Exhibit 23

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[Service Date June 20, 2002]

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Investigation Into U S WEST COMMUNICATIONS, INC.'s Compliance With Section 271 of the Telecommunications Act of 1996	DOCKET NO. UT-003022 DOCKET NO. UT-003040
In the Matter of U S WEST COMMUNICATIONS, INC.'s Statement of Generally Available Terms Pursuant to Section 252(f) of the Telecommunications Act of 1996	37th SUPPLEMENTAL ORDER: COMMISSION ORDER ADDRESSING QWEST'S COMPLIANCE WITH COMMISSION ORDERS CONCERNING QWEST'S SGAT AND PERFORMANCE ASSURANCE PLAN (QPAP)

I. SYNOPSIS

1 *In this Order, the Commission determines that Qwest's QPAP, filed on May 28, 2002, as Exhibit K to the SGAT does not comply with the Commission's 30th and 33rd Supplemental Orders. Further, the Commission finds that Qwest must modify sections of the SGAT relating to the use of Direct Trunked Transport facilities for interconnection, access to loop qualification information, terms and conditions relating to CLEC access to right-of-way agreements, collocation provisioning, and service performance.*

II. BACKGROUND AND PROCEDURAL HISTORY

2 This is a consolidated proceeding to consider the compliance of Qwest Corporation (Qwest), formerly known as U S WEST Communications, Inc. (U S WEST),[1] with

[1] After this proceeding began, U S WEST merged and has become known as Qwest Corporation. For consistency and ease of reference we will use the new name Qwest in this Order.

the requirements of section 271 of the Telecommunications Act of 1996 (the Act),[2] and the review and approval of Qwest's Statement of Generally Available Terms (SGAT) under section 252(f)(2) of the Act. This proceeding is designed, among other things, to produce a recommendation to the Federal Communications Commission (FCC) regarding Qwest's compliance with certain requirements of law.

3 The Commission has conducted its review of the SGAT in this proceeding through a series of four workshops, comments by the parties, and the opportunity for oral argument to the Commission on contested issues. The Commission participated in the Multi-state Proceeding's hearings on Qwest's Performance Assurance Plan (QPAP), and considered the Multi-state facilitator's report as an initial order following the hearings.[3] A detailed summary of the history of Workshops 1 through 4, and hearings on the QPAP are set forth in the Commission's *30th Supplemental Order, Commission Order Addressing Qwest's Performance Assurance Plan (30th Supplemental Order)* and *34th Supplemental Order, Order Regarding Qwest's Demonstration of Compliance with Commission Orders (34th Supplemental Order)* and will not be repeated in this order.

4 The Commission held hearings on December 18 and 19, 2001, to hear additional testimony and argument on the issue of the QPAP, and on whether Qwest's SGAT filings comply with Commission orders. The Commission entered its *30th Supplemental Order* on April 5, 2002. Following Qwest's petition for reconsideration and responses by the parties, the Commission entered the *33rd Supplemental Order: Order Denying in Part and Granting in Part, Qwest's petition for Reconsideration of the 30th Supplemental Order (33rd Supplemental Order)* on May 20, 2002.

5 On May 29, 2002, the Commission entered its *34th Supplemental Order.* That order discussed compliance issues arising from Commission orders addressing Workshops 1 through 4, as well as argument on these issues presented during hearings held in

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[2] Pub. L. No. 104-104, 110 Stat. 56, *codified at* 47 U.S.C. § 151 *et seq.*

[3] Seven states--Iowa, Utah, North Dakota, Wyoming, Montana, Idaho, and New Mexico—have held a joint proceeding, known as the Multi-state Proceeding, similar to the proceeding in Dockets No. UT-003022 and UT-003040 to evaluate Qwest's SGAT and Qwest's compliance with section 271 of the Act. The states participating in the Multi-state Proceeding hired a facilitator, Mr. John Antonuk of The Liberty Consulting Group, to conduct the workshops and hearings and prepare reports following each workshop or hearing. The facilitator issued a report on October 22, 2001 following the QPAP hearings.

December 2001, April 2002, and May 2002. The order required Qwest to file an SGAT in compliance with the requirements of the order by June 11, 2002. Qwest filed its compliance SGAT on June 11, 2002.[4] AT&T filed a response to Qwest's compliance filing on June 18, 2002.

6 The Commission held hearings on June 5-7, 2002, addressing the issue of KPMG's Final Report on Qwest's OSS Testing and compliance issues concerning the QPAP.

7 The orders discussed above addressed disputed issues from hearings on the QPAP and Workshops 1, 2, 3, and 4, and stated findings and conclusions on all material facts inquired into during the course of the workshops. Where the same issues are addressed below, the Commission restates and adopts the findings and conclusions entered in the orders, with the modifications discussed below.

