addressing manual form deficiencies. Qwest implemented LSOG5 for its manual ordering forms before these Observations and Exceptions were resolved, which resulted in the P-CLEC submitting its manual orders only under LSOG5 guidelines.



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Product Type	IMA EDI			IMA GUI			Manual	
	6.0	7.0	8.0	6.x	7.x	8.x	LSOG3	LSOG5
Cancellation (CTQ) - Appointment	X	X		X	X			
Connecting Facility Assignment (CFAQ)	X	X		X	X	X		
Customer Service Record (CSRQ)	X	X		X	X	X		
Design Layout Record (DLR)	X	X		X	X			
Facility Availability (FAQ)	X	X		X	X	X		
Meet Point (MPQ)	X	X		X	X			
Raw Loop Data (RLDQ)	X	X						



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Product Type	IMA EDI			IMAGUI			Manual	
	6.0	7.0	8.0	6.x	7.x	8.x	LSOG3	LSOG5
UNE-P POTS	X	X		X	X	X		X
Post-Order								
Completion	X	X		X	X			
Jeopardy (includes Non-Fatal, Fatal)	X	X		X	X	X		
LSR Status Query / Response	X	X		X	X			
Order FOC and Supplemental	X	X		X	X	X		
Status Change Inquiry - Auto Push	X	X						

To assist in its pre-order, order and post-order transaction testing activities, the P-CLEC used documentation publicly available on Qwest's wholesale website,¹⁰ or resources provided to the P-CLEC by its Account Team. HP's Test 10 report, the Order and Transaction Creation Documentation Evaluation, evaluates the effectiveness of these resources and documentation. The P-CLEC believes that it did not receive or use any materials in its pre-order, order, and post-order transaction processing that Qwest does not make available to all CLECs.

2.5 Analysis Methods

The P-CLEC recorded and tracked each transaction submitted through Qwest's OSS, and logged subsequent responses, including functional acknowledgements, FOCs, errors and rejects, jeopardy notices, and SOCs. The P-CLEC compared each response it received to its expectations. The P-CLEC based its expectations on its understanding of Qwest documentation, published process flows, and business rules.

Whenever the P-CLEC received an unexpected response from Qwest on a transaction, it reviewed the transaction details to ascertain whether the error was the result of inaccurate test case data, transaction entry error, or a Qwest system or processing issue. If the source of the error was test case data, HP worked with the Test Administrator to correct the test case data so the transaction could be resubmitted. For transaction entry errors, HP reviewed the transactions, corrected any fields that contained incorrect information or formatting, and resubmitted the test transactions. Finally, if the error was determined to have been caused by a Qwest system or processing issue, HP presented the issue in a formal Observation or Exception report.

NOTE: By the date of this report, all HP Test Incident Reports (i.e., all Observations and Exceptions) were "Closed—Resolved."

¹⁰ <http://www.qwest.com/wholesale>.



HP used the data gathered from the submission and analysis of the P-CLEC's test transactions to determine if essential elements of Qwest's processes were present, and whether Qwest followed its published processes. Data items were analyzed against the evaluation criteria listed in Section 3.1, below, in order to assess the results of Qwest's pre-order, order, and post-order processing performance.

3.0 Results Summary

This section identifies the discrete evaluation criteria and test results.

3.1 Results & Analysis

The results of this test are presented in the table below. Definitions of evaluation criteria, possible results, and exceptions are provided in Section II. Summaries of HP Observations and Exceptions referenced in the comments, and their resolutions, are located in Appendix HP-A.

Table 12A-1.3: Evaluation Criteria and Results

Test Cross-Reference	Evaluation Criteria	Result	Comments
12-1-1	Qwest's IMA EDI interface is regularly available for CLECs to submit pre-order and order transactions and receive transaction responses.	Satisfied	The P-CLEC used the IMA EDI interface to submit transactions and receive responses of the types identified in Table 12-1.2. During testing, HP recorded those instances in which the P-CLEC was either a.) unable to submit transactions via IMA EDI; or, b.) unable to receive transaction responses via IMA EDI. The P-CLEC identified issues pertaining to these instances in the following Incident Reports. Observations: 2022, 2030, 2054, 2059. Exceptions: 2015, 2016, 2018, 2019, 2021, 2022, 2029, 2045.
12-1-2	Qwest's IMA GUI interface is regularly available for CLECs to submit pre-order and order transactions and receive transaction responses.	Satisfied	The P-CLEC used IMA GUI to submit transactions and receive responses for those transaction types identified in Table 12-1.2. HP recorded those instances in which the P-CLEC was unable to submit transactions to, or receive responses from, IMA GUI. The P-CLEC identified issues pertaining to the IMA GUI interface in the following Incident Reports. Observations: 2022, 2030, 2090. Exceptions: 2012, 2015, 2018, 2019, 2045,



