

### III. Test Summaries

This section provides summary information for each test. Each test summary provides a description of the test objective, evaluation methods, analysis methods, and summary results. See Section II, 6.1 "Evaluation Criteria and Results" for definitions of these items. For more information on planned testing, refer to the respective test sections in the *Master Test Plan*. For more detailed information on the test design, analysis, and results from the execution of the tests, refer to Section IV.

## 1.0 Test 12: Evaluation of POP Functionality and Performance Versus Parity Standards and Benchmarks

This section provides a summary of the POP Feature Function Test.

### 1.1 Objective

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.

### 1.2 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 outlined, at a high level, the specific products and services that were ordered, and the activity types that were requested.

As test administrator, KPMG Consulting provided Hewlett-Packard Consulting (HPC) in its role of Pseudo-CLEC (P-CLEC) with a schedule of instances to be submitted that detailed priority, interface, and due date, when applicable, as well as the corresponding account information for each test case instance.

### 1.3 Analysis Methods

The POP Functional Evaluation included evaluation criteria developed by KPMG Consulting during the initial phase of the OSS Evaluation. The data collected was analyzed against these evaluation criteria.

### 1.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-1: Test 12 – Summary Results**

Evaluation Criteria – Satisfied	
12-1-1	EDI order transaction capability is consistently available during scheduled hours of operation.
12-2-1	Qwest systems provide required pre-order functionality.
12-2-2	Qwest systems provide responses to pre-order transactions submitted via IMA GUI.
12-2-3	Qwest systems provide responses to pre-order transactions submitted via IMA EDI.
12-3-1	Qwest systems provide timely responses to Address Validation Queries (AVQs) submitted via IMA GUI.
12-3-2	Qwest systems provide timely responses to Telephone Number Availability Queries (TNAQs) submitted via IMA GUI.
12-3-3	Qwest systems provide timely responses to Customer Service Record Queries (CSRQs) submitted via IMA GUI.

<b>Evaluation Criteria – Satisfied</b>	
12-3-4	Qwest systems provide timely responses to Appointment Availability Queries (AAQs) submitted via IMA GUI.
12-3-5	Qwest systems provide timely responses to Facility Availability Queries (FAQs) submitted via IMA GUI
12-3-6	Qwest systems provide timely responses to Service Availability Queries (SAQs) submitted via IMA GUI.
12-3-7	Qwest systems provide timely responses to Qualified ADSL Facility Availability Queries (FAQs-ADSL) submitted via IMA GUI
12-3-8	Qwest systems provide timely responses to Connecting Facility Assignment Queries (CFAQs) submitted via IMA GUI.
12-3-9	Qwest systems provide timely responses to Appointment Selection Queries (ASQs) submitted via IMA GUI.
12-3-10	Qwest systems provide timely responses to Telephone Number Selection Queries (TNSQs) submitted via IMA GUI.
12-4-1	Qwest systems provide timely responses to Address Validation Queries (AVQs) submitted via IMA EDI.
12-4-2	Qwest systems provide timely responses to Telephone Number Availability Queries (TNAQs) submitted via IMA EDI.
12-4-3	Qwest systems provide timely responses to Customer Service Record Queries (CSRQs) submitted via IMA EDI.
12-4-4	Qwest systems provide timely responses to Appointment Availability Queries (AAQs) submitted via IMA EDI.
12-4-5	Qwest systems provide timely responses to Facility Availability Queries (FAQs) submitted via IMA EDI.
12-4-6	Qwest systems provide timely responses to Service Availability Queries (SAQs) submitted via IMA EDI.
12-4-7	Qwest systems provide timely responses to Qualified ADSL Facility Availability Queries (FAQs-ADSL) submitted via IMA EDI.
12-4-8	Qwest systems provide timely responses to Connecting Facility Assignment Queries (CFAQs) submitted via IMA EDI.
12-4-9	Qwest systems provide timely responses to Appointment Selection Queries (ASQs) submitted via IMA EDI.
12-4-10	Qwest systems provide timely responses to Telephone Number Selection Queries (TNSQs) submitted via IMA EDI.
12-5-1	Qwest systems or representatives provide required order transaction functionality.
12-5-2	Qwest systems provide Functional Acknowledgements (FAs) in response to LSRs submitted via IMA EDI.
12-5-3	Qwest provides expected order responses for LSRs submitted via IMA GUI.
12-5-4	Qwest provides expected order responses for LSRs submitted via IMA EDI.
12-5-8	Qwest provides FOC Due Dates consistent with valid CLEC Due Date Requests.
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.
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.
12-6-3	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop, flow-through LSRs submitted via IMA GUI.
<b>Evaluation Criteria – Satisfied</b>	
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.
12-6-5	Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA GUI.
12-6-6	Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA GUI.
12-7-1	Qwest systems or provide timely Functional Acknowledgements (FAs) in response to IMA EDI LSRs.
12-7-2	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to UNE-P and Resale flow-through LSRs submitted via IMA EDI.
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.
12-7-4	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop flow-through LSRs submitted via IMA EDI.
12-7-5	Qwest systems or representatives provide timely Firm Order Confirmations (FOCs) in response to Unbundled Loop non-flow-through LSRs submitted via IMA EDI.
12-7-6	Qwest systems provide timely Firm Order Confirmations (FOCs) in response to LNP flow-through LSRs submitted via IMA EDI.
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.
12-7-8	Qwest representatives provide timely LSR Manual Rejections (Errors) in response to LSRs via IMA EDI.
12-7-9	Qwest systems provide timely LSR Automated Rejections (Errors) in response to LSRs via IMA EDI.
12-8-1	Qwest representatives provide timely Firm Order Confirmations (FOCs) in response to LSRs submitted via facsimile.
12-8-3	Qwest representatives provide timely LSR Rejections (Errors) in response to LSRs submitted via facsimile.
12-9-3	Qwest provides Jeopardy Notices in advance of the due date for Unbundled Loop products.
12-9-6	Qwest systems or representatives provide timely Jeopardy notices for Unbundled Loop products.
12-10-1	Qwest systems or representatives provide work completion notifications in response to completed orders.
12-11-1	Product and feature offerings are defined and documented for both retail and wholesale services.
12-11-2	Product and feature offerings are comparable for both retail and wholesale services.
12-11-3	Pre-Order and Order capabilities are functionally equivalent for both retail and wholesale services.
<b>Evaluation Criteria – Unable to Determine</b>	
12-8-2	Qwest representatives provide timely Firm Order Confirmations (FOCs) in response Local

	Interconnection Service Trunk ASRs.
12-9-1	Qwest provides Jeopardy Notices in advance of the due date for Resale products and services.
12-9-2	Qwest provides Jeopardy Notices in advance of the due date for UNE-P products.
12-9-4	Qwest systems or representatives provide timely Jeopardy notices for Resale products and services.
12-9-5	Qwest systems or representatives provide timely Jeopardy notices for UNE-P.
<b>Evaluation Criteria – Diagnostic</b>	
12-3-11	Qwest systems provide timely pre-order error message responses via IMA GUI.
12-4-11	Qwest systems provide timely pre-order error message responses via IMA EDI.
12-5-5	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA GUI.
12-5-6	Qwest systems or representatives provide rejections in response to LSRs submitted via IMA EDI.
12-5-7	Qwest systems or representatives provide rejections in response to LSRs submitted via facsimile.
12-5-9	Qwest adheres to the original confirmed Due Date provided on the Firm Order Confirmation (FOC).
12-5-10	Qwest is able to account for LSRs received electronically.
12-10-2	Qwest systems or representatives provide timely Work Completion Notifications in response to LSRs submitted via IMA GUI.
12-10-3	Qwest systems or representatives provide timely Work Completion Notifications in response to LSRs submitted via IMA EDI.
12-10-4	Qwest systems or representatives provide timely Billing Completion Notifications (BCNs) in response to LSRs submitted via IMA GUI.
12-10-5	Qwest systems or representatives provide timely Billing Completion Notifications (BCNs) in response to LSRs submitted via IMA EDI.
<b>Evaluation Criteria – Not Complete</b>	
12-11-4	Qwest-produced measures of Preorder/Order performance results for HPC transactions are consistent with KPMG Consulting-produced HPC measures.

## 2.0 Test 12.7: Loop Qualification Process "Parity by Design" Evaluation

This section provides a summary for the Loop Qualification Review.

### 2.1 Objective

The objective of this evaluation was to determine whether the loop qualification process Qwest provides to its wholesale customers is equivalent to the process Qwest uses for its own retail customers. This was accomplished through an examination and analysis of Qwest's internal processes and a comparison to the processes available to Qwest's wholesale customers.

### 2.2 Evaluation Methods

KPMG Consulting utilized four methods of data collection for this evaluation. The evaluation included review of Qwest's 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 HPC in their role as P-CLEC. In addition, KPMG Consulting conducted interviews and on-site observations with Qwest staff responsible for loop qualification processing.

### 2.3 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, to determine results.

### 2.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-2: 12.7 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
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.
12.7-1-2	The loop qualification query process is consistent for retail and wholesale customers.
12.7-1-3	Process and procedures are defined for addressing errors regarding loop qualifications in the retail and wholesale environments.
12.7-1-4	The internal process flow used for loop qualification is consistent for retail and wholesale customers.
12.7-1-5	Qwest contact information is readily available for retail and wholesale customers.
12.7-1-6	The customer receives confirmation of the completion of a loop qualification, or can access the status of loop qualifications.
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.
12.7-1-8	Loop qualification response types that are provided are consistent between retail and wholesale customers.
12.7-1-9	The escalation process for loop qualifications is consistent for retail and wholesale customers.
12.7-1-10	The capacity management process for loop qualification is consistent for retail and wholesale customers.
12.7-1-11	Loop qualification performance measurement processes are consistent for retail and wholesale operations.

### 3.0 Test 12.8: POP Manual Order Processing Evaluation

This section provides a summary of the POP Manual Order Processing Evaluation.

### 3.1 Objective

The objective of this test was to validate the processes and procedures used to support manual submission of orders for service and to ensure that these procedures were being uniformly followed by Qwest's personnel across the three regions.

### 3.2 Evaluation Methods

KPMG Consulting utilized four methods of data collection for this evaluation: documentation reviews; CLEC interviews; Qwest interviews and observations; and P-CLEC Findings.