III. PARTIES AND REPRESENTATIVES

8 The following parties and their representatives participated in hearings addressing the issue of compliance with Commission orders concerning the QPAP and the SGAT: Qwest, by Lisa Anderl and Adam Sherr, attorneys, Seattle, Washington, Lynn Stang, and Charles W. Steese, attorneys, Denver, Colorado; AT&T Communications of the Pacific Northwest, Inc. and TCG Seattle (collectively AT&T), by Mary Tribby, Rebecca DeCook, Letty S. D. Friesen, and Steven Weigler, attorneys, Denver; WorldCom, Inc. (WorldCom) by Ann E. Hopfenbeck, Michel Singer Nelson, and Thomas Dixon, attorneys, Denver; Electric Lightwave Inc. (ELI), XO Washington, Inc. (XO), and Time-Warner Telecom of Washington by Gregory J. Kopta, attorney, Seattle; Covad Communications Company (Covad) by K. Megan Doberneck, attorney, Denver; Teligent Services, Inc., Rhythms Links, Inc. and TRACER, by Arthur A. Butler, attorney, Seattle; Sprint Corporation (Sprint), by Barbara Young, attorney, Hood River, Oregon; and Public Counsel by Robert W. Cromwell, Jr., Assistant Attorney General, Seattle.

[4] Qwest's June 11, 2002, seventh revised SGAT has been admitted as Exhibit 1806. The redlined version of the SGAT has been admitted as Exhibit 1807.

IV. DISCUSSION

A. QPAP COMPLIANCE ISSUES

9 On May 28, 2002, Qwest filed its QPAP Compliance Filing, attaching a revised QPAP, which is also Exhibit K to the SGAT, and a copy of a summary of the agreements and discussions in the Post Entry Performance Plan (PEPP) Final Collaborative. *See Exs. 1680-82.* Qwest filed these documents to demonstrate its compliance with the Commission's *30th* and *33rd Supplemental Orders* addressing QPAP issues. On June 3, 2002, Public Counsel filed comments in response to Qwest's filing, as did AT&T, WorldCom, Covad, ELI, and Time Warner, filing jointly.

10 During the hearing on QPAP compliance issues held on June 5, 2002, Qwest, AT&T, WorldCom, Covad and Public Counsel reached agreement on QPAP language concerning the use of current year ARMIS data, collocation payments, adding new UNEs to the QPAP, the special fund, and the method of payment. Those agreements were not included in the SGAT filed with the Commission on June 11, 2002. The agreements reached during the June 5 hearing are discussed briefly below together with discussion of contested issues.

11 This order identifies whether the changes Qwest has made in its QPAP comply with Commission orders. Where Qwest has proposed different QPAP language, or the parties contest whether QPAP language complies, the Commission discusses the issue below and either finds the language complies or directs Qwest to make changes to the QPAP to comply with Commission orders in QPAP filed as a part of a complete SGAT compliance filing, on Tuesday, June 25, 2002. Where the Commission finds that Qwest's language in the QPAP complies, the language is identified below in a table listing the issue discussed in Commission orders, the relevant Commission order and ordering paragraph, the change required by the order, and the QPAP section or Exhibit that complies.

1. The Revenue Cap

12 Qwest filed a QPAP with the Commission following hearings in the Multi-state Proceeding, incorporating recommendations made by the facilitator for the Multi-state Proceeding. *See Ex. 1217.* Section 12.1 of Exhibit 1217 provides that:

> CLEC agrees that this amount constitutes a maximum annual cap that shall apply to the aggregate total of Tier 1 liquidated damages, including any such damages paid pursuant to this Agreement, any other interconnection agreement, or any payments made for the same underlying activity or omission under any other contract, order or rule and Tier 2 assessments or payments made by Qwest for the same underlying activity or omission under any other contract, order or rule.

¶ In paragraph 51 of the *30th Supplemental Order*, the Commission adopted the Multi-state facilitator's recommendation that "Qwest place 36 percent of ARMIS Net Revenue at risk for payment to CLECs for failure to meet designated performance standards." The Commission did not order Qwest to modify the language set forth above.

¶ **Joint CLECs.** The Joint CLECs assert that Qwest's language in section 12.1 of Exhibit 1681, Qwest's compliance QPAP, contemplates that the cap will limit more than just payments under the plan. *Ex. 1689 at 7.* The Joint CLECs argue that any reference in section 12.1 other than to payments made under the plan should be stricken.