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			2048.
12-2-1	Qwest provides complete responses to CLEC pre-order transactions.	Satisfied	<p>The P-CLEC adhered to Qwest-provided training and documentation to complete IMA EDI and IMA GUI pre-order transactions.</p> <p>The P-CLEC identified issues pertaining to the completeness of responses for pre-order transactions in the following Incident Reports.</p> <p>Observations: 2026, 2054, 2061, 2070, 2078, 2082.</p> <p>Exceptions: 2055, 2077.</p>
12-2-2	Error messages returned for pre-order transactions clearly and accurately explain the cause and source of the transaction error.	Satisfied	<p>Of the 35,780 EDI pre-order responses received during the test, the P-CLEC received 18 responses (0.05%) from Qwest that contained syntactical errors and generated a negative 997 Functional Acknowledgment (FA) from the P-CLEC's EDI translator. These errors were all the result of an error in Qwest's mapping of the PO1 segment of the 855 response to a Facilities Availability Query (FAQ) when the FAQ was submitted with a zero (0) in the WLNUM field. Qwest notified the CLEC community of this error on November 1, 2001, and corrected the issue on November 6, 2001.</p> <p>The P-CLEC processed IMA EDI and IMA GUI pre-order transactions. The P-CLEC submitted, as part of its pre-order test transactions, test cases that included planned errors.</p> <p>The P-CLEC evaluated the clarity and accuracy of the error messages and found them to be satisfactory overall. The P-CLEC identified issues pertaining to pre-order error messages in the following Incident Reports.</p> <p>Observations: 2044, 2047.</p> <p>Exceptions: 2059, 2066, 2082, 2085.</p>
12-2-3	The P-CLEC was able to submit valid pre-order transactions based upon publicly available Qwest information.	Satisfied	The P-CLEC used publicly available Qwest documentation, provided via Account Management channels or from the Qwest wholesale website, when processing pre-order transactions for products and services. Where the P-CLEC's experience differed from Qwest documentation, the P-



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>HP identified issues pertaining to the usability of Qwest information in pre-order transaction processing in the following Incident Reports.</p> <p>Observations: 2014, 2057, 2078.</p> <p>Exceptions: 2048, 2059, 2063, 2069, 2072, 2080.</p>
12-3-1	Qwest provides complete responses to CLEC Resale order and post-order transactions.	Satisfied	<p>The P-CLEC used Qwest-provided training and documentation to complete IMA EDI, IMA GUI, and manual order and post-order transactions for Resale products.</p> <p>The P-CLEC identified issues pertaining to the completeness of responses for Resale transactions in the following Incident Reports.</p> <p>Observations: 2048, 2054, 2059, 2086.</p> <p>Exceptions: 2019, 2029, 2032, 2033, 2036, 2037, 2057, 2068, 2086, 2087, 2088.</p>
12-3-2	Error messages returned for Resale order and post-order transactions clearly and accurately explain the cause and source of the transaction error.	Satisfied	<p>Of the 33,358 EDI order responses received during the test, the P-CLEC did not receive any responses from Qwest that contained syntactical errors generating a negative 997 Functional Acknowledgment (FA) from the P-CLEC's EDI translator.</p> <p>The P-CLEC processed IMA EDI, IMA GUI, and manual resale order and post-order transactions. The P-CLEC submitted, as part of these test transactions, test cases that included planned errors.</p> <p>HP evaluated the clarity and accuracy of the error messages and found them to be satisfactory overall. HP identified issues pertaining to resale transaction error messages in the following Incident Reports.</p> <p>Observations: 2048, 2051, 2053, 2089, 2094.</p> <p>Exceptions: 2007, 2014, 2030, 2031, 2032, 2033, 2034, 2049, 2054, 2058, 2071, 2089.</p>
12-3-3	The P-CLEC was able to submit valid Resale order transactions based upon publicly available Qwest information.	Satisfied	<p>The P-CLEC relied on Qwest's publicly available documentation, obtained from the Qwest wholesale website and via the Qwest Account Team, to complete its Resale order and post-order transaction processing. Where the P-CLEC's experience differed</p>



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>from the Qwest documentation, the P-CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>HP identified issues pertaining to Qwest information, with regard to Resale order and post-order transaction processing, in the following Incident Reports.</p> <p>Observations: 2045, 2069.</p> <p>Exceptions: 2005, 2019, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2036, 2037, 2038, 2039, 2041, 2042, 2043, 2044, 2046, 2047, 2048, 2050, 2071, 2073, 2076, 2078, 2081.</p>
12-4-1	Qwest provides complete responses to CLEC UNE-P and UNE-C order transactions.	Satisfied	<p>The P-CLEC adhered to Qwest-provided training and documentation to complete order and post-order transactions for UNE-P and UNE-C. The P-CLEC submitted test transactions for UNE-P and UNE-C products and services via IMA EDI, IMA GUI, and manual facsimile.</p> <p>The P-CLEC identified issues pertaining to the completeness of responses for UNE-P/UNE-C order transaction processing in the following Incident Reports.</p> <p>Observations: 2054, 2079, 2086, 2088.</p> <p>Exceptions: 2026, 2029, 2032, 2033, 2036, 2037, 2068, 2084, 2086, 2087.</p>
12-4-2	Error messages returned for UNE-P and UNE-C order transactions clearly and accurately explain the cause and source of the transaction error.	Satisfied	<p>Of the 33,358 EDI order responses received during the test, the P-CLEC did not receive any responses from Qwest that contained syntactical errors generating a negative 997 Functional Acknowledgment (FA) from the P-CLEC's EDI translator.</p> <p>The P-CLEC processed UNE-P and UNE-C order and post-order transactions via IMA EDI, IMA GUI, and manual facsimile. The P-CLEC submitted, as part of these test transactions, test cases that included planned errors.</p> <p>The P-CLEC evaluated the clarity and accuracy of the error messages and found them to be satisfactory overall. The P-CLEC identified issues pertaining to UNE-P and UNE-C error messages in the following Incident Reports.</p> <p>Observations: 2032, 2033, 2067.</p>