### 3.3 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. KPMG Consulting analyzed this data to determine if essential elements of Qwest's processes and systems are present, and whether or not defined process steps are followed.

### 3.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-3: 12.8 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
12.8-1	Procedures for processing manually submitted orders are defined, documented, and followed.
12.8-2	Procedures for processing electronically submitted non-flow through orders are defined, documented, and followed.
12.8-3	Performance measures and process improvement practices for manual orders are defined, tracked, reported, reviewed, and applied.
12.8-4	Processes and procedures are in place to evaluate manual order capacity.
12.8-5	Processes and procedures to make adjustments to manual order capacity are in place and followed.
12.8-6	Processes and procedures for manual order inquiries and escalations are defined and followed.
12.8-7	Processes and procedures to delineate and track internal ownership of manual orders are in place and followed.
12.8-8	Processes and procedures for addressing manual order errors are defined, documented, and followed.
12.8-9	Processes and procedures that allow customers to check the status of a manual order(s) are in place and followed.
12.8-10	Processes and procedures for maintaining security and data integrity are in place and followed.

## 4.0 Test 13: Order Flow Through Evaluation

This section provides a summary of the Order Flow Through Evaluation.

#### 4.1 Objective

The objective of the Order Flow Through Test was to verify the ability of Qwest systems to flow through orders from the CLEC through the application-to-application interface to the backend Qwest service ordering processing systems without human intervention.

#### 4.2 Evaluation Methods

The Order Flow Through Evaluation included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. KPMG Consulting reviewed the Qwest flow through documentation and assigned an expected flow through level to each test scenario.

#### 4.3 Analysis Method

Expected flow through results were compared to the actual flow through results, which were provided by Qwest on daily flow through reports, to verify that orders were processed in accordance with documented rules.

#### 4.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-4: 13 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
13-1-1	Qwest order FT documentation is complete, accurate, clear, and available to the CLEC community.
<b>Evaluation Criteria – Diagnostic</b>	
13-1-2	Order transactions submitted via IMA EDI flow through to the SOP.
13-1-3	Flow Through eligible Resale transactions are processed in IMA EDI in accordance with documented FT rules.
13-1-4	Flow Through eligible UNE-P transactions are processed in IMA EDI in accordance with documented FT rules.
13-1-5	Flow Through eligible UNE-L transactions are processed in IMA EDI in accordance with documented FT rules.
13-1-6	Qwest documented Flow Through eligible Stand Alone LNP transactions are processed in IMA EDI in accordance with documented flow through rules.
13-1-7	Order transactions submitted via IMA GUI flow through to the SOP.
13-1-8	Flow Through eligible Resale transactions are processed in IMA GUI in accordance with documented flow through rules.



Evaluation Criteria – Satisfied	
13-1-9	Flow Through eligible UNE-P transactions are processed in IMA GUI in accordance with documented flow through rules.
13-1-10	Flow Through eligible UNE-L transactions are processed in IMA GUI in accordance with documented flow through rules.
13-1-11	Flow Through eligible Stand Alone LNP transactions are processed in IMA GUI in accordance with documented flow through rules.

### 5.0 Test 14: Provisioning Evaluation

This section provides a summary of the Provisioning Evaluation.

#### 5.1 Objective

The objective of this test was to evaluate the ability of Qwest to provision orders submitted by CLECs and to do so on time.

#### 5.2 Evaluation Methods

KPMG Consulting collected and used data from a variety of sources, which included Qwest documentation, publicly available documentation, interviews with Qwest personnel, and interviews with CLEC personnel. Integral to the execution of the test were the outputs of P-CLEC transactions, CLEC transactions, and Qwest transactions.

#### 5.3 Analysis Methods

The Provisioning Evaluation included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. Outputs of data collection activities were compared to standards and benchmarks in order to determine a result for each criterion.

#### 5.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-5: Test 14 – Summary Results**

Evaluation Criteria – Satisfied	
14-1-1	Qwest's directory assistance database contains required field inputs.
14-1-2	Qwest's directory assistance database is updated on the committed due date.
14-1-3	Qwest switch translations contain required field inputs.
14-1-4	Qwest switch translations for disconnect orders are de-provisioned with the proper intercept-recording message.
14-1-5	Qwest's switch translation disconnect orders are completed on the committed due date.

14-1-6	Qwest provisions High Capacity circuits by adhering to documented method and procedure tasks.
14-1-7	Qwest provisions Loop Migrations (Hot Cuts) by adhering to documented method and procedure tasks.
14-1-8	Qwest provisions xDSL circuits by adhering to documented method and procedure tasks.
14-1-9	Qwest provisions ADSL Line Sharing circuits by adhering to documented method and procedure tasks.
14-1-11	Qwest's WCN completion dates accurately reflect the service order completion due date.
<b>Evaluation Criteria – Satisfied</b>	
14-1-12	Qwest post order CSRs are consistent with required field inputs from submitted Pre-Order CSRs.
14-1-13	Qwest's CSRs are updated on committed due dates.
14-1-15	Qwest provisions Analog Loops by adhering to documented method and procedure tasks.
14-1-16	Qwest meets the performance benchmark for PID OP-3C – Installation Commitments Met for Analog Loops.
14-1-17	Qwest meets the performance benchmark for PID OP-3C – Installation Commitments Met for Non-Loaded Loops.
14-1-18	Qwest meets the performance benchmark for PID OP-3A, B, D, & E – Installation Commitments Met for All Products.
14-1-19	Qwest meets the performance benchmark for PID OP-4C – Installation Interval for Analog Loops.
14-1-20	Qwest meets the performance benchmark for PID OP-4C – Installation Interval for Non-Loaded Loops.
14-1-21	Qwest meets the performance benchmark for PID OP-4A, B, D, & E – Installation Interval for All Products.
14-1-22	Qwest meets the performance benchmark for PID OP- 8B – Number Portability Timeliness for LNP Loops with Coordination.
14-1-23	Qwest meets the performance benchmark for PID OP- 8C – Number Portability Timeliness for LNP Loops without Coordination.
14-1-24	Qwest meets the performance benchmark for PID OP- 13A – Coordinated Cuts on Time – Unbundled Loop.
14-1-29	Qwest meets the parity performance requirements for PID OP-5 – New Service Installation Quality All Products.
<b>Evaluation Criteria – Not Satisfied</b>	
14-1-10	Qwest provisions Unbundled Dark Fiber by adhering to documented method and procedure tasks.
14-1-14	Qwest provisions EEL circuits by adhering to documented method and procedure tasks.
14-1-44	Qwest-produced measures of ordering and provisioning (OP) performance results for HPC transactions are consistent with KPMG Consulting-produced HPC measures.
<b>Evaluation Criteria – Unable to Determine</b>	
14-1-25	Qwest meets the parity performance requirements for PID OP-3A, B, D, & E – Installation Commitments Met for All Products.
14-1-26	Qwest meets the parity performance requirements for PID OP-3A, B, D, & E – Installation Commitments Met for DS1 Loops.

14-1-27	Qwest meets the parity performance requirements for PID OP-4 A, B, D, & E – Installation Interval for All Products.
14-1-28	Qwest meets the parity performance requirements for PID OP-4 A, B, D, & E – Installation Interval for DS1 Loops.
14-1-30	Qwest meets the parity performance requirements for PID OP-6B - Delayed Days.
14-1-31	Qwest meets the performance benchmark for PID OP-3C – Installation Commitments Met for Business POTS.
14-1-32	Qwest meets the performance benchmark for PID OP-3C – Installation Commitments Met for Residential POTS.
<b>Evaluation Criteria – Unable to Determine</b>	
14-1-33	Qwest meets the performance benchmark for PID OP-3C – Installation Commitments Met for UNE-P services.
14-1-34	Qwest meets the performance benchmark for PID OP-4C – Installation Interval for Business POTS.
14-1-35	Qwest meets the performance benchmark for PID OP-4C – Installation Interval for Residential POTS.
14-1-36	Qwest meets the performance benchmark for PID OP-4C – Installation Interval for UNE-P services.
14-1-37	Qwest meets the parity performance requirements for PID OP-6A - Delayed Days Business POTS.
14-1-38	Qwest meets the parity performance requirements for PID OP-6A - Delayed Days Residential POTS.
14-1-39	Qwest meets the parity performance requirements for PID OP-6A - Delayed Days UNE-P POTS.
14-1-40	Qwest meets the parity performance requirements for PID OP-6A - Delayed Days Unbundled Loops.
<b>Evaluation Criteria – Diagnostic</b>	
14-1-41	Qwest meets the performance benchmark for PID OP-7 – Coordinated “Hot Cut” Interval – Unbundled Loop.
14-1-42	Qwest meets the performance benchmark for PID OP-13B – Coordinated Cuts on Time – Unbundled Loop – Cuts Started Without CLEC Approval.
14-1-43	Qwest meets the performance benchmark for PID OP-15 – Interval for Pending Orders Delayed Past Due Date – all Products.

## 6.0 Test 14.7: Provisioning Process Parity Evaluation

This section provides a summary for the Provisioning Process Parity Evaluation.

### 6.1 Objective

The objective of this evaluation was to determine the degree to which the provisioning environment supporting CLEC orders is at parity with internal Qwest provisioning for its own retail customers.

## 6.2 Evaluation Methods

KPMG Consulting interviewed Qwest personnel, and conducted observations of work center staff performing provisioning functions. In addition, to data gathered during interviews and observations, KPMG Consulting obtained and reviewed copies of relevant Qwest provisioning documentation.

## 6.3 Analysis Methods

Information gathered during on-site visits and documentation reviews was evaluated against criteria defined by KPMG Consulting. This evaluation compared personnel, processes, and systems used to provision wholesale orders to those employed for retail orders, in order to determine whether consistencies exist.

## 6.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-6: 14.7 – Summary Results**

Evaluation Criteria – Satisfied	
14.7-1-1	The method for prioritizing orders in the order processing system(s) is the same for retail and wholesale operations.
14.7-1-2	Outputs from the order processing system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-3	Inputs to the translation system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-4	The method for prioritizing orders in the translations system(s) is the same for retail and wholesale operations.
14.7-1-5	Outputs from the translations system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-6	Inputs to problem resolution system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-7	The method for prioritizing orders in problem resolution system(s) is the same for retail and wholesale operations.
14.7-1-8	Outputs from problem resolution system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-9	Inputs to facilities system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-10	The method for prioritizing orders in facility group system(s) is the same for retail and wholesale operations.
14.7-1-11	Outputs from facilities system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-12	Inputs to engineering system(s) are prioritized using the same method for retail and wholesale operations.