¶ During argument, AT&T asserted that the cap in the Colorado plan is limited to payments made under the CPAP. WorldCom argued that, as a related issue, the Commission ordered in paragraph 109 of the *30th Supplemental Order* that Qwest modify sections 13.8 and 12.1 to be consistent with section 11.2 of Colorado's Performance Assurance Plan (CPAP).

¶ **Qwest.** During the hearing on June 5, 2002, Qwest asserted that the CLECs have raised this issue for the first time in this phase of the proceeding. Qwest argued that the language should be retained. In response to WorldCom's argument, Qwest asserted that in paragraph 109 of the *30th Supplemental Order*, the Commission directed Qwest to delete only certain language related to service quality payments.

¶ **Discussion and Decision.** As stated above, the Commission adopted the Multi-state facilitator's recommendation that "Qwest place 36 percent of ARMIS Net Revenue at risk *for payment to CLECs for failure to meet designated performance standards.*" *30th Supplemental Order, ¶51 (emphasis added).* The Commission did not

specifically direct Qwest to remove the language that the Joint CLECs now find objectionable. However, the Commission specifically limited application of the revenue cap to the payments under the QPAP.

18 In paragraph 109 of the *30th Supplemental Order*, the Commission provided that "Qwest must modify sections 13.8 and 12.1 to be consistent with section 11.2 of the CPAP to allow the Commission to assess penalties, where necessary, to address service quality issues, but to allow Qwest to dispute any payments it believes are duplicate." Paragraph 98 of the *30th Supplemental Order* further provided that payments made to uphold the integrity of the QPAP, such as payments for late reporting and interest payments for late or under reporting, should be excluded from the cap.

19 The Joint CLECs primarily object to the application of the cap to liquidated damages paid pursuant to "any other interconnection agreement," and to "any payments made for the same underlying activity or omission under any other contract, order or rule." *See Ex. 1681, section 12.1.* Consistent with our decision in the *30th Supplemental Order* that the cap applies to payments under the QPAP, and our decision at paragraphs 65 and 66 of the *33rd Supplemental Order* concerning the election of remedies under the QPAP, Qwest must modify QPAP section 12.1 as reflected on page 7 of Exhibit 1689, except that Tier 2 assessments or payments made by Qwest shall be subject to the revenue cap.

2. ARMIS Data

20 Paragraph 56 of the *30th Supplemental Order* requires Qwest to update section 12 of the QPAP to reflect the use of current ARMIS Net Revenue data rather than 1999 ARMIS results. During the June 5 hearing, Qwest agreed to modify section 12.1 as reflected in Exhibit 1687. *Tr. 7887.* That exhibit provides that:

> The annual cap for the State of Washington shall be 36% of ARMIS Net Return, recalculated each year based on the prior year's Washington ARMIS results. Qwest shall submit to the Commission the calculation of each year's cap no later than 30 days after the submission of ARMIS results to the FCC.

Qwest must modify section 12.1 accordingly.

3. Tier 2 Payment Trigger

28 Tier 2 payments are payments that Qwest makes to the state when Qwest fails to meet certain performance standards. *Ex. 1681, §7.0.* Paragraph 86 of the *30th Supplemental Order* requires that Qwest make payments to the state in any month that Qwest fails to meet Tier 2 performance standards. Qwest's original proposal under the QPAP provided that Qwest would make payments only after three consecutive months of nonperformance. *Ex. 1200, §7.3.* The Multi-state facilitator recommended that Qwest make Tier 2 payments when it failed to meet performance standards for any two months in a consecutive three-month period. *See 30th Supplemental Order, ¶80.*

29 **Qwest.** In its compliance filing, Qwest accepts the Commission's direction to make Tier 2 payments for each month of nonperformance, but proposes to apply a different critical value to the performance measurements that are eligible for Tier 2 payments. *Ex. 1680 at 5-7; see also Ex. 1681, §§ 7.2, 7.3, and 9.1.* Qwest asserts that this is necessary to reflect an expectation reached in the PEPP collaborative sponsored by the Regional Oversight Committee (ROC),[5] as well as a conversation between Qwest and the FCC.[6] *Ex. 1680 at 6.*

30 **Joint CLECs.** The Joint CLECs did not respond to Qwest's proposal, but noted that Qwest failed to properly modify section 9.0.[7] *Ex. 1689 at 21-22.* At oral argument, the Joint CLECs stated that they had no position in the issue.

31 **Public Counsel.** In written comments, Public Counsel objected to Qwest making modifications during a compliance filing, asserting that Qwest's pleading was

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[5] In August 2000, eleven states in Qwest's region--Washington, Oregon, Iowa, Nebraska, North Dakota, South Dakota, Utah, Wyoming, Montana, Idaho, and New Mexico--formed a collaborative to discuss Qwest's Post Entry Performance Plan (PEPP), known as the ROC PEPP collaborative. The Regional Oversight Committee, or ROC, is composed of representatives of the regulatory commissions in states in which Qwest provides local exchange service.