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>Exceptions: 2007, 2013, 2014, 2026, 2030, 2031, 2032, 2033, 2034, 2052, 2056, 2071, 2089.</p>
12-4-3	<p>The P-CLEC was able to submit valid UNE-P and UNE-C order transactions based upon publicly available Qwest information.</p>	Satisfied	<p>The P-CLEC used publicly available Qwest documentation, obtained via the Qwest wholesale website and the Qwest Account Team, to complete its UNE-P and UNE-C transactions. Where Qwest documentation differed from the P-CLEC's experience, the P-CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>The P-CLEC identified issues pertaining to Qwest information, with regard to UNE-P and UNE-C transaction processing, in the following Incident Reports.</p> <p>Observations: 2032, 2033, 2045, 2049, 2073.</p> <p>Exceptions: 2005, 2009, 2010, 2012, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2036, 2037, 2039, 2041, 2042, 2043, 2044, 2048, 2070, 2071, 2073, 2076, 2078, 2084.</p>
12-5-1	<p>Qwest provides complete responses to CLEC Unbundled Loop order and post-order transactions.</p>	Satisfied	<p>The P-CLEC completed order and post-order transactions for Unbundled Loops via IMA EDI, IMA GUI, and manual facsimile.</p> <p>Qwest generally provided complete responses to the P-CLEC's Unbundled Loop transactions. HP identified issues dealing with transaction responses in the following Incident Reports.</p> <p>Observations: 2054, 2064, 2086, 2088.</p> <p>Exceptions: 2024, 2029, 2032, 2033, 2035, 2036, 2037, 2067, 2068.</p>
12-5-2	<p>Error messages returned for Unbundled Loop order and post-order transactions clearly and accurately explain the cause and source of the transaction error.</p>	Satisfied	<p>Of the 33,358 EDI order responses received during the test, the P-CLEC did not receive any responses from Qwest that contained syntactical errors generating a negative 997 Functional Acknowledgment (FA) from the P-CLEC's EDI translator.</p> <p>The P-CLEC processed Unbundled Loop order and post-order transactions via IMA EDI, IMA GUI, and manual facsimile. The P-CLEC submitted, as part of these test transactions, test cases that included planned errors.</p> <p>The P-CLEC identified several instances in which the error messages that Qwest returned on Unbundled Loop transactions</p>



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>did not clearly explain the error cause or source. HP identified these issues in the following Incident Reports.</p> <p>Observations: 2060, 2072, 2074.</p> <p>Exceptions: 2030, 2031, 2032, 2033, 2034, 2035, 2065, 2067, 2074, 2079, 2089.</p>
12-5-3	<p>The P-CLEC was able to submit valid Unbundled Loop order and post-order transactions based upon publicly available Qwest information.</p>	Satisfied	<p>The P-CLEC used publicly available Qwest documentation, obtained via the Qwest wholesale website and the Qwest Account Team, to complete its Unbundled Loop transactions. Where Qwest documentation differed from the P-CLEC's experience, the P-CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>The P-CLEC identified issues pertaining to Qwest information, with regard to Unbundled Loop transaction processing in the following Incident Reports.</p> <p>Observations: 2009, 2076, 2087.</p> <p>Exceptions: 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2040, 2042, 2043, 2044, 2051, 2053, 2060, 2067, 2076, 2083.</p>
12-6-1	<p>Qwest provides complete responses to CLEC Line Sharing/Shared Loop order and post-order transactions.</p>	Satisfied	<p>The P-CLEC completed order and post-order transactions for Line Sharing/Shared Loops via IMA EDI and IMA GUI.</p> <p>Qwest generally provided complete responses to the P-CLEC's Line Sharing/Shared Loop transactions. HP identified issues dealing with transaction responses in the following Incident Reports.</p> <p>Observations: 2054, 2086.</p> <p>Exceptions: 2008, 2029, 2032, 2033, 2036, 2037.</p>
12-6-2	<p>Error messages returned for Line Sharing/Shared Loop order and post-order transactions clearly and accurately explain the cause and source of the transaction error.</p>	Satisfied	<p>Of the 33,358 EDI order responses received during the test, the P-CLEC did not receive any responses from Qwest that contained syntactical errors generating a negative 997 Functional Acknowledgment (FA) from the P-CLEC's EDI translator.</p> <p>The P-CLEC processed Line Sharing/Shared Loop order and post-order transactions via IMA EDI and IMA GUI. The P-CLEC submitted, as part of these test transactions, test cases that included planned errors.</p> <p>The P-CLEC identified issues pertaining to</p>



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Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>UNE-P and UNE-C error messages in the following Incident Reports.</p> <p>Observation: 2061.</p> <p>Exceptions: 2030, 2031, 2032, 2033, 2034, 2089.</p>
12-6-3	The P-CLEC was able to submit valid Line Sharing/Shared Loop order and post-order transactions based upon publicly available Qwest information.	Satisfied	<p>The P-CLEC used publicly available Qwest documentation, obtained via the Qwest wholesale website and the Qwest Account Team, to complete its Line Sharing/Shared Loop transactions. Where Qwest documentation differed from the P-CLEC's experience, the P-CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>HP identified issues pertaining to Qwest information, with regard to Line Sharing/Shared Loop transaction processing, in the following Incident Reports.</p> <p>Exceptions: 2008, 2029, 2030, 2031, 2032, 2033, 2034, 2036, 2037, 2042, 2043, 2044, 2076.</p>
12-7-1	Qwest provides complete responses to CLEC Unbundled Dark Fiber (UDF) transactions.	Satisfied	<p>The P-CLEC ordered UDF from Qwest via manual facsimile, using the process outlined on the Qwest wholesale website. The P-CLEC received and analyzed Qwest response to these orders.</p> <p>Qwest generally provided complete responses to the P-CLEC's UDF order transactions. HP identified issues dealing with transaction responses in the following Incident Reports.</p> <p>Observations: 2052, 2075.</p>
12-7-2	Error messages returned for Unbundled Dark Fiber (UDF) transactions clearly and accurately explain the cause and source of the transaction error.	Satisfied	<p>The P-CLEC processed Unbundled Dark Fiber orders via manual facsimile. The P-CLEC submitted, as part of these test transactions, orders that included errors.</p> <p>The P-CLEC evaluated the clarity and accuracy of the error messages and found them to be satisfactory. HP did not issue any Observations or Exceptions that dealt with error messages received for the P-CLEC's UDF orders.</p>
12-7-3	The P-CLEC was able to submit valid Unbundled Dark Fiber (UDF) transactions	Satisfied	The P-CLEC used publicly available Qwest documentation, obtained via the Qwest wholesale website and the Qwest Account