<b>Evaluation Criteria – Satisfied</b>	
14.7-1-13	The method for prioritizing orders in the engineering center for retail circuit provisioning system(s) is the same for retail and wholesale operations.
14.7-1-14	Outputs from engineering system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-15	Inputs to dispatch system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-16	The method for prioritizing orders in dispatch system(s) is the same for retail and wholesale operations.
14.7-1-17	Outputs from dispatch system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-18	Inputs to inventory system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-19	The method for prioritizing orders in inventory center system(s) is the same for retail and wholesale operations.
14.7-1-20	Outputs from inventory system(s) are prioritized using the same method for retail and wholesale operations.
14.7-1-21	Wholesale order processing center(s) are organized with personnel who have the same abilities and skill sets as those for retail centers.
14.7-1-22	The execution of work in the translation center(s) is the same for retail and wholesale operations.
14.7-1-23	The translation center(s) are organized with personnel who have the same abilities and skill sets for retail as wholesale.
14.7-1-24	Hours of operations for translation center(s) are the same for retail and wholesale operations.
14.7-1-25	The execution of work in the problem resolution center(s) is the same for retail and wholesale operations.
14.7-1-26	The problem resolution center(s) are organized with personnel who have the same abilities and skill sets for retail and wholesale operations.
14.7-1-27	Hours of operation for problem resolution center(s) are the same for retail and wholesale operations.
14.7-1-28	The execution of work in facilities center(s) is the same for retail and wholesale operations.
14.7-1-29	The facilities center(s) are organized with personnel who have the same abilities and skill sets for retail and wholesale operations.
14.7-1-30	Hours of operation for facilities center(s) are the same for retail and wholesale operations.
14.7-1-31	Execution of work in the engineering center(s) is the same for retail and wholesale operations.
14.7-1-32	Engineering center(s) are organized with personnel who have the same abilities and skill sets for retail and wholesale operations.

<b>Evaluation Criteria – Satisfied</b>	
14.7-1-33	Hours of operation for Engineering center(s) are the same for retail and wholesale operations.
14.7-1-34	The execution of work in the dispatch center(s) is the same for retail and wholesale operations.
14.7-1-35	Dispatch center(s) are organized with personnel who have the same abilities and skill sets for retail as wholesale operations.
14.7-1-36	Hours of operation for dispatch center(s) are the same for retail and wholesale operations.
14.7-1-37	The execution of work in inventory center(s) is the same for retail and wholesale operations.
14.7-1-38	Inventory center(s) are organized with personnel who have the same abilities and skill sets for retail and wholesale operations.
14.7-1-39	Hours of operation for inventory center(s) are the same for retail and wholesale operations.
14.7-1-40	M&Ps used in the translations center are the same for retail and wholesale operations.
14.7-1-41	M&Ps used in the problem resolution center are the same for retail and wholesale operations.
14.7-1-42	M&Ps used in the facilities center are the same for retail and wholesale operations.
14.7-1-43	M&Ps used in the engineering center are the same for retail and wholesale operations.
14.7-1-44	M&Ps used in the dispatch center are the same for retail and wholesale operations.
14.7-1-45	M&Ps used in the inventory center are the same for retail and wholesale operations.
14.7-1-46	Processes for evaluating and adjusting system infrastructure utilization, based on current and forecasted volumes are the same for wholesale and retail operations.
14.7-1-47	Processes for evaluating and adjusting equipment utilization, based on current and forecasted volumes, are the same for wholesale and retail operations.
14.7-1-48	Processes for evaluating and adjusting office space utilization, based on current and forecasted volumes, are the same for wholesale and retail operations.
14.7-1-49	Processes for evaluating and adjusting personnel utilization, based on current and forecasted volumes, are the same for wholesale and retail operations.
14.7-1-50	Processes for incorporating capacity management plans into the business plan are the same for wholesale and retail operations.

## **7.0 Test 14.8: Provisioning Coordination Process Evaluation**

This section provides a summary of the Provisioning Coordination Process Evaluation.

### **7.1 Objective**

The objectives of this evaluation were to determine the completeness and consistency of provisioning coordination processes; determine whether the provisioning coordination processes are correctly documented, maintained and published; determine the accuracy, completeness and functionality of procedures for measuring, tracking, projecting and maintaining provisioning coordination process performance; ensure the provisioning coordination processes have effective management oversight and Qwest personnel are adhering to the documented process; and ensure that responsibilities for provisioning coordination process performance improvement are defined and assigned.

## 7.2 Evaluation Methods

KPMG Consulting utilized three methods of data collection for this evaluation: interviews with Qwest personnel; reviews of internal and external documentation that supports the coordinated provisioning process; and direct observations of Qwest personnel performing functions associated with the coordinated provisioning process.

## 7.3 Analysis Method

Information gathered during on-site visits and documentation reviews was evaluated against criteria defined by KPMG Consulting. This evaluation compared personnel, processes, and systems used to conduct coordinated provisioning activities to determine whether essential elements were present, and whether or not the defined steps are followed.

## 7.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-7: 14.8 – Summary Results**

Evaluation Criteria – Satisfied	
14.8-1-1	Coordinated provisioning procedures exist, are documented, and are adhered to.
14.8-1-2	Coordinated provisioning performance measures and process improvement practices are defined, tracked, and complete.
14.8-1-3	Coordinated provisioning request practices are defined, tracked, and practiced accurately and consistently.
14.8-1-4	Coordinated provisioning identification practices are defined, tracked, and practiced accurately and consistently.
14.8-1-5	Coordinated provisioning scheduling practices are defined, tracked, and practiced accurately and consistently.
14.8-1-6	Coordinated manual provisioning CLEC practices are defined, tracked, and practiced accurately and consistently.
14.8-1-7	The QCCC's manual coordination procedures used for order processing, translations, and dispatch centers are defined, tracked, and practiced accurately and consistently.
14.8-1-8	Error and exception processes are defined, tracked, and applied in a consistent manner.
14.8-1-9	Escalation practices are defined, tracked, and applied in a consistent manner.
14.8-1-10	The coordinated provisioning center maintains a defined management structure and oversight process.
14.8-1-11	M&Ps supporting the QCCC's operation and interaction with internal organizations are defined, tracked, and applied in a consistent manner.
14.8-1-12	The QCCC's and DSC's methods for assigning, managing, and training personnel are defined and consistent.
14.8-1-13	The QCCC and DSCs are operational according to defined hours.

## 8.0 Test 15: POP Volume Performance Test

This section provides a summary of the POP Volume Performance Test.

### 8.1 Objective

The objective of the POP Volume Performance Test was to validate the performance of the interfaces and systems at future projected volumes.

### 8.2 Evaluation Methods

The POP Volume Performance Test included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. The POP Volume Performance Test examined the timeliness of Qwest's system responses for IMA EDI and IMA GUI pre-order and order transactions. KPMG Consulting also evaluated the accessibility of each interface, as well as the completeness of responses received. These evaluation criteria provided the framework for the POP Volume Performance Test.

### 8.3 Analysis Methods

The data collected from the POP Volume Performance Test was analyzed and the results were assessed employing test-specific evaluation criteria.

### 8.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-8: Test 15 – Summary Results**

Evaluation Criteria – Satisfied	
15-1-1	Qwest systems provide responses to pre-order transactions via IMA EDI.
15-1-2	Qwest systems provide timely Address Validation Query (AVQ) pre-order responses via IMA EDI.
15-1-3	Qwest systems provide timely Connecting Facility Assignment Query (CFAQ) pre-order responses via IMA EDI.
15-1-4	Qwest systems provide timely Customer Service Record Query (CSRQ) pre-order responses via IMA EDI.
15-1-5	Qwest systems provide timely Facility Availability Query (FAQ) pre-order responses via IMA EDI.
15-1-6	Qwest systems provide timely Service Availability Query (SAQ) pre-order responses via IMA EDI.
15-1-7	Qwest systems provide timely Raw Loop Data Query (RLDQ) pre-order responses via IMA EDI.
15-1-9	Qwest systems provide complete pre-order responses via IMA EDI.
15-1-10	Qwest systems are available for IMA EDI pre-order processing.
15-1-11	Qwest systems provide responses to pre-order transactions via IMA GUI.



<b>Evaluation Criteria – Satisfied</b>	
15-1-12	Qwest systems provide timely Address Validation Query (AVQ) pre-order responses via IMA GUI.
15-1-13	Qwest systems provide timely Connecting Facility Assignment Query (CFAQ) pre-order responses via IMA GUI.
15-1-14	Qwest systems provide timely Customer Service Record Query (CSRQ) pre-order responses via IMA GUI.
15-1-15	Qwest systems provide timely Facility Availability Query (FAQ) pre-order responses via IMA GUI.
15-1-16	Qwest systems provide timely Service Availability Query (SAQ) pre-order responses via IMA GUI.
15-1-17	Qwest systems provide timely Raw Loop Data Query (RLDQ) pre-order responses via IMA GUI.
15-1-19	Qwest systems provide complete pre-order responses via IMA GUI.
15-1-20	Qwest systems are available for IMA GUI pre-order processing.
15-2-1	Qwest systems provide valid functional acknowledgements (FAs) to LSR transactions submitted via IMA EDI.
15-2-2	Qwest systems provide valid firm order confirmations (FOCs) to valid LSR transactions submitted via IMA EDI.
15-2-3	Qwest systems provide timely functional acknowledgements (FAs) to LSR transactions submitted via IMA EDI.
15-2-4	Qwest systems provide timely firm order confirmations (FOCs) to valid LSR transactions submitted via IMA EDI.
15-2-5	Qwest systems provide timely error (ERR) responses to LSR transactions submitted via IMA EDI.
15-2-6	Qwest systems provide complete order responses via IMA EDI.
15-2-7	Qwest systems provide complete order error responses via IMA EDI.
15-2-8	Qwest systems are available for IMA EDI order processing.
15-2-9	Qwest systems provide valid firm order confirmations (FOCs) to valid LSR transactions submitted via IMA GUI.
15-2-10	Qwest systems provide timely firm order confirmations (FOCs) to valid LSR transactions submitted via IMA GUI.
15-2-11	Qwest systems provide timely error (ERR) responses to erroneous LSR transactions submitted via IMA GUI.
15-2-12	Qwest systems provide complete order responses via IMA GUI.
15-2-13	Qwest systems provide complete order error responses via IMA GUI.
15-2-14	Qwest systems are available for IMA GUI order processing.
<b>Evaluation Criteria – Diagnostic</b>	
15-1-8	Qwest systems provide timely pre-order error messages via IMA EDI.
15-1-18	Qwest systems provide timely pre-order error messages via IMA GUI.