[6] Qwest's reference to its conversation with the FCC appears at pages 40-41 of its September 13, 2001 brief filed in the Multi-state Proceeding.

[7] During argument, Qwest agreed to modify section 9.0 of the QPAP as requested by the Joint CLECs. This has not yet been reflected in Qwest's QPAP.

actually a second motion for reconsideration. *Response of Public Counsel to Qwest's Compliance Filing on the QPAP at 2 (Public Counsel's Response).*

25 **Discussion and Decision.** Qwest asserts that this modification of Tier 2 payments is necessary because of an "expectation" reached in the PEPP collaborative, and because of a conversation with the FCC. A review of Exhibit 1682, the summary of the PEPP collaborative, does not demonstrate the "expectation" Qwest alleges. Nor do we give much weight to Qwest's discussion of its conversation with the FCC, as there is no way to verify the information.

26 Qwest had an opportunity to raise this issue in its petition for reconsideration and did not. The purpose of Qwest's filing on May 28, 2002, was to demonstrate compliance with the Commission's orders, not to file an additional petition for reconsideration or request for modification. In addition, our review of Qwest's response to Bench Request No. 57 demonstrates that the effect of Qwest's proposal is to significantly lower Tier 2 payments made to the state. *See Ex 1694.* Tier 2 payments will assist the Commission in paying for its oversight of the QPAP, audits and six-month reviews, as well as participation in any multi-state audit and review process. Given the significant effect of Qwest's proposal on Tier 2 payments, as well as the late nature of the request, we reject Qwest's request to modify the critical value for Tier 2 payments. Qwest must modify sections 7.2, 7.3, 9.1, 9.1.1, and 9.1.2 of the QPAP to remove the changes reflected in Exhibit 1681 that do not reflect requirements from the *30th* or *33rd Supplemental Orders*. However, should the level of Tier 2 payments prove problematic under the existing critical value, Qwest may raise the issue at a six-month review.

4. Collocation Payments

27 In paragraph 93 of the *30th Supplemental Order*, the Commission directed Qwest to modify QPAP section 6.3 to reflect that CP-2 and CP-4 business rules are applicable only to matters not addressed in WAC 480-120-560. The Commission also required that QPAP section 6.3 and SGAT section 8.4.1.10 be consistent. In paragraph 28 of the *33rd Supplemental Order*, the Commission required Qwest to modify SGAT sections 8.2.1.1 and 8.4.1.10 to include additional language.

28 **Joint CLECs.** The Joint CLECs assert that Qwest included a sentence in SGAT section 8.2.1.1 as required in the *33rd Supplemental Order*, but that the SGAT does

not include language that reflects all of the requirements of the Commission's collocation rule, WAC 480-120-560. *Ex. 1689 at 19.* The Joint CLECs also assert that Qwest did not modify SGAT section 8.4.1.10 as required by the *33rd Supplemental Order. Id. at 19-20.* Finally, the Joint CLECs assert that Qwest must modify the language in section 6.3 of the QPAP to include the language the Commission has required to be included in SGAT sections 8.2.1.1 and 8.4.1.10. *Id. at 20.*

Discussion and Decision. In its compliance filing, Qwest did not modify SGAT section 8.4.1.10 as required by the *33rd Supplemental Order. See Ex. 1667.* During the June 5 hearing, Qwest and the Joint CLECs agreed upon SGAT and QPAP language. That language must be included in the QPAP and SGAT to be filed on June 25, 2002. *See Tr. 7890–92; 7950.*

8. Service Quality Payments

In paragraph 109 of the *30th Supplemental Order*, the Commission directed Qwest to modify sections 12.1 and section 13.8 of the QPAP to be consistent with section 11.2 of the CPAP, in order to allow the Commission to assess penalties to address service quality issues, but also to allow Qwest to dispute any payments it believes are duplicative.

Joint CLECs. As noted above concerning the revenue cap issue, the Joint CLECs disputed whether Qwest had complied with paragraph 109 of the *30th Supplemental Order. Ex. 1689 at 16.* The Joint CLECs asserted that the language in section 12.1 of the QPAP must mirror the language in CPAP section 11.2.

Qwest. During oral argument, Qwest asserted that the Commission had ordered Qwest to delete from section 12.1 only certain language relative to service quality payments.