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Test Cross-Reference	Evaluation Criteria	Result	Comments
	based upon publicly available Qwest information.		<p>Team, to complete its UDF orders. Where Qwest documentation differed from the P-CLEC's experience, the P-CLEC noted the discrepancy to Qwest and requested a change or clarification.</p> <p>HP identified issues pertaining to Qwest information, with regard to UDF order processing, in the following Incident Reports.</p> <p>Observations: 2052, 2075.</p>



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EXHIBIT C

12.7. Test Results: Loop Qualification Process Evaluation (Test 12.7)

1.0 Description

The Loop Qualification Process Evaluation was a review of the Digital Subscriber Line (DSL) loop qualification processes and procedures developed and employed by Qwest to support both retail and wholesale customers. Operational analysis techniques were used to determine if parity exists in the design, implementation, and use of Qwest's loop qualification process. Additionally, the Loop Qualification Evaluation assessed remedial⁵¹ options available for both the retail and wholesale processes.

2.0 Method

This section summarizes the test execution method.

2.1 Business Process Description

This section provides an overview of the Qwest retail and wholesale loop qualification processes.

2.1.1 Qwest Retail Loop Qualification Process

Qwest retail customers are able to determine whether or not a loop qualifies for Digital Subscriber Line (DSL) service by using one of the following methods:

- Qwest retail Web site tool (orderdsl.qwest.com);
- Telephone inquiry; and
- Email or fax inquiry.

The retail Web site tool allows Qwest's end-user customers to submit a query by entering their existing telephone number (TN) to determine whether the loop dedicated to that TN qualifies for DSL service. If the customer receives a positive response, the customer can then request DSL service.

Retail customers can submit requests for DSL service via telephone, email, or fax. In these cases, a Qwest retail customer service representative performs the loop qualification by using the QCity/QServ Loop Qualification Tool.

The QCity/QServ tool allows the Qwest representative to submit a query using either the customer TN or street address. The customer TN is used for most requests. QServ returns a positive or negative response:⁵²

- **YES** – indicates that the customer's loop qualifies for Qwest DSL service at given available data transmission speed(s), and that an order for DSL service can be submitted.

⁵¹ Remedial options are those available to a CLEC for instances in which the loop that it is trying to qualify for Digital Subscriber Line (DSL) service does not. Examples include auto qualification capabilities and loop conditioning services for facility-based CLECs.

⁵² Prior to December 18, 2001, QServ included an additional "Not Determined" response. The "Not Determined" response indicated that the database did not contain sufficient information for QCity to determine whether or not the customer qualified for service.

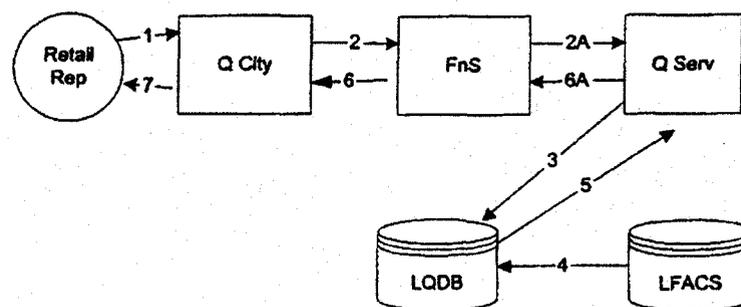
- *NO* – indicates that the customer's loop does not qualify for DSL service. A brief explanation is provided in the query response (e.g., distance from Central Office [CO] is too great).

Qwest retail customers do not have remedial options available to them when the specified loop does not support DSL service. For example, Qwest does not provide conditioning services⁵³ in order to qualify customers for DSL service if the specified loop does not support DSL service. In such instances, customers are informed that their TNs are not currently eligible for the service.

2.1.2 Qwest Retail Loop Qualification System Description

The diagram below illustrates the systems and flow that comprise Qwest's retail loop qualification query process:

Figure 12.7-1: Qwest Retail Loop Qualification Query Process



1. Representative accesses QCity Loop Qualification by telephone number (TN); Representative enters TN.
2. QCity sends telephone number to QServ.
- 2A. Data is transferred from QCity to QServ via Fetch 'n Stuff (FnS).
3. QServ pulls Raw Loop Data (RLD) to make loop qualification determination from Loop Qualification Data Base (LQDB).
4. LQDB checks Loop Facilities Assignment & Control System (LFACS) to verify that data is current.
5. LQDB returns RLD for TN(s).
6. QServ uses RLD to determine loop qualification, and sends loop qualification results to QCity.
- 6A. Data is transferred from QServ to QCity via FnS.
7. QCity sends loop qualification results to representative.

Process Description: The QCity interface submits the query information to QServ. QServ is a middleware application that collects raw loop data from the LQDB, and uses an algorithm to determine whether or not the loop qualifies, based on the technical specifications for Qwest DSL service.

System Performance/Database Updates: The LFACS database is Qwest's central repository for loop data. It serves as the source database for the loop data in the LQDB, which is updated with revised LFACS data on a nightly basis. The two databases are synchronized each month. As part of the loop qualification query process, the LQDB also queries a "recent changes" field in the LFACS database. If this query indicates that the LFACS information has been updated,

⁵³ Conditioning services include removal of bridge taps and/or load coils.

the new LFACS information is populated into the LQDB, and is used as the basis for the loop qualification query.