## 9.0 Test 16: CEMR Functional and Performance Evaluation

This section provides a summary of the CEMR Functional and Performance Evaluation.

### 9.1 Objective

The objectives of this test were to validate the existence and behavior of CEMR functional elements as documented in the *Qwest CEMR User Guide* and other applicable documents, and to evaluate, based on both quantitative and qualitative analysis methods, the equivalence of CEMR functionality to Qwest's retail front-end systems for trouble management. The behavior of CEMR was also evaluated to determine system performance, in terms of response time and operability, and to identify potential performance bottlenecks.

### 9.2 Evaluation Methods

Data collection activities for this evaluation corresponded to its three phases. For Phase 1, the P-CLEC, under the direction of KPMG Consulting, executed transactions using CEMR, and maintained communication with Qwest until trouble ticket closure. The P-CLEC also captured specific test data that was returned to KPMG Consulting for analysis. For Phase 2, KPMG Consulting performed observations of, and conducted interviews with, M&R retail work center personnel who perform trouble-processing activities, in order to identify potential substantive differences between the functionality of CEMR and the systems used in the Retail centers. For Phase 3, KPMG Consulting defined normal, peak, and stress volumes, and submitted CEMR transactions at corresponding volumes.

### 9.3 Analysis Methods

Using data obtained through the evaluation methods described above, KPMG Consulting compared the information gathered to checklists of evaluation criteria developed in the planning stage for each phase of this test.

### 9.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-9: Test 16 – Summary Results**

Evaluation Criteria – Satisfied	
16-1-1	The user is able to establish connectivity to CEMR.
16-1-2	Qwest systems generate expected responses when attempting to Create/Enter a trouble report via CEMR.
16-1-3	Qwest systems generate expected responses when attempting to Modify a trouble report via CEMR.
16-1-4	Qwest systems generate expected responses when attempting to Close/Cancel a trouble report via CEMR.
16-1-5	Qwest systems generate expected responses when attempting to Retrieve Status of a trouble report via CEMR.
16-1-6	Qwest systems generate expected responses when attempting to Retrieve Trouble History of a trouble report via CEMR.

16-1-7	Qwest systems generate expected responses when attempting to Initiate Mechanized Loop Test (MLT) via CEMR.
16-1-8	Qwest systems generate expected responses when attempting to Receive MLT Test Results via CEMR.
16-1-9	The user is able to Create a Resale trouble report using CEMR within 24 hours of service order due date, and receive the expected response.
16-1-10	The user is able to Create a UNE-P trouble report using CEMR within 24 hours of service order due date, and receive the expected response.
16-1-11	The user is able to Create a trouble report within 24 hours of an Unbundled Loop (UNE-L) migration using CEMR, and receive the expected response.
16-2-1	The functionality for creating a trouble ticket within the CEMR system is comparable to the functionality for creating a trouble ticket within the retail trouble reporting system.
16-2-2	The functionality for modifying a trouble ticket within the CEMR system is comparable to the functionality for modifying a trouble ticket within the retail trouble reporting system.
16-2-3	The functionality for closing a trouble ticket within the CEMR system is comparable to the functionality for closing a trouble ticket within the retail trouble reporting system.
16-2-4	The functionality for retrieving a status of a trouble ticket within the CEMR system is comparable to the functionality for retrieving the status of a trouble ticket within the retail trouble reporting system.
16-2-5	The functionality for retrieving a history of a trouble ticket within the CEMR system is comparable to the functionality for retrieving the history of a trouble ticket within the retail trouble reporting system.
16-2-6	The functionality for initiating an MLT within the CEMR system is comparable to the functionality for initiating an MLT within the retail trouble reporting system.
16-2-7	The functionality for receiving the results of an MLT within the CEMR system is comparable to the functionality for receiving the results of an MLT within the retail trouble reporting system.
16-3-1	CEMR returns expected responses for normal load transaction volumes.
16-3-2	CEMR returns expected responses for peak load transaction volumes.
16-3-4	The Create/Enter transactions are processed within the guidelines established by the ROC TAG benchmark.
16-3-6	Close/Cancel transactions are processed within the guidelines established by the ROC TAG benchmark.
16-3-7	Retrieve trouble report status transactions are processed within the guidelines established by the ROC TAG benchmark.
16-3-8	Retrieve trouble history transactions are processed within the guidelines established by the ROC TAG benchmark.
16-3-9	Initiate MLT results transactions are processed within the guidelines established by the ROC TAG benchmark.
16-3-10	Retrieval of MLT results transactions is processed within the guidelines established by the ROC TAG benchmark.
16-3-11	Initiate and Retrieval of Line Record results are processed within the guidelines established by the ROC TAG benchmark.
<b>Evaluation Criteria – Diagnostic</b>	
16-3-3	CEMR returns expected responses for stress load transaction volumes.

Evaluation Criteria – Not Satisfied	
16-3-5	Modify a trouble report transactions are processed within the guidelines established by the ROC TAG benchmark.

### 10.0 Test 17: MEDIACC (EB-TA) M&R Trouble Functional Evaluation

This section provides a summary of the MEDIACC (EB-TA) M&R Trouble Functional Evaluation.

#### 10.1 Objective

The objective of the test was to validate the existence, and expected behavior, of Qwest's EB-TA Gateway functionality.

#### 10.2 Evaluation Methods

The EB-TA Functional Test was conducted by submitting designed trouble scenarios across a Test Competitive Local Exchange Carrier's gateway to validate the existence, and expected behavior of the interface. The expected behavior, evaluated by examining the system's output and based on the Joint Implementation Agreement (JIA), was executed between the Test CLEC and Qwest. The JIA was based on industry standards developed for electronic bonding for trouble administration established between the Test CLEC and Qwest.

#### 10.3 Analysis Methods

The EB-TA Functional Test included a checklist of evaluation criteria developed by KPMG Consulting during the preparation of test activities. The success rates were recorded and evaluated against the criteria in the checklist. In addition, KPMG Consulting compared information gathered during work center visits to a pre-determined checklist to determine if substantive functional differences existed between Qwest retail and wholesale M&R systems.

#### 10.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-10: 17 – Summary Results**

Evaluation Criteria – Satisfied	
17-1-1	The user is able to enter a trouble report into EB-TA and receive a satisfactory response for at least 95% of transactions.
17-1-2	The user is able to request trouble report status from EB-TA and receive a satisfactory response for at least 95% of transactions.
17-1-3	The user is able to add trouble information to an EB-TA trouble report and receive a satisfactory response for at least 95% of transactions.
17-1-4	The user is able to modify trouble administration information on an EB-TA trouble report and receive a satisfactory response for at least 95% of transactions.

Evaluation Criteria – Satisfied	
17-1-5	The user is able to cancel a trouble report in EB-TA and receive a satisfactory response for at least 95% of transactions.
17-1-6	The user is able to respond to trouble repair completion notifications and receive a satisfactory response for at least 95% of transactions.
17-1-7	The user is able to conduct a Mechanized Loop Test (MLT) and receive a satisfactory response for at least 95% of transactions.
17-1-8	The functionality of the wholesale trouble reporting system is comparable to the functionality of the retail trouble reporting system.

### 11.0 Test 18: M&R End to End Trouble Report Processing

This section provides a summary of the M&R End to End Trouble Report Processing.

#### 11.1 Objective

The objective of this test was to evaluate Qwest's performance in making repairs under the conditions posed by various wholesale maintenance scenarios. The quality and timeliness of the repair process were assessed and compared with retail operations in those instances for which the retail data was available.

#### 11.2 Evaluation Methods

Qwest provisioned a test bed of circuits based on requirements specifications provided by KPMG Consulting that included test design input received from the Regional Oversight Committee (ROC) Technical Advisory Group (TAG). The test bed contained circuit types and features that were representative of those provisioned by Qwest for its wholesale customers. The test bed was designed to allow KPMG Consulting to introduce all categories of commonly reported faults.

#### 11.3 Analysis Methods

Analysis consisted of comparing the checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation to the results of the test troubles processed through normal Qwest maintenance flows. Testers maintained a record of all key data elements associated with each trouble processed. Additionally, results of the closed troubles were physically inspected to verify repairs.

#### 11.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-11: 18 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
18-1-1	Out-of-Service trouble reports on wholesale services specified in PID MR-3 that require the dispatch of a technician are cleared within 24 hours.
18-1-2	Out-of-Service trouble reports on wholesale services specified in PID MR-3 that do not require the dispatch of a technician are cleared within the defined interval.
18-2-1	Out-of-Service and service-affecting trouble reports on wholesale services specified in PID MR-4 that require the dispatch of a technician are cleared within 48 hours.
18-2-2	Out-of-Service and service-affecting trouble reports on wholesale services specified in PID MR-4 that do not require the dispatch of a technician are cleared within 48 hours.
18-3-1	Out-of-Service and service-affecting trouble reports on wholesale services specified in PID MR-5 that may or may not require the dispatch of a technician are cleared within 4 hours.
18-4-1	The mean time to restore wholesale services specified in PID MR-6 that require the dispatch of a technician is equal to or less than retail services.
18-4-2	The mean time to restore wholesale services specified in PID MR-6 that do not require the dispatch of a technician is equal to or less than retail services.
18-5-1	Repair of wholesale services specified in PID MR-9 that require the dispatch of a technician are made by the appointment date and time.
18-5-2	Repair of wholesale services specified in PID MR-9 that do not require the dispatch of a technician are made by the appointment date and time.
18-6-2	Close out codes for out-of-service and service-affecting wholesale UNE-L troubles indicated in Qwest's systems, and that may or may not require the dispatch of technician, are consistent with the troubles placed on the line.
<b>Evaluation Criteria – Not Satisfied</b>	
18-6-1	Close out codes for out-of-service and service-affecting wholesale UNE-P, resale, and Centrex 21 troubles indicated in Qwest's systems, and that may or may not require the dispatch of a technician, are consistent with the troubles placed on the line.
18-7-1	Out-of-service and service-affecting wholesale UNE-P, resale, and Centrex 21 troubles that may or may not require the dispatch of a technician are successfully repaired.
<b>Evaluation Criteria – Unable to Determine</b>	
18-6-3	Close out codes for out-of-service and service-affecting wholesale DS1 and higher bit rate troubles indicated in Qwest's systems are consistent with the troubles placed on the line that may or may not require the dispatch of a technician.