Discussion and Decision. As discussed above concerning the revenue cap, we find that Qwest did comply with paragraph 109 of the *30th Supplemental Order* concerning service quality payments, but did not comply with paragraph 51 of the order concerning the revenue cap. Qwest must modify section 12.1 of the QPAP as reflected above in paragraph 19 of this order.

6. Reporting of Special Access Data

34 In paragraph 119 of the *30th Supplemental Order*, the Commission directed Qwest to file "monthly special access reports for Washington at the same time as it begins special access reporting to the Colorado Commission." The Commission upheld this requirement in paragraph 34 of the *33rd Supplemental Order*, requiring Qwest to "report on special access measures for Washington using the same measures on which it reports to Colorado," at the same time as Qwest begins reporting to the Colorado Commission.

35 **Joint CLECs.** The Joint CLECs assert that Qwest's compliance filing provides no reference to reporting on special access measures, and no information about when it will begin reporting, the form of the report, the information that will be included, or with whom Qwest will file the reports. *Ex. 1689 at 8-9.* During argument, counsel for ELI and Time Warner Telecom asserted that some CLECs do not do business in Colorado and do not have the same information as those CLECs operating in Colorado. Counsel requested that Qwest file the appropriate information with the Commission. *See Tr. 7952, 7955.*

36 **Qwest.** During argument, Qwest stated the information is not necessary to comply with the Commission's order. Qwest asserted that the information the CLECs request is included in an April 11, 2001, decision entered in Colorado.

37 **Discussion and Decision.** During the June 5 hearing, the Commission issued Bench Request No. 54, requesting Qwest to file with the Commission by June 11, 2002, a report identifying the information requested by the Joint CLECs. After seeking and obtaining a one-day extension of time to file, Qwest filed on June 12, 2002, its response to Bench Request No. 54. Qwest provided a copy of the Colorado order and a description of the reporting process. We find the information sufficient. If the process described in Qwest's response does not prove to be adequate, we will address the matter in our continuing oversight role.

7. Adding New UNEs

38 Paragraph 124 of the *30th Supplemental Order* required Qwest to provide payment opportunities for performance measures applicable to EELs, sub-loops, and line-sharing as the standards are determined.

Joint CLECs. The Joint CLECs asserted that Qwest had failed to include the agreed upon standard for line sharing in Attachment 1 of the QPAP. *Ex. 1690 at 17.* The Joint CLECs further requested that Qwest attach the Performance Indicator Definitions (PIDs) as an appendix to the QPAP consistent with the Colorado PAP. *Id.*

Discussion and Decision. During the June 5 hearing, Qwest agreed to include the line sharing measure in Attachment 1. Further, the Joint CLECs agreed with Qwest's proposal that the PIDs be included as Exhibit B to the SGAT, given that the QPAP will also be an exhibit to the SGAT. *Tr. 7889; see also Ex. 1687.* Qwest must add the line sharing measure to Attachment 1 of the QPAP and modify section 20 of the SGAT as reflected in Exhibit 1687.

8. Changes to Measure Weighting

In paragraph 135 of the *30th Supplemental Order*, the Commission stated:

> In this particular case, we find that higher payment levels for high-value services create a more appropriate incentive for Qwest to provide nondiscriminatory service, because they more closely correlate with one another. Qwest must amend the QPAP to include the payment table for high-value services proposed in Exhibit 1205 at page 12.[8]

Joint CLECs. The Joint CLECs assert that Qwest failed to modify Table 2A of Section 6.2.2 of the QPAP as directed by the Commission. *Ex. 1687 at 20.* Specifically, the Joint CLECs assert that Qwest increased the payment values for high-value services in Table 2A, but also lowered the payment levels for residence resale, UBL-2 wire/analog loops, and business resale. *Id.* The Joint CLECs assert that the Commission did not direct Qwest to reduce the payments for low-value services.

Qwest. During oral argument, Qwest asserted that it may have misunderstood the *30th Supplemental Order* and if it had understood the order as the Joint CLECs interpret it, Qwest would have sought reconsideration.

[8] Upon review of this issue, we note that the correct exhibit reference is Exhibit 1204–C at page 12.

44 **Discussion and Decision.** The *30th Supplemental Order* specifically references the payment table for high-value services, not just "the payment table." The Commission's intent is as the Joint CLECs assert, to increase the payments for high-value services, but not to lower payments for low-value services. Qwest must modify Table 2A to increase the base value of QPAP payments for residential and business resale, and UBL-2 wire/analog loops to $150. Although Qwest may have misinterpreted the Commission's intent and sought reconsideration of the issue, the time has now clearly passed for seeking reconsideration. If this issue becomes problematic for Qwest when implementing the QPAP, Qwest can raise the matter at the six-month review.