2.1.3 Qwest Wholesale Loop Qualification Process

CLECs can determine whether a loop qualifies for DSL service by using one of the following methods:

- Qwest Interconnect Mediated Access (IMA);
- Qwest wholesale Web site tool;
- Telephone inquiry to the Interconnect Service Center (ISC); and
- Email or fax inquiry to the ISC.

IMA is the primary tool used by CLECs to perform loop qualifications. The other methods serve as backups, in the event that a CLEC experiences difficulty with the IMA tools, described below. Qwest makes several loop qualification tools available through IMA. They include:

- Qwest DSL Qualification Tool – used by resellers to qualify loops, based on the specific technical parameters for Qwest DSL service;
- Asymmetrical Digital Subscriber Line (ADSL) Unbundled Loop Qualification Tool – used by facility-based CLECs to qualify loops, based on industry standard technical specifications for ADSL service; and
- Raw Loop Data Tool – used to access specific loop makeup characteristics, including specific loop modifications, segment characteristics, distance from the CO, and presence of load coils or bridge taps.

CLECs use the appropriate IMA tool to qualify a customer loop prior to submitting an order to Qwest for DSL service. Raw loop data can be used to examine the specific loop makeup characteristics for a discrete TN or address. In addition to using the Raw Loop Data Tool, CLECs can download bulk raw loop data in comma-delimited format, from Qwest's Web site, for use in their own loop qualification applications.

The Qwest DSL and ADSL Unbundled Loop Qualification tools allow CLECs to submit queries by either TN or address. The IMA response for both tools indicates whether or not the specified loop qualifies for DSL service, and provides a brief description of the loop make-up characteristics.

The Qwest DSL tool provides the same response as the QCity tool described above: "yes" or "no." The result is based on the same data and algorithms that are used in the retail loop qualification process (see Section 2.1.4 below for further detail).

Resellers of Qwest DSL service who receive a "no" response can request an auto qualification feature through IMA. This tool allows CLECs to establish an automatic query that periodically checks a loop to determine if its qualification status has changed. If a loop becomes eligible at a later date, the CLEC is notified via email. As is the case with the retail process, Qwest does not provide resellers of Qwest DSL service conditioning services in order to qualify customers for DSL service.

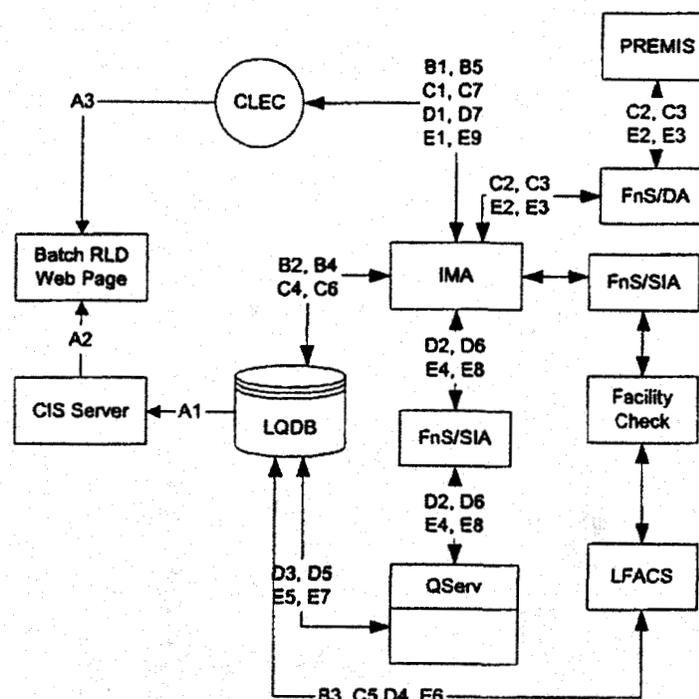
Facility-based CLECs who order unbundled loop products do have the remedial option (in addition to the auto qualification feature) of ordering loop-conditioning services from Qwest in order to qualify customers for DSL service. Examples of such options include the removal of load coils and bridge taps from a specified loop.

Qwest provides support to CLECs through its ISCs. Resellers receive support from the Complex Resale ISC in Minneapolis, MN. Facility-based DSL providers receive support from the Unbundled Loop ISC in Duluth, MN. These ISCs are staffed by Service Delivery Coordinators (SDCs), who are trained to process orders for DSL-related products and services. Resale SDCs perform loop qualifications on DSL orders using the Qwest DSL Qualification Tool, which returns loop results in the same manner ("yes" or "no") as the tools used by CLECs. The Qwest DSL Qualification Tool is the same tool used by Qwest retail representatives.

2.1.4 Qwest Wholesale Loop Qualification System Description

The diagram below illustrates the systems and flow that comprise the CLEC loop qualification query processes:

Figure 12.7-2: Wholesale Loop Qualification System Process



A1-A3 – Batch Raw Loop Data: Raw loop data is updated nightly to the CIS server. CLECs can access this data via the Qwest Web site using a digital certificate.

B1-B5 – IMA Raw Loop Data: Raw loop data for individual TNs is accessed via IMA. Data is drawn from the LQDB. LQDB queries a field in the LFACS database to determine whether any recent updates have been made to the database. Query results are returned to the CLEC via the IMA interface.