**12.0 Test 18.7: M&R Work Center Support Process Evaluation**

This section provides a summary of the M&R Work Center Support Process Evaluation.

**12.1 Objective**

The objective of this test was to evaluate the effectiveness of M&R work center support operations and adherence to common support center/help desk procedures. An additional objective was to analyze the nature and frequency of problems referred to the work center to determine if they indicated potential problems in other M&R Domains.

## 12.2 Evaluation Methods

KPMG Consulting used four methods of data collection for this evaluation: CLEC Interviews; Qwest Interviews; Observations; and Documentation Reviews.

## 12.3 Analysis Method

The M&R Work Center Support Evaluation included a pre-determined checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. These evaluation criteria provided the framework and guidelines for testing activities. Using data obtained through interviews, observations, and documentation reviews, KPMG Consulting compared the information gathered to the checklist of evaluation criteria in order to execute the test.

## 12.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-12: 18.7 – Summary Results**

Evaluation Criteria – Satisfied	
18.7-1-1	M&R work center call processing procedures are in place, complete, and adhered to by Qwest personnel.
18.7-2-1	M&R work center problem tracking and resolution procedures are in place, complete, and adhered to by Qwest personnel.
18.7-2-2	M&R work center trouble ticket closing and customer notification procedures are in place, complete, and adhered to by Qwest personnel.
18.7-3-1	M&R work center expedite and escalation procedures are in place, complete, and adhered to by Qwest personnel.
18.7-4-1	M&R work center responsibilities and activities for serving CLEC customers are in place, complete, and adhered to by Qwest personnel.
18.7-4-2	The M&R work center CEMR Help Desk is made available to assist users with the CEMR application.
18.7-4-3	M&R work center staff training procedures are in place and complete.
18.7-4-4	M&R work center staff performance monitoring procedures are in place and complete.
18.7-4-5	M&R work center staffing procedures are in place and complete.
18.7-4-6	M&R work center processes for maintaining security and integrity of data access tools are in place, complete, and adhered to by Qwest personnel.
18.7-5-1	M&R work center coordinated vendor meet and coordinated testing procedures are in place, complete, and adhered to by Qwest personnel.
18.7-5-2	M&R work center coordinated vendor meet request and scheduling procedures are in place, complete, communicated to CLECs, and adhered to by Qwest personnel.
18.7-5-3	M&R work center coordinated vendor meet trouble ticket closeout and notification procedures are in place, complete and adhered to by Qwest personnel.

Evaluation Criteria – Satisfied	
18.7-6-1	M&R work center manual handling procedures for resale are in place, complete and adhered to by Qwest personnel.
18.7-7-1	M&R work center manual handling procedures for UNE-L and UNE-P are in place, complete and adhered to by Qwest personnel.
18.7-8-1	M&R work center contingency action procedures are in place and complete.
18.7-8-2	M&R work center resource capacity management procedures are in place and complete.
18.7-8-3	M&R work center office space capacity management procedures are in place and complete.
18.7-8-4	M&R work center procedures for incorporating capacity management plans into Qwest’s business plan are in place and complete.

**13.0 Test 18.8: End-to-End Maintenance and Repair (M&R) Process Evaluation**

This section provides a summary of the End-to-End Maintenance (M&R) Process Evaluation.

*13.1 Objective*

The objectives of this test were to evaluate Qwest’s wholesale M&R trouble reporting process and the equivalence of Qwest’s end-to-end processes for trouble reporting and repair of retail and wholesale services. Additional objectives were to assess whether or not substantive differences exist between the Qwest retail and wholesale M&R processes, and to identify any potential differences between the processes that are practiced in the related work centers.

*13.2 Evaluation Methods*

KPMG Consulting utilized four methods of data collection for this evaluation. These included CLEC interviews, Qwest interviews, direct observations of Qwest work center personnel, and reviews of documentation related to applicable business operations.

*13.3 Analysis Method*

This evaluation included a pre-determined checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. Using data obtained through interviews, observations, and documentation reviews, KPMG Consulting compared the information gathered to the pre-determined checklist of evaluation criteria to determine a result for each.

*13.4 Summary Results*

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.



**Table III-13: 18.8 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
18.8-1-1	M&R trouble handling procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-2	M&R procedures for logging incoming trouble calls are repeatable and consistent between wholesale and retail operations.
18.8-1-3	M&R trouble diagnosis and appointment scheduling procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-4	M&R trouble ticket modification and cancellation procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-5	M&R status update procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-6	M&R customer escalation procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-7	M&R customer dispute resolution procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-8	M&R procedures for collection and review of performance data are repeatable and consistent between wholesale and retail operations.
18.8-1-9	M&R trouble ticket coding procedures are repeatable and consistent between wholesale and retail operations.
18.8-1-10	M&R trouble ticket closing procedures are repeatable and consistent between wholesale and retail operations.
18.8-2-1	M&R procedures for developing, updating, and distributing documentation related to trouble reporting and handling are repeatable and consistent between wholesale and retail operations.
18.8-2-2	M&R procedures relating to trouble reporting and handling activities are comparatively accessible to Qwest personnel providing wholesale and retail operations.
18.8-3-1	M&R contingency action procedures for business functions in the event of extended office outages are repeatable and consistent between wholesale and retail work centers.
18.8-3-2	M&R resource utilization evaluation and adjustment procedures are repeatable and consistent between wholesale and retail work centers.
18.8-3-3	M&R office space utilization evaluation and adjustment procedures are repeatable and consistent between wholesale and retail work centers.
18.8-3-4	M&R procedures for incorporating capacity management plans into the business plan are repeatable and consistent between wholesale and retail work centers.

#### **14.0 Test 19: Billing Usage Functional Evaluation**

This section provides a summary of the Billing Usage Functional Evaluation.

##### **14.1 Objective**

The objectives of this test were to evaluate the accuracy and completeness of all usage record types on the Daily Usage Feed (DUF) and to evaluate the timeliness of the DUF and access records delivery.

### 14.2 Evaluation Methods

Execution of the Billing Functional Usage Evaluation required KPMG Consulting to place common incoming and outgoing call types on an established test bed of accounts. Service order activity was introduced on selected accounts during the test calling period. Details of all calls were recorded for later comparison to DUF records.

### 14.3 Analysis Methods

The Billing Functional Usage Evaluation included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. Tester call logs were examined and compared to the DUF to ensure that only expected DUF records were received and that these records met the specifications of the call as it was recorded in the test call log.

### 14.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-14: Test 19 – Summary Results**

Evaluation Criteria – Satisfied	
19-1-1	DUF records adhere to EMI guidelines.
19-1-2	DUF record fields are accurately populated.
19-1-3	Expected DUF records are received by the correct owner.
19-1-4	Unexpected DUF records were not received.
19-1-5	DUF record packs are complete.
19-1-6	DUFs are delivered to the CLEC in a timely manner as defined in PID BI-1A.

### 15.0 Test 19.6: Daily Usage Feed Returns, Production and Distribution Processes Evaluation

This section provides a summary for the Daily Usage Feed Returns, Production, and Distribution Processes Evaluation.

#### 15.1 Objective

The objective of this test was to determine the accuracy, completeness, and timeliness of processes used to produce and distribute the DUF, and to receive and respond to DUF Returns.

#### 15.2 Evaluation Methods

Information about the processes used in the production, distribution, and returns of DUF was obtained through a series of interviews with Qwest Subject Matter Experts (SMEs), as well as through inspections of relevant Qwest internal and external documentation. KPMG Consulting also conducted interviews with CLECS to provide commercial input regarding the DUF retransmission process.

15.3 Analysis Methods

The information collected through interviews and documentation reviews was evaluated against test specific evaluation criteria to determine results.

15.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-15: 19.6 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
19.6-1-1	DUF production and distribution procedures are clearly defined.
19.6-1-2	The scope of Qwest’s Corporate Information Systems and Wholesale Help Desk is adequate to address customer needs.
19.6-1-3	CLECs are provided with sufficient contacts for DUF production and distribution issues.
19.6-1-4	DUF balancing and reconciliation procedures are clearly defined.
19.6-1-5	DUF routing and guiding is controlled by defined and documented processes.
19.6-1-6	DUF routing and guiding contains functionality to adequately address pending and completed service order activity.
19.6-1-7	DUF is prepared and delivered according to a defined production schedule.
19.6-1-8	DUF data delivery options are documented.
19.6-1-9	DUF interface specifications are documented.
19.6-1-10	Changes to DUF interface specifications are subject to change management techniques.
19.6-1-11	Process(es) exist to archive and retrieve prior period DUFs for re-transmission upon request.
19.6-1-12	Policies regarding availability of historical DUFs are documented.
19.6-1-13	Procedures for CLEC retransmission requests are documented.
19.6-1-14	CLECs can readily check the status of retransmission requests.
19.6-1-15	Capacity management practices and/or processes related to DUF production and distribution are adequate to manage resource utilization.
19.6-1-16	DUF returns procedures are defined.
19.6-1-18	CLECs are provided with sufficient contacts for DUF returns issues.
<b>Evaluation Criteria – Unable to Determine</b>	
19.6-1-17	DUF is corrected and returned according to a defined schedule.
19.6-1-19	CLECs can readily obtain status on DUF return requests.

16.0 Test 20: Carrier Bill Functional Evaluation

This section provides a summary of the Carrier Bill Functional Evaluation.