9. Six-Month Review Process

45 Paragraph 146 of the *30th Supplemental Order* requires Qwest to modify the QPAP to add language in section 16.1 to allow the Commission to consider the changes to be made to the QPAP at the six-month review. Further, the Commission stated that

> [W]e believe it would be unreasonable to preclude or limit the Commission's authority to examine issues that may arise in the course of operation of the plan. However, the Commission is concerned that the six-month review process not become a forum for relitigating the essential terms of the plan. We believe the six-month review should focus on fine-tuning the performance metrics delineated above, while the other plan elements may be reexamined at the biennial review. However, consistent with the terms of section 18.7 of the CPAP, we will permit parties to request that the Commission review other issues if they can demonstrate that exigent circumstances exist.

30th Supplemental Order, ¶147.

46 In paragraphs 46, 47, and 48 of the *33rd Supplemental Order*, the Commission reasserted the necessity for state commission control over changes to performance assurance plans as well as the fact that Qwest had agreed to a plan in Colorado that allowed substantial state control over changes to the CPAP. Further, the Commission rejected as a subject for later review the question of whether a 10-percent collar was necessary for inclusion.

Qwest. In its compliance filing, Qwest proposes to replace section 16 of the QPAP with a new section 16, which it describes as "the most recent and final CPAP language related to the six-month review, with modifications Qwest believes are appropriate in light of the differences between the two plans." *Ex. 1680 at 4-5.* The new language would identify the changes that may be considered at the six-month review, applies a 10 percent "collar" on changes to the plan, and applies an automatic stay of any Commission order that changes aspects of the plan that are not subject to review at the six-month review. *Id. at 2.*

During argument, Qwest asserted that states do not have authority to make unfettered changes to a performance assurance plan, pointing to plans approved for Texas and other states. Qwest asserts that it must have some control over changes made to the plan and that there must be some finality as to what can be changed.

Joint CLECs. The Joint CLECs assert that the Commission has stated its intent to retain control over the changes to the QPAP in both the *30th* and *33rd Supplemental Orders*, and that Qwest has offered language that "would significantly alter the Commission's ability to make changes to the plan." *Ex. 1689 at 2-3.* The Joint CLECs assert that Qwest's proposal would limit changes solely to proposals related to "measuring and/or providing payments for non-discriminatory wholesale performance." *Id. at 3.* The Joint CLECs assert that the proposal includes a judicial stay and a financial collar, both of which were part of the Utah stipulation that the Commission rejected in its *33rd Supplemental Order*. *Id. at 4.* Finally, the Joint CLECs assert that the North Dakota commission has recently adopted language similar to the language this Commission has adopted in its *30th* and *33rd Supplemental Orders*. *Id. at 6; see also Exs. 1688, 1690.*

During argument, AT&T referred the Commission to FCC decisions concerning section 271 applications for Massachusetts and New York that recognize state authority to change a plan, as well as a recent California decision concerning SBC-Pacific Bell.

Public Counsel. Public Counsel asserts that the Commission's orders on the issue of the six-month review are clear and that Qwest must comply with those orders. *Public Counsel's Response at 1-2.* Further, Public Counsel asserts that Qwest's filing should be rejected to the extent that it does not reflect the directions of the *30th* and *33rd Supplemental Orders*. *Id.*

52 During argument, Public Counsel objected that Qwest's proposal limits review of any aspect of the QPAP other than performance measures, and severely limits Commission authority. Public Counsel further stated that it is inappropriate to limit the Commission's ability to change aspects of the QPAP when no party knows how events will unfold over time and what changes may be necessary to make to the QPAP.

53 **Discussion and Decision**. At the heart of this issue is a fundamental disagreement over whether this Commission has authority to require changes to the QPAP. The nature of performance assurance plans is that they cannot be frozen in time. They should remain flexible to address issues that may arise over time, including, but not limited to whether the performance measures must be adjusted. It is necessary for the states to retain authority for ongoing oversight over the plan and to retain flexibility over how a plan should be changed. As Public Counsel stated during the argument, no one knows how things will change in the future, and the QPAP should not be self-limiting. In fact, the FCC expects states to continue in an oversight role following the grant of 271 authority.[9]

54 Also at issue is the fact that, on the one hand, Qwest seeks some finality in the process for a six-month review, and on the other, that this Commission may choose to participate in an as-yet-undefined, multi-state process under development by the ROC.