C1-C7 – IMA Raw Loop Data: Raw loop data address queries are validated in PREMIS. The query is then submitted to the LQDB, and Raw Loop Data results are returned to the CLEC via the IMA interface.⁵⁴

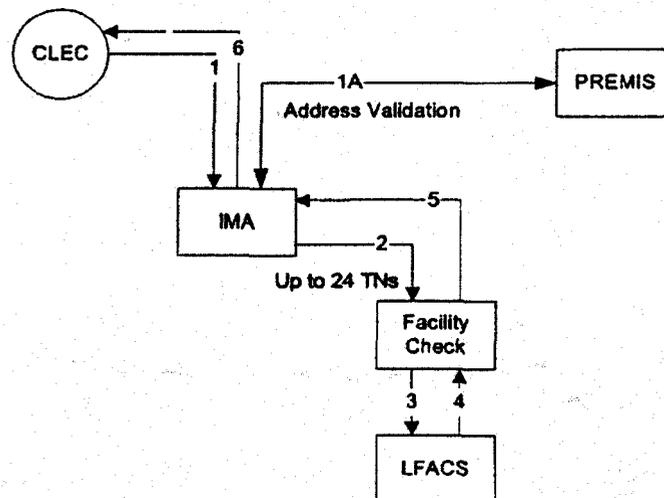
D1-D7 – Qwest DSL (Resale) Loop Qualification: Queries are submitted via IMA to QServ. QServ collects loop data from the LQDB and executes the algorithms to determine whether the specified loop qualifies based on the technical parameters for Qwest DSL service.⁵⁵

E1-E9 – Qwest DSL (Resale) Loop Qualification: Queries based on customer address follow the same process as the Resale telephone number query (D1 – D7) above, except that the query first validates the given address in PREMIS.

System Performance/Database Updates: The LFACS and LQDB databases are the same databases used for retail loop qualification. The update procedures described in Section 2.1.2 also apply to this section.

The flow for the Unbundled ADSL Loop Qualification process is depicted below. The ADSL Loop Qualification Tool is used prior to submitting a Local Service Request (LSR) for an Unbundled Local Loop. This tool enables the CLEC to verify the type of facility and the loop make-up of the Unbundled Local Loop prior to order submission.

Figure 12.7-3: Unbundled ADSL Loop Qualification Process



1. CLEC accesses IMA for loop qualification by TN; CLEC enters TN.
- 1A. IMA accesses PREMIS to validate addresses or working TNs; PREMIS returns results.
2. IMA sends TN to Facility Check.
3. Facility Check queries LFACS to verify that data is current.
4. LFACS returns data to Facility Check for loop qualification determination.
5. Facility Check sends loop qualification result to IMA.
6. IMA sends loop qualification result to CLEC.

⁵⁴ FnS/DA is an acronym for Fetch 'n Stuff / Data Arbitor

⁵⁵ FnS/SIA is an acronym for Fetch 'n Stuff / Safe Information Access

CLECs submit queries via IMA. Address-based queries determine the validated addresses or working TNs in PREMIS. PREMIS is the system used by IMA GUI, IMA EDI, and other applications as a source of address validation information. It is used by Qwest retail and wholesale operations. TN data is submitted to Facility Check. Facility Check draws loop make-up characteristics from the LFACS database, and performs algorithms to determine whether the loop will support DSL service. Results are then returned to the CLEC via IMA.

2.2 Scenarios

Scenarios were not applicable to this test.

2.3 Test Targets & Measures

The test targets were the loop qualification processes and procedures used by Qwest to support both retail and wholesale customers. Processes, sub-processes, and evaluation measures are summarized in the following table.

Table 12.7-1: Test Target Cross-Reference

Process	Sub-Process	Evaluation Measure	Test Cross-Reference
Loop Qualification Pre-Order Query Process	Pre-Order Receipt and Logging	Consistency between wholesale and retail processes	12.7-1-1 – 12.7-1-2, 12.7-1-4, 12.7-1-7
Assemble Pre-Order Response	Delivery of Error Messages and Queries	Consistency between wholesale and retail processes	12.7-1-3
	Delivery of Response	Consistency between wholesale and retail processes	12.7-1-6, 12.7-1-8
Escalation Process	User-initiated Escalation	Consistency between wholesale and retail processes	12.7-1-3, 12.7-1-5, 12.7-1-9
Process Management	General Management Practices	Consistency between wholesale and retail processes	12.7-1-2 – 12.7-1-4
	Performance Measurement Process	Consistency between wholesale and retail processes	12.7-1-11
Capacity Management	Capacity Management Processes and Procedures	Consistency between wholesale and retail processes	12.7-1-10

2.4 Evaluation Methods

KPMG Consulting utilized three methods of data collection for this evaluation. The evaluation included reviews of Qwest documentation of processes and procedures, management practices, and pre-order processes. Interviews and observations were held with Competitive Local

Exchange Carriers (CLECs) to evaluate their collective experiences. KPMG Consulting used findings from Hewlett-Packard Consulting (HPC), which held the role of pseudo-CLEC (P-CLEC) during execution of Test 12, Evaluation of POP Functionality and Performance Versus Parity Standards and Benchmarks. In addition, KPMG Consulting conducted interviews and on-site observations with Qwest staff responsible for loop qualification processing.

2.5 Analysis Methods

Information gathered during on-site visits, through data requests, and from HPC's P-CLEC experience was evaluated against criteria defined by KPMG Consulting during the planning phase of the test. One component of this evaluation compared Qwest personnel, processes, and systems used for wholesale loop qualification to those employed for retail loop qualification, in order to determine whether or not consistencies exist. Another component evaluated data gathered to determine if essential elements of Qwest's processes and systems are present, and whether or not defined process steps are followed.

3.0 Results Summary

This section identifies the discrete evaluation criteria and test results.

3.1 Results & Analysis

The results of this test are presented in the table below. Definitions of evaluation criteria, possible results, and Exceptions are provided in Section II.