### 16.1 Objective

This test evaluated the accurate and timely appearance of charges on the appropriate bill and the timely electronic transmission of the bill.

### 16.2 Evaluation Methods

KPMG Consulting reviewed Qwest's documentation to gather information related to bill structure, content, Resale bill elements, UNE bill elements, and UNE-P bill elements for each of the relevant bill types.

### 16.3 Analysis Methods

Expected results were compared to bills produced by Qwest to verify that charges were appropriately and accurately billed.

### 16.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-16: 20 – Summary Results**

Evaluation Criteria – Satisfied	
20-1-1	Major bill sections appear on paper-formatted bills per Qwest documentation.
20-1-2	Appropriate sub-accounts appear under the correct summary account on paper-formatted bills.
20-1-3	Appropriate data appears in each of the major bill sections on paper-formatted bills.
20-2-1	Recurring rates on Resale bills are consistent with applicable tariffs and/or contract rates.
20-2-2	Recurring rates on UNE bills are consistent with applicable tariffs and/or contract rates.
20-2-3	Recurring rates on UNE-P bills are consistent with applicable tariffs and/or contract rates.
20-2-4	Non-recurring rates on Resale bills are consistent with applicable tariffs and/or contract rates.
20-2-5	Non-recurring rates on UNE bills are consistent with applicable tariffs and/or contract rates.
20-2-6	Non-recurring rates on UNE-P bills are consistent with applicable tariffs and/or contract rates.
20-2-7	Totals reflect accurate sums on Resale bills.
20-2-8	Totals reflect accurate sums on UNE bills.
20-2-9	Totals reflect accurate sums on UNE-P bills.
20-2-10	Cross-totals are correct on Resale Bills.
20-2-11	Cross-totals are correct UNE bills.
20-2-12	Cross-totals are correct on UNE-P bills.
20-2-13	Calculations on Resale bills correspond with tariff and/or published definitions.
20-2-14	Calculations on UNE bills correspond with tariff and/or published definitions.
20-2-15	Calculations on UNE-P bills correspond with tariff and/or published definitions.
20-2-16	Unbundled Minutes of Use (MOUs) usage charges are billed in accordance with Qwest business rules, tariffs and/or contractual terms.

Evaluation Criteria – Satisfied	
20-2-17	Unbundled transport usage charges are billed in accordance with Qwest business rules, tariffs, and/or contractual terms.
20-2-18	Unbundled Operator Surcharges and special usage-related charges are billed in accordance with Qwest business rules, tariffs, and/or contractual terms.
20-2-19	Resale usage is billed in accordance with Qwest business rules, tariffs and/or contractual terms.
20-2-20	Resale Operator Surcharges and special usage-related charges are billed in accordance with Qwest business rules, tariffs and/or contractual terms.
20-3-1	Wholesale bill completeness as defined by PID BI-4A, is in parity with retail bill accuracy.
20-3-2	P-CLEC bills reflect timely call event activity.
20-3-3	Wholesale bill accuracy as defined by PID BI-3A, is in parity with retail bill accuracy.
20-3-4	Wholesale bills are delivered within 10 calendar days, as defined by PID BI-2.

**17.0 Test 20.7: Bill Production and Distribution Process Evaluation**

This section provides a summary of the Bill Production and Distribution Process Evaluation.

**17.1 Objective**

The objective of this test was to determine whether the processes employed by Qwest to produce and distribute carrier bills result in bills that are accurate and are distributed to CLECs on a timely basis. The processes that enable a CLEC to request and obtain copies of previously received bills were also reviewed.

**17.2 Evaluation Methods**

Information about the processes used in the production, distribution, and resending of bills was obtained through a series of interviews with Qwest Subject Matter Experts (SMEs), as well as through inspections of relevant Qwest internal and external documentation.

**17.3 Analysis Method**

The analysis of the Bill Production and Distribution Process Evaluation focused on the accuracy with which rates and charges are applied, the completeness with which inputs to the bill are processed, and the timeliness with which inputs to the bill are processed and delivered to customers.

**17.4 Summary Results**

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-17: 20.7 – Summary Results**

Evaluation Criteria – Satisfied	
20.7-1-1	Scope of the bill cycle balancing services addresses balancing requirements.

<b>Evaluation Criteria – Satisfied</b>	
20.7-1-2	Cycle balancing responsibilities are defined.
20.7-1-3	Cycle balancing procedures exist to identify and resolve out-of-balance conditions.
20.7-1-6	Process includes procedures to ensure that service order activity is properly captured.
20.7-1-7	Process includes procedures to ensure customer usage is properly captured and guided.
20.7-1-8	Process includes procedures to ensure that customer profile changes are applied.
20.7-1-10	Process includes procedures to retrieve and transmit historical billing information.
20.7-1-11	Bill delivery responsibilities and activities are defined.
20.7-1-12	Process includes procedures to ensure creation of customer bills on appropriate medium.
20.7-2-1	Rate table maintenance responsibilities and activities are defined.
20.7-2-2	Process includes procedures to ensure that recurring and non-recurring rates are accurately applied.
20.7-2-3	Process includes internal change management procedures to prioritize, implement, and test system changes.
20.7-2-4	Process includes procedures to ensure that usage is accurately rated and applied.
20.7-2-5	Process provides for quality check of printed bills.
20.7-3-1	Bill delivery process performance measures are defined and measured.
20.7-3-2	Process includes procedures to ensure that bills are shipped or transmitted according to the established schedule.
20.7-3-3	Process includes procedures to ensure customer usage is billed according to an established schedule.
20.7-3-4	Process includes procedures to ensure that service order activity is billed on the next available bill.
<b>Evaluation Criteria – Unable to Determine</b>	
20.7-1-4	Process includes reasonability checks to identify errors not susceptible to pre-determined balancing procedures.
20.7-1-5	Process includes procedures to ensure that payments and adjustments are applied.
20.7-1-9	Process includes procedures to ensure that bill retention requirements are operationally satisfied.

## **18.0 Test 22: CLEC Network Provisioning – Network Design Request (NDR), Collocation, and Interconnection Trunks**

This section provides a summary of the CLEC Network Provisioning Test.

### **18.1 Objective**

The objectives of this qualitative test were to evaluate Qwest's processes and procedures for network designs, collocation facilities, and interconnection trunks.

### **18.2 Evaluation Methods**

The evaluation methods used for this test included gathering information through interviews with, and through reviews of documentation provided by, Qwest personnel who support the

NDR, collocation, and interconnection trunks. In addition, discussions were held with members of the CLEC community to acquire knowledge about their experiences with these processes.

### 18.3 Analysis Methods

Information gathered through data requests and interviews with both Qwest and CLEC personnel was evaluated against criteria defined by KPMG Consulting during the planning phase of the test. This evaluation examined Qwest personnel, processes, and systems used to process collocation, network design request and interconnection trunk orders to determine if essential elements of Qwest's processes and systems are present, and whether or not defined process steps are followed.

### 18.4 Summary Results

The following tables present the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-18-a: 22.1 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
22-1-1	Qwest and CLEC responsibilities are defined and available for NDR implementations.
22-1-2	NDR projects are implemented through structured, documented methodologies.
22-1-3	NDR decisions are documented and communicated to Qwest and CLEC participants.
22-1-4	The NDR process includes procedures for addressing errors and exceptions.
22-1-5	NDR methodologies specify a series of meetings and project milestones.
22-1-6	A tracking system is used to monitor and/or collect information from the beginning to the completion of Network Design projects.
22-1-7	The NDR implementation process includes dispute resolution and escalation processes that are defined, documented, and available to both CLEC and Qwest personnel.
22-1-8	Procedures are in place for defining the scope, estimating, documenting, and managing the design and costs of NDR implementations.
22-1-9	Standards of delivery are established for NDR implementations.
<b>Evaluation Criteria – Unable to Determine</b>	
22-1-10	Defined processes for NDR implementations are adhered to.

**Table III-18-b: 22.2 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
22-2-1	Qwest and CLEC responsibilities for collocation implementations are defined and available.
22-2-2	Collocation projects are implemented through structured, documented methodologies.
22-2-3	Qwest and CLEC responsibilities for collocation implementations are defined and available.
22-2-4	Collocation decisions are documented, and are communicated to Qwest and CLEC participants.
22-2-5	Collocation methodologies specify a series of intervals and project milestones.

Evaluation Criteria – Satisfied	
22-2-6	A tracking system is used to monitor and/or collect information from the beginning to the completion of collocation projects.
22-2-7	Procedures are defined for ensuring that CLECs have the same access to their collocation facilities as Qwest has to its own facilities.
22-2-8	The collocation implementation process includes dispute resolution and escalation processes that are defined, documented, and available to both CLEC and Qwest personnel.
22-2-9	Standards and procedures are defined for ensuring that trained personnel are assigned to a collocation project or customer.
22-2-10	Procedures are defined for ensuring that project staffs are available to collaborate on, and are empowered to resolve, collocation project issues.
22-2-11	Formal procedures are in place to quantify and track scope changes during collocation implementations, and communicate such to both Qwest and CLEC personnel.
22-2-12	Testing techniques and standards of delivery are adopted for collocation implementations.
22-2-13	Procedures are in place for defining the scope, estimating, documenting, and managing the design and costs of collocation implementations.
22-2-14	Defined processes for collocation implementations are adhered to.

**Table III-18-c: 22.3 – Summary Results**

Evaluation Criteria – Satisfied	
22-3-1	Qwest and CLEC Interconnection trunk responsibilities are defined and available.
22-3-2	Interconnection trunk projects are implemented and adhered to through structured, documented methodologies.
22-3-3	Interconnection methodologies specify intervals and project milestones.
22-3-4	Status reports are managed from the beginning to the completion of interconnection projects.
22-3-5	Interconnection trunk decisions are documented and communicated to Qwest and CLEC participants.
22-3-6	The interconnection trunk implementation process includes dispute resolution and escalation processes that are defined and documented.
22-3-7	Process(es) exist to track scope changes during interconnection trunk implementations, and are communicated to both Qwest and CLEC personnel.
22-3-8	The interconnect trunk process includes defined forecast intervals and execution timelines.
22-3-9	Generally accepted industry testing delivery processes are adopted for interconnection trunk implementations.
22-3-10	CLEC forecast needs for interconnection trunks are collected and processed on a timely basis.
22-3-11	Defined processes for interconnection trunks implementations are adhered to.