55 For the reasons identified in our prior orders on the QPAP, because Qwest's proposal has been made so late in the process, and because Qwest has not demonstrated that its proposal would allow any modification to the QPAP, we deny Qwest's request to modify section 16 of the QPAP as set forth in its compliance filing. We find that the language required in the *30th Supplemental Order* provides the correct balance of stability and flexibility to allow Qwest, the CLECs, and this state to know how the plan will operate, but also to allow the plan to be modified if necessary. We believe the QPAP, as contemplated in our *30th* and *33rd Supplemental Orders*, is a plan that provides "probative evidence that the [Qwest] will continue to meet its section 271

[9] *In the Matter of the Application of Verizon Pennsylvania Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc., and Verizon Select Services Inc. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, Memorandum Opinion and Order, CC Docket No. 01-138, FCC 01-269, ¶¶127-32 (rel. Sept. 19, 2001).

obligations and that its entry is consistent with the public interest."[10] Qwest, therefore, must modify section 16 of the QPAP as ordered in the *30th Supplemental Order*.

10. Special Fund

In paragraph 160 of the *30th Supplemental Order*, the Commission deferred a decision to contribute Tier 1 or Tier 2 funds to a "Special Fund" until after determining the state's participation in a multi-state process to review and audit the QPAP. In paragraph 161 of the *30th Supplemental Order*, the Commission directed Qwest to modify the QPAP to ensure that the Commission may establish or contribute funds to an identified account for funding the state's participation in a multi-state process. Further, at paragraph 162 of the same order, the Commission directed Qwest to modify section 7.5 of the QPAP to reflect that Qwest must maintain an escrow account for depositing Tier 2 funds that Qwest will pay under the QPAP in Washington.

Joint CLECs. Given the Commission's directions in the *30th Supplemental Order*, the Joint CLECs object to Qwest including in the QPAP requirements for contributing to the Special Fund, particularly in sections 11.3.1 through 11.3.3. *Ex. 1689 at 9-10.* The Joint CLECs assert that Qwest must delete all references in the QPAP to the Special Fund, including references in sections 16.2, 16.9, and 16.12. *Id. at 11.*

Discussion and Decision. During the June 5 hearing, Qwest agreed to delete sections 11.3.1 through 11.3.3 of the QPAP and to modify the QPAP to delete references to the Special Fund. *Tr. 7890-91.* Qwest must modify the QPAP accordingly.

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[10] *In the Matter of Application of Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404, ¶429 (rel. Dec. 22, 1999); *see also In the Matter of SBC Communications Inc., Southwestern Bell Telephone Company and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, ¶420 (rel. June 30, 2000).

11. Multi-State Audits/Investigations

59 In paragraph 241 of the *30th Supplemental Order*, the Commission directed Qwest to replace QPAP sections 15.1 through 15.4 with new language. In that paragraph, the Commission specifically stated that it would defer a decision on participation in a multi-state audit process, and preferred to "wait and see how the ROC-TAG process develops before agreeing to a specific multi-state review process."

60 **Qwest.** In its compliance filing, Qwest replaces the language as requested by the Commission, but modifies section 15.1 to include an additional sentence concerning coordination with other state and regional audits. *Ex. 1680 at 7-8.* Qwest proposes that the following language be included in section 15.1:

> Any audit requested pursuant to this section shall be coordinated with other audits including audits planned or conducted by the regional audit program or pursuant to any other PAP, shall be planned and conducted so as to avoid duplication and interference with Qwest's ability to comply with the other provisions of the PAP, and shall be of a nature and scope that it can be conducted within the reasonable course of Qwest's business. In order to avoid the unnecessary duplication of other audits, Qwest shall make the audit results of performance measurements in the QPAP available to the Commission.

Id. Qwest asserts that the language is necessary to protect Qwest from multiple and duplicative audits of the same performance measurements. *Id.*

61 **Joint CLECs.** The Joint CLECs object to Qwest's proposed language as offered too late in the process, and as requiring mandatory coordination among the states. *Ex. 1689 at 12.* The Joint CLECs object to the "numerous and severe restrictions . . . on the Commission's ability to conduct an independent audit." *Id. at 13.*

62 **Public Counsel.** Similar to Public Counsel's objections to Qwest's proposed changes to the six-month review process and Tier 2 payments, Public Counsel asserts that the proposal is inappropriately raised, even if it serves "laudable goals." *Public Counsel's Response at 2-3.* During argument, Public Counsel objected to the mandatory language in Qwest's proposal as limiting the Commission's authority to conduct its own independent audits.

64 **Discussion and Decision.** Qwest's proposed language does not comply with the Commission's *30th* and *33rd Supplemental Orders*. In its present form, Qwest's language imposes mandatory requirements on the Commission that may limit the Commission's ability to conduct an audit under the QPAP, independent of an audit conducted by another state or multi-state process. Qwest must remove this additional language from section 15.1 of the QPAP.

65 The Commission recognizes the time and costs involved in an audit and will seek to conduct any audit in the most efficient manner. The Commission is aware that the QPAP and the performance measures underlying the QPAP have been developed through a multi-state process, and that there may be efficiencies to be gained from participating in a multi-state audit. If, however, the Commission does not ultimately participate in a multi-state audit process, the Commission will not conduct an audit in a vacuum. The Commission will look to the scope of the audit, data gained during the audit, and the results of an audit conducted in any other state. However, the Commission is not bound by those results and may expand or narrow the scope of an audit, or request additional data, compared to that conducted in another state.

12. Payment Language

66 In paragraph 220 of the *30th Supplemental Order*, the Commission directed Qwest to "modify section 11.2 of the QPAP to adopt the language from section 12.1 of the CPAP, which states: 'All payments shall be in cash. Qwest shall be able to offset cash payments to CLEC with a bill credit applied against any non-disputed charges that are more than 90 days past due'."

67 **Qwest.** In its compliance filing, Qwest modified section 11.2 as directed, except that Qwest included additional language that does not form a complete sentence. *See Ex. 1681, §11.2.* During the June 5 hearing, Qwest explained that it had included only part of a sentence relating to payments through the use of electronic funds transfers to CLECs from the most recent CPAP, and intended to include the entire sentence, as reflected in Exhibit 1687.

68 **Joint CLECs.** The Joint CLECs note that Qwest has included additional language in section 11.2 that was not required by the *30th Supplemental Order*. *Ex. 1689 at 17-18.* The Joint CLECs do not object to including in section 11.2 language allowing

payment via electronic funds transfers, as long as the language is exactly as it is included in section 12.2 of the CPAP. *Id.*

68 **Discussion and Decision.** During the June 5 hearing, the parties agreed that the following sentence appearing in Exhibit 1687 should be included in section 11.2 of the QPAP: "Qwest shall be allowed, after obtaining the individual agreement of CLEC, to make such cash payments through the use of electronic fund transfers to CLEC and the State." *Tr. 7889.* Qwest must modify the QPAP accordingly.

13. Compliant QPAP Language

69 For the issues identified in the table below, Qwest's QPAP complies with the Commission's *30th* and *33rd Supplemental Orders*.

Description of Issue	Order and Paragraph	Change Required by the Order	QPAP /SGAT Section
Raising or Lowering the Cap	*30th Supp. Order*, ¶63.	Qwest must revise section 12 of the QPAP to use a flat 36 percent cap.	Ex. 1681, section 12.2 (deleted)
Exclusions from Cap on Payments	*30th Supp. Order*, ¶98.	Qwest must revise section 12 such that payments made to uphold the integrity of the QPAP are excluded from the cap on payments.	Ex. 1681, sections 12.1 and 14.3.
Adding New Measures	*30th Supp. Order*, ¶129; *33rd Supp. Order*, ¶39.	Qwest must include the PO-2b measure (flow-though) in the QPAP for payment purposes in the Low Tier 1 and High Tier 2 payment categories.	Ex. 1681, Att. 1
Termination of QPAP	*30th Supp. Order*, ¶180; *33rd Supp. Order*, ¶60.	Qwest must modify section 16.2 of QPAP to mirror section 18.11 of CPAP.	Ex. 1681, section 16.12

Election of Remedies	*30th Supp. Order*, ¶¶193-95; *33rd Supp. Order*, ¶¶65-67.	Qwest must replace section 13.6 of QPAP with language from section 16 of CPAP.	Ex. 1681, section 13.6
Offsetting Remedies	*30th Supp. Order*, ¶202; *33rd Supp. Order*, ¶71.	Qwest must modify QPAP section 13.7 to incorporate language in section 16.7 of the proposed CPAP and delete the last sentence of section 13.7.	Ex. 1681, section 13.7
Force Majeure Language	*30th Supp. Order*, ¶¶208-9; *33rd Supp. Order*, ¶¶78-79.	**1) Waiver Requirements**: Qwest must modify section 13.3 to provide that the Commission will determine whether to grant requests for waiver, and reflect deadlines for Qwest to file waiver requests **2) Parity Standards**: Qwest must add the words "(excluding force majeure events)" following the word parity in section 13.3.	Ex. 1681, section 13.3
SGAT Consistency	*30th Supp. Order*, ¶¶213-14.	The QPAP must conform to the SGAT.	Ex. 1681.
Recalc. of Payments	*30th Supp. Order*, ¶229.	Qwest must replace language in section 14.4.	Ex. 1681, section 14.4.
Monthly Reports	*30th Supp. Order*, ¶244; *33rd Supp. Order*, ¶87.	Qwest must revise section 14.1 to provide aggregate