Table 12.7-2: Evaluation Criteria and Results

Test Cross-Reference	Evaluation Criteria	Result	Comments
12.7-1-1	The end-user information that is required prior to the submission of a loop qualification is the same for wholesale and retail orders.	Satisfied	<p>End-user information that is required prior to the submission of a loop qualification is the same for wholesale and retail orders.</p> <p>Both retail and wholesale loop qualifications can be performed using either an end-user telephone number (TN) or street address.</p> <p>KPMG Consulting confirmed these submission requirements during interviews and observations with CLEC subject matter experts (SMEs) who are responsible for qualifying loops.</p> <p>Requirements are documented and made available to CLECs and Qwest personnel. CLEC information is available on the Qwest Web site at http://www.qwest.com/wholesale/ima/gui/document.html, and in the <i>IMA Loop Qualification and Raw Loop Data Job Aid</i>. Loop qualification information for Qwest retail customers is available at: https://orderdsl.qwest.com/order/welcome.asp.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			KPMG Consulting also observed the loop qualification process in the Qwest retail and wholesale work centers in order to confirm that these activities were accurately and consistently practiced, as defined and documented above.
12.7-1-2	The loop qualification query process is consistent for retail and wholesale customers.	Satisfied	<p>The loop qualification query process is consistent for retail and wholesale customers.</p> <p>Qwest retail customers can determine whether they qualify for DSL service through one of the following means:</p> <ul style="list-style-type: none"> • Telephone inquiry; • Qwest Web site query; and • Email or fax inquiry. <p>Qwest wholesale customers use various loop qualification tools, via IMA, to obtain comparable information for their end-user customers. Wholesale customers can also obtain loop qualification information from Qwest's ISCs via the same means listed above.</p> <p>Qwest retail processes are documented on the retail Web site at https://orderdsl.qwest.com/order/welcome.asp. Qwest wholesale processes are documented on the wholesale Web site at http://www.qwest.com/wholesale/ima/gui/document.html. Qwest wholesale SDCs have access to additional process documentation via InfoBuddy, a Qwest internal, online job aid.</p> <p>During observations of Qwest retail and wholesale work center representatives, KPMG Consulting confirmed that the loop qualification process activities were accurately and consistently practiced, as defined and documented above. KPMG Consulting also observed CLEC representatives submitting loop qualification queries using the processes documented above.</p>
12.7-1-3	Processes and procedures are defined for addressing errors regarding loop qualifications in the retail and wholesale environments.	Satisfied	<p>Processes and procedures are defined for addressing errors regarding loop qualifications in the retail and wholesale environments.</p> <p>If a CLEC receives a questionable "no" response from a loop qualification query to the Qwest DSL or ADSL Unbundled Loop Tool, it may check loop make-up</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>information using the Raw Loop Data Tool. A retail customer who receives a "no" response when inquiring about DSL availability is informed that the relevant TN is not currently eligible for the service.</p> <p>KPMG Consulting observations of representatives in the Qwest retail and wholesale work centers confirmed that these activities were accurately and consistently practiced, as defined and documented. KPMG Consulting also observed CLECs using the procedures defined for addressing errors regarding loop qualifications.</p>
12.7-1-4	The internal process flow used for loop qualification is consistent for retail and wholesale customers.	Satisfied	<p>Qwest's internal process flow used for loop qualification is consistent for retail and wholesale customers.</p> <p>During interviews with CLEC SMEs, KPMG Consulting confirmed that the internal process flow used for wholesale loop qualifications is consistent with defined and documented Qwest processes. Requirements are documented and made available to CLECs and Qwest personnel. CLEC information is available on the Qwest Web site at https://orderdsl.qwest.com/order/welcome.asp, and in Qwest's document, <i>IMA Loop Qualification and Raw Loop Data CLEC Job Aid</i>.</p> <p>During initial testing, KPMG Consulting identified apparent discrepancies with Qwest's back-end systems that provide loop qualification results. KPMG Consulting issued Exception 3038.</p> <p>After completing additional interviews and document analysis, KPMG Consulting determined that internal process flows are consistent for both retail and wholesale operations, and that back-end systems, following a system change by Qwest, provide consistent results for both wholesale and retail queries.</p> <p>See Exception 3038 for additional information on this issue. Exception 3038 is closed.</p>
12.7-1-5	Qwest contact information is readily available for retail and wholesale customers.	Satisfied	<p>Qwest contact information is readily available for retail and wholesale customers.</p> <p>Interviews with CLEC SMEs verified that Qwest contact information is available on</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>Qwest's Web site, and in documentation provided to CLECs by Qwest account managers. KPMG Consulting confirmed the availability of contact information with SMEs at CLECs.</p> <p>Documentation that describes the various Qwest departments and related SMEs is available to CLECs at https://www.qwest.com/wholesale/, and in the Qwest document, <i>Frequently Called Numbers - ISC - Wholesale</i>.</p> <p>KPMG Consulting verified the availability of this contact information during observations at both the Qwest wholesale and retail work centers. KPMG Consulting also observed SDCs providing contact information to end-users and CLECs. KPMG Consulting also observed CLECs accessing Qwest contact information on the Web site identified above.</p>
12.7-1-6	The customer receives confirmation of the completion of a loop qualification, or can access the status of loop qualifications.	Satisfied	<p>The customer receives confirmation of the completion of a loop qualification, or can access the status of loop qualifications. CLECs and retail end-users receive completion confirmations via the same vehicle through which they query. That is, if submitted in IMA, the CLEC will receive confirmation via IMA.</p> <p>During observations with CLEC SMEs who are responsible for receiving confirmation of loop qualification query completion, KPMG Consulting observed receipt of such confirmations.</p> <p>KPMG Consulting also observed receipt of loop qualification confirmations in the Qwest retail and wholesale work centers, to confirm that these activities were accurately and consistently practiced.</p>
12.7-1-7	Systems and processes are in place to allow wholesale and retail loop qualification queries to be performed using the customer address.	Satisfied	<p>Systems and processes are in place to allow wholesale and retail loop qualification queries to be performed using the customer address.</p> <p>The database used to qualify loops is the same for both the wholesale and retail organizations. All tools (the Qwest DSL Tool, the ADSL Unbundled Loop Tool, and the Raw Loop Data Tool for wholesale and the QCity/QServ Tool for retail) may be used to conduct loop qualifications based on the customer address.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>During on-site visits with CLECs, KPMG Consulting observed loop qualification queries being performed using the customer address.</p> <p>KPMG Consulting also observed loop qualification queries being performed with customer addresses in the Qwest retail and wholesale work centers, and confirmed that these activities were accurately and consistently practiced, as defined and documented above.⁵⁶</p>
12.7-1-8	Loop qualification response types that are provided are consistent between retail and wholesale customers.	Satisfied	<p>Loop qualification response types that are provided are consistent between retail and wholesale customers.</p> <p>Loop qualification queries, by both retail and wholesale customers, result in one of the following response types:</p> <ul style="list-style-type: none"> • Yes; or • No. <p>Interviews with both CLEC SMEs and Qwest representatives verified that loop qualification response types that are provided are consistent between retail and wholesale customers.</p> <p>KPMG Consulting observations at Qwest retail and wholesale centers, and CLEC centers verified that personnel receive the same qualification response types. Identical query types for loop qualification resulted in the same response types.</p>
12.7-1-9	The escalation process for loop qualifications is consistent for retail and wholesale customers.	Satisfied	<p>The escalation process for loop qualifications is consistent for retail and wholesale customers.</p> <p>For loop qualification queries for which the qualification tools return a "no" response, CLECs can request an auto qualification feature, which periodically checks a loop to determine whether its qualification status has changed. In addition, facility-based CLECs may request loop conditioning services.</p> <p>In addition to the specific loop qualification</p>