### 19.0 Test 23: Change Management Test

This section provides a summary of the Change Management Test.



### 19.1 Objective

The objective of this test was to determine the adequacy and completeness of procedures for developing, publicizing, conducting, and monitoring change management.

### 19.2 Evaluation Methods

Sources of data for this test included reviews of Qwest notifications, Qwest documentation, the Qwest Wholesale Web site, and the Change Request database. In addition, KPMG Consulting attended the monthly CMP meetings and CMP Redesign work sessions as an observer. KPMG Consulting conducted interviews with Qwest change management team personnel and commercial CLECs. KPMG Consulting also interviewed P-CLEC representatives who were knowledgeable about the Qwest Change Management Process.

### 19.3 Analysis Methods

KPMG Consulting used data obtained via interviews with Qwest personnel, as well as reviews of Qwest documentation and analysis of data, to compare information gathered to a pre-determined framework of evaluation criteria. This analysis focused on the existence and adequacy of, as well as adherence to, defined processes to determine a result for each discrete evaluation criterion.

### 19.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-19: Test 23 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
23-1	The change management process responsibilities and activities are defined.
23-4	The change management process includes procedures for allowing input from all interested parties.
23-5	The change management process defines intervals for considering and notifying customers about proposed changes.
23-6	Documentation regarding proposed changes is distributed to wholesale customers.
<b>Evaluation Criteria – Unable to Determine</b>	
23-2	The change management process is in place and documented.
23-3	The change management process has a framework to evaluate, categorize, and prioritize proposed changes.
<b>Evaluation Criteria – Unable to Determine</b>	
23-7	Procedures and systems are in place to track information such as descriptions of proposed changes, key notification dates, and change status.
23-8	Criteria are defined for the prioritization system and for severity coding.
23-9	Qwest complies with notification intervals and documentation release requirements

## 20.0 Test 24.3: Account Establishment and Management Review

This section provides a summary for the Account Establishment and Management Review.

### 20.1 Objective

The objective of this test was to determine the adequacy, completeness, and compliance with procedures for developing, publicizing, conducting, and monitoring account management.

### 20.2 Evaluation Methods

Information relevant to the Qwest processes and procedures for account establishment and management was obtained from six sources, which included: interviews with Qwest personnel, an examination of Qwest's InfoBuddy system, reviews of publicly available documentation, an interview with P-CLEC, a review Qwest internal documentation, and interviews with CLEC representatives who volunteered to participate in the Qwest OSS Evaluation.

### 20.3 Analysis Methods

KPMG Consulting compared information gathered to a pre-determined framework of evaluation criteria to conduct the analysis for the test. This analysis focused on the existence of, adequacy of, and adherence to, defined processes to determine conclusion for each criterion

### 20.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-20: 24.3 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
24.3-1	Account establishment and management responsibilities and activities are defined.
24.3-2	Account management staff is organized to provide account coverage.
24.3-3	Instructions for contacting account managers are defined and published.
24.3-4	Procedures for receiving, managing, and resolving customer inquiries are defined and adhered to.
24.3-5	Procedures for escalating critical, time-sensitive, and unresolved customer issues are defined and adhered to.
24.3-6	Procedures for making routine, regular communications to customers are defined and adhered to.
24.3-7	Procedures for making emergency notifications and communications to customers are defined.
24.3-8	Account Managers interact with other Qwest units on the CLECs' behalf.
24.3-10	Responsibilities and procedures for developing, updating, and correcting CLEC documentation are defined.
24.3-11	Production and distribution procedure allows latest document version to be made available to interested parties as soon as they are complete.
<b>Evaluation Criteria – Unable to Determine</b>	

Evaluation Criteria – Satisfied	
24.3-9	Customer calls are returned per documented/stated intervals.

**21.0 Test 24.4: CLEC Forecasting Review**

This section provides a summary of the CLEC Forecasting Review.

**21.1 Objective**

The objective of this test was to determine the existence of, adequacy of, and Qwest’s compliance with, procedures for requesting, receiving, refining, and utilizing forecasts from CLECs. The utilization portion of this test included an assessment of Qwest’s capacity management process for scaling the growth of its systems and staff, based on projected demand.

**21.2 Evaluation Methods**

Information relevant to the Qwest processes and procedures for CLEC forecasting was obtained from interviews with Qwest personnel, reviews of publicly available documentation, reviews of Qwest internal methods and procedures documentation and interviews with CLEC representatives.

**21.3 Analysis Method**

Using information obtained through the methods described above, KPMG Consulting compared the information gathered against a pre-determined framework of evaluation criteria to carry out the analysis for the test.

**21.4 Summary Results**

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-21: 24.4 – Summary Results**

Evaluation Criteria – Satisfied	
24.4-1	Forecast process responsibilities and activities are defined and documented.
24.4-2	Scope and objectives of the forecasting process are defined and documented.
24.4-3	Discrete activities that comprise the forecasting process and associated outputs are defined and documented.
24.4-4	The forecasting process includes procedures for addressing errors and exceptions.
24.4-5	Forms and templates are provided to facilitate data collection from CLECs.
24.4-6	Data provided by each CLEC is confirmed and verified.
24.4-7	Procedures are in place to use forecasted data for capacity management purposes.
24.4-8	The process includes requirements for periodic forecast revisions.
24.4-9	Procedures are in place to ensure that confidentiality regarding proprietary CLEC information is ensured.

Evaluation Criteria – Satisfied	
24.4-10	Forecasted data is utilized by Qwest.

## 22.0 Test 24.5: CLEC Training Review

This section provides a summary of the CLEC Training Process Review.

### 22.1 Objective

The objective of this test was to determine the existence and adequacy of procedures for developing, announcing, conducting, and monitoring Qwest training for CLECs.

### 22.2 Evaluation Methods

The data collection performed for this test relied on interviews, and reviews of documentation and the CLEC Student Database, supplied by Qwest. In addition, KPMG Consulting interviewed KPMG Consulting and HPC representatives who attended Qwest training courses to survey them on their experiences, and gather information about areas such as course registration from the trainees' perspectives.

### 22.3 Analysis Method

The CLEC Training Review included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. KPMG Consulting used data obtained through interviews with Qwest personnel, as well as reviews of Qwest documentation and analysis of data, to compare the information gathered to a pre-determined framework of evaluation criteria to conduct the analysis for the test.

### 22.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-22: 24.5 – Summary Results**

Evaluation Criteria – Satisfied	
24.5-1	Training process responsibilities are defined and documented.
24.5-2	Scope and objectives of the training process are defined and documented.
24.5-3	Essential elements of the training process are in place and documented.
24.5-4	Process includes procedures for publishing information about training opportunities.
24.5-5	The training process includes procedures for addressing updated information and errors.
24.5-6	Process includes procedures to survey students on effectiveness of training.
24.5-7	Process includes procedures for incorporating feedback about training content and instructor performance into the training program.
24.5-8	Process includes procedures to track CLEC training utilization and attendance.
24.5-9	Training offerings are scalable in response to additional demand (e.g., increased class size, number of instructors).

Evaluation Criteria – Satisfied	
24.5-10	Training process performance metrics are defined and measured.

**23.0 Test 24.6: OSS Interface Development Review**

This section provides a summary of the OSS Interface Development Review.

*23.1 Objective*

The objectives of this test were to determine the adequacy, consistency, and completeness of Qwest’s specifications, documentation and technical assistance provided to the CLECs for developing, testing, and operating OSS interfaces for pre-ordering, ordering, maintenance and repair, and billing.

*23.2 Evaluation Methods*

KPMG Consulting collected data for the OSS Interface Development Review through reviews of Qwest’s documentation, interviews with Qwest personnel; and interviews with, and reviews of documentation from, a CLEC, the Pseudo-CLEC (P-CLEC), and a CLEC service provider.

*23.3 Analysis Methods*

The OSS Interface Development Review included a checklist of evaluation criteria developed by KPMG Consulting during the preparation of test activities for the Qwest OSS Evaluation. These evaluation criteria provided the framework of norms, standards, and guidelines for the OSS Interface Development Review.

*23.4 Summary Results*

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-23: 24.6 – Summary Results**

Evaluation Criteria – Satisfied	
24.6-1-1	Qwest has a documented software/interface development methodology that addresses requirements and specifications definition, design, development, testing, and implementation.
24.6-1-2	Interface development methodology defines how quality is to be assured.
24.6-1-3	Responsibilities and procedures for developing and updating interface specification document(s) are defined.
24.6-1-4	Interface specifications that define applicable business rules, data formats/definitions, and transmission protocols are made available to customers.
24.6-1-5	On-call customer support for interface specifications is provided.
24.6-1-6	Procedures for updating interface specifications are integrated with formal change management procedures involving customers.
24.6-1-7	Qwest has a documented methodology for conducting carrier-to-carrier testing with customers seeking to interconnect.

<b>Evaluation Criteria – Satisfied</b>	
24.6-1-9	Carrier-to-carrier test environments are available and segregated from Qwest production and development environments.
24.6-1-10	On-call customer support for interface testing is provided.
24.6-1-11	Carriers are provided with documented specifications for active test environments.
24.6-1-12	Active test environments are subject to version control, and carriers are notified before changes are made to active test environments.
24.6-1-13	Procedures are defined to log software “bugs,” errors, and omissions in specifications and other issues discovered during carrier-to-carrier testing.
24.6-1-14	On-call technical support is provided for production versions of interfaces.
24.6-1-15	Procedures are defined to track software “bugs,” errors, and omissions in specifications and other issues discovered during production use of interfaces.
24.6-1-16	Business rules and software change logs exist, are updated, and are shared with customers.
24.6-1-17	Internal software acceptance testing is defined and documented.
24.6-1-18	Methods and procedures are defined for ensuring that changes found during all phases of testing are incorporated into instances of software code.
24.6-1-19	Processes direct that new releases undergo testing prior to migration to a test environment.
24.6-1-20	Defects and required changes are identified and tracked during pre-production testing.
24.6-1-21	Measures are defined and tools exist to monitor system resource utilization levels.
24.6-1-22	There are defined conditions that trigger the addition of resources.
24.6-1-23	Procedures are in place to adjust for changes in demand of services once the need for these changes is detected.
24.6-1-24	Contingencies are defined to mitigate the impact of unexpected changes in business and transaction volumes on OSS interfaces.
24.6-2-1	Qwest has a documented software/interface development methodology that addresses requirements and specifications definition, design, development, testing, and implementation.
24.6-2-2	Interface development methodology defines how quality is to be assured.
24.6-2-3	Responsibilities and procedures for developing and updating interface specification document(s) are defined.
24.6-2-4	Interface specifications that define applicable business rules, data formats/definitions, and transmission protocols are made available to customers.
24.6-2-5	On-call customer support for interface specifications is provided.
24.6-2-6	Procedures for updating interface specifications are integrated with formal change management procedures involving customers.
24.6-2-7	Qwest has a documented methodology for conducting carrier-to-carrier testing with customers seeking to interconnect.
24.6-2-8	A functional test environment is made available to customers for all supported interfaces.
24.6-2-10	On-call customer support for interface testing is provided.
24.6-2-11	Carriers are provided with documented specifications for active test environments.
24.6-2-12	Active test environments are managed to version control. Carriers are notified before changes are made to active test environments.
24.6-2-13	Procedures are defined to log software “bugs,” errors, and omissions in specifications and other issues discovered during carrier-to-carrier testing.

<b>Evaluation Criteria – Satisfied</b>	
24.6-2-14	On-call technical support is provided for production versions of interfaces.
24.6-2-15	Procedures are defined to track software “bugs,” errors, and omissions in specifications and other issues discovered during production use of interfaces.
24.6-2-16	Business rules and software change tracking tools exist, are updated, and are shared with customers.
24.6-2-17	Internal software acceptance testing is defined and documented.
24.6-2-18	Methods and procedures are defined for ensuring that changes found during all phases of testing are incorporated into instances of software code.
24.6-2-19	Processes direct that new releases undergo testing prior to migration to a test environment.
24.6-2-20	Defects and required changes are identified and tracked during pre-production testing.
24.6-2-21	Measures are defined and tools exist to monitor system resource utilization levels.
24.6-2-22	There are defined conditions that trigger the addition of resources.
24.6-2-23	Procedures are in place to adjust for changes in demand of services once the need for these changes is detected.
24.6-2-24	Contingencies are defined to mitigate the impact of unexpected changes in business and transaction volume on OSS interfaces.
<b>Evaluation Criteria – Not Satisfied</b>	
24.6-1-8	A functional test environment is made available to customers for all supported interfaces.
24.6-2-9	Carrier-to-carrier test environments are available and segregated from Qwest production and development environments.

#### **24.0 Test 24.7: Wholesale Systems Help Desk Review**

This section provides a summary of the Wholesale Systems Help Desk Review.

##### **24.1 Objective**

The objectives of this test were to determine completeness and consistency of, and adherence to, the Wholesale Systems Help Desk (WSHD) processes.

##### **24.2 Evaluation Methods**

Data collection activities for this evaluation include interviews with Qwest, HPC and CLEC personnel, observations of WSHD work operations, and reviews of Qwest’s internal and publicly available documentation.

##### **24.3 Analysis Methods**

The data collected from the Wholesale System Help Desk Review was analyzed and the results were assessed employing test-specific evaluation criteria.

##### **24.4 Summary Results**

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-24: 24.7 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
24.7-1	Help Desk responsibilities and activities are defined and documented.
24.7-2	Customer can initiate the trouble ticket process.
24.7-3	Customer has access to status of a trouble ticket.
24.7-4	Customer escalation procedures are defined and documented.
24.7-5	Process includes procedures for call logging and acknowledgement.
24.7-6	Process includes procedures for resolving trouble tickets.
24.7-7	Process includes procedures for closing a trouble ticket.
24.7-8	Process includes procedures for status tracking, management reporting, and management intervention.
24.7-9	Process includes procedures for maintaining security and integrity of data.
24.7-10	Process includes procedures for obtaining CLEC feedback.
24.7-11	Process performance measures are defined, measured, and reviewed.
24.7-12	Process includes procedures for capacity planning.
24.7-13	Process improvement responsibilities are assigned and applied.

### **25.0 Test 24.8: Interconnect Service Center (ISC) Support Review**

This section provides a summary for the Interconnect Service Center (ISC) Support Review.

#### **25.1 Objective**

The objectives of this review were to determine completeness and consistency of, and adherence to, the Interconnection Service Center (ISC) processes:

#### **25.2 Evaluation Methods**

KPMG Consulting utilized documentation reviews, CLEC interviews; Qwest interviews and observations; and P-CLEC findings to collect data for this evaluation.

#### **25.3 Analysis Methods**

Information gathered during documentation reviews, interviews, observations, and from P-CLEC findings was evaluated against criteria, defined by KPMG Consulting during the planning phase of the test, to determine results.

#### **25.4 Summary Results**

The following table presents the summary results of the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.



**Table III-25: Test 24.8 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
24.8-1	Interconnect Service Center support processes, including policy, procedures, roles, and objectives, are documented and followed.
24.8-2	The scope and objectives of the Interconnect Service Center support are documented and communicated to CLECs.
24.8-3	Interconnect Service Center support processes include call intake procedures for logging and acknowledgement of issues.
24.8-4	Interconnect Service Center support processes include procedures for problem categorization, prioritization, and escalation.
24.8-5	Interconnect Service Center support processes include procedures for help desk referral/transfer.
24.8-6	Interconnect Service Center support processes include procedures for addressing CLEC problems or issues.
24.8-7	Interconnect Service Center support processes include procedures for providing CLECs with accurate and timely responses.
24.8-8	Interconnect Service Center support processes include procedures for closure of escalated issues.
24.8-9	Interconnect Service Center support processes include procedures for tracking the status of escalated issues and management reporting.
24.8-10	Interconnection Service Center support performance measures and process improvement practices are defined, tracked, reported, reviewed, and applied.
24.8-11	Interconnect Service Center support processes include procedures for capacity planning.
24.8-12	Interconnect Service Center processes include procedures for maintaining security and data integrity.

## **26.0 Test 24.9: Network Surveillance and Outage Support Review**

This section provides a summary of the Network Surveillance and Outage Support Review.

### **26.1 Objective**

The objective of this test was to assess the functionality of Qwest's network surveillance activities and its application to the wholesale and retail customers they support. Test targets for the evaluation included the network surveillance systems and processes employed by the following Qwest operations centers: 1) Network Management Center (NMC), and 2) Network Operations Center (NOC). In addition, a review of the network blockage and outage notification procedures used by Qwest to alert affected wholesale customers of alarms and outage events was conducted.

### **26.2 Evaluation Methods**

KPMG Consulting utilized four methods of data collection for this evaluation. These included Qwest interviews, CLEC interviews, work center observations, and documentation reviews.

### 26.3 Analysis Method

Analysis for the Network Surveillance and Outage Support Evaluation focused on the existence of processes related to surveillance of the Qwest network, and notification of associated network outages, the completeness of such processes, and Qwest Network Surveillance personnel adherence to processes. Data gathered were compared to pre-defined evaluation criteria in order to determine a result for each.

### 26.4 Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-26: 24.9 – Summary Results**

Evaluation Criteria – Satisfied	
24.9-1	A process for IOF surveillance (including trunking) is in place.
24.9-2	The process for IOF surveillance (including trunking) is complete.
24.9-3	The process for IOF surveillance (including trunking) is adhered to by Qwest personnel.
24.9-4	A process for Advanced Intelligent Network (AIN) interconnection surveillance is in place.
24.9-5	The process for AIN interconnection surveillance is complete.
24.9-6	The process for AIN interconnection surveillance is adhered to by Qwest personnel.
24.9-7	A process for SS7 interconnection surveillance is in place.
24.9-8	The process for SS7 interconnection surveillance is complete.
24.9-9	The process for SS7 interconnection surveillance is adhered to by Qwest personnel.
24.9-10	A process for network event notification (including blockage events) is in place.
24.9-11	Network event notification process documentation is accurate and complete.
24.9-12	Network event notification procedures are conducted in a timely, accurate, and complete manner.

### 27.0 Test 24.10: ISC/Billing and Collection Center Evaluation

This section provides a summary of the ISC/Billing and Collection Center Evaluation.

#### 27.1 Objective

The objectives of this evaluation were to determine completeness and consistency of, and adherence to, the ISC/Billing and Collection Center processes.

#### 27.2 Evaluation Methods

KPMG Consulting conducted interviews with Qwest personnel and performed on-site inspections of work operations. Processes, operational methods and procedures, organization charts, and supporting documentation were collected for evaluation and analysis.

### 27.3 Analysis Methods

The ISC/Billing and Collection Center Support Evaluation included a checklist of evaluation criteria developed by KPMG Consulting during the initial phase of the Qwest OSS Evaluation. These evaluation criteria provided the framework and guidelines for the ISC/Billing and Collection Center Support Evaluation.

### 27.4. Summary Results

The following table presents the summary results for the evaluation criteria. Definitions of evaluation criteria and possible results (Satisfied, Not Satisfied, Unable to Determine, Not Complete, or Diagnostic) are provided in Section II.

**Table III-27: 24.10 – Summary Results**

<b>Evaluation Criteria – Satisfied</b>	
24.10-1-1	Scope of responsibilities of the Billing Support Center is adequate to address customer inquiries.
24.10-1-2	Process includes procedures to acknowledge and track CLEC requests.
24.10-1-3	Process includes procedures for resolving inquiries and claims in a timely manner.
24.10-1-4	Process includes procedures for closure of claims.
24.10-2-1	Escalation procedures are defined.
24.10-2-2	Customers can readily initiate a claim or query.
24.10-2-3	Customers can obtain information on the status of a claim or inquiry.
24.10-2-4	Business transaction volumes and resource utilization are tracked for use in the capacity planning process.
24.10-3-1	Process includes procedures for management reporting.
24.10-3-2	Process includes procedures for maintaining security and integrity of customer data.
24.10-3-3	Performance measures are defined, measured, and reviewed.
<b>Evaluation Criteria – Unable to Determine</b>	
24.10-3-4	Training of representatives is defined documented, and followed.