⁵⁶ During the execution of Test 12, Evaluation of POP Functionality and Performance versus Parity and Standards and Benchmarks, Hewlett-Packard Consulting (HPC) identified an issue with Raw Loop Data Query pre-order functionality; see HPC's Exception 2063 for additional information. The specific discrepancy identified in E2063 is not addressed in the Test 12.7 Test Report because the issue in question has no comparable Retail equivalent. HPC Exception 2063 is closed. HPC subsequently issued Observation 2078 to monitor the above issue. Following retesting, Observation 2078 is closed.

Test Cross-Reference	Evaluation Criteria	Result	Comments
			<p>remedial option escalations, the general escalation process is documented and made available to CLECs and Qwest personnel. CLEC information is available on the Qwest Web site at http://www.qwest.com/wholesale/clecs/exescoper.html. Additional escalation process descriptive information is available in the Qwest documents, <i>Escalation Management Process for Design Services Bulletin Number: PB97028-5</i> and <i>Service Delivery Escalation/Status Process</i>.</p> <p>KPMG Consulting interviews with CLEC SMEs who are responsible for escalating orders confirmed that the Qwest escalation process, as defined and documented, is consistently practiced. At visits to Qwest work centers, KPMG Consulting also observed direct use of the escalation process.</p>
12.7-1-10	The capacity management process for loop qualification is consistent for retail and wholesale customers.	Satisfied	<p>Qwest's capacity management process for loop qualification is equivalent for retail and wholesale customers.</p> <p>Qwest's process for loop qualification capacity management is encompassed within its overall work center capacity management process.</p> <p>Qwest work center order volume is tracked, and is used to forecast future work volumes. Qwest uses this information to schedule resources for the retail and wholesale centers.</p> <p>Load and Resource Managers (LRM) are responsible for managing and monitoring order and/or call volumes, staffing levels, product trends, and capacity utilization. LRMs regularly compile various reports: actual vs. projected volumes, in today/out today, and Automatic Call Distributor (ACD) logs.</p> <p>Qwest's capacity management procedures are documented and made available to CLECs and Qwest personnel. CLEC information is available on the Qwest Web site at http://www.qwest.com/wholesale/guides/forecasting.html.</p>
12.7-1-11	Loop qualification performance measurement processes are consistent for retail and wholesale	Satisfied	<p>Qwest's performance measurement processes for loop qualification are consistent for retail and wholesale operations.</p>

Test Cross-Reference	Evaluation Criteria	Result	Comments
	operations.		<p>Processes are in place to measure and report on the timeliness of loop qualification query responses. Qwest uses "time in" and "time out" as measurement indicators of system timeliness.</p> <p>For the Raw Loop Data Tool, the measurement is divided into two measurements: Retrieve Request Screen and Receive Response. The Qwest DSL Tool measurement begins with the Qwest DSL Facility Request and ends with the Loop Qualification Response.</p> <p>For the ADSL Tool, there are three types of loop qualification transactions measured: a request for one line by address, a request for one line by TN, and a request for 25 lines by address. The address request measures the ADSL Request Screen and ADSL Response Screen. The request by TN and the ADSL Loop Qualification for 25 lines measures the Loop Qualification Request window appearing in IMA and the Loop Qualification Response window appearing.</p> <p>The performance measurement process is consistent for wholesale and retail organizations at Qwest. Both organizations use the process of monitoring "time in" and "time out" to measure performance.</p> <p>The wholesale and retail center managers are responsible for the performance measurement process. Actual data and benchmarks for Qwest DSL and ADSL loop qualification are available on the Qwest Web site at http://www.qwest.com/wholesale/results/index.html. Performance measurement data for the Raw Loop Data Tool is available in the Qwest document <i>Performance Measurement Criteria for RLD Tool version 1.00</i>.</p> <p>Interviews with both CLEC SMEs and Qwest system SMEs verified that processes for performance measurement of loop qualification systems operate as defined and documented.</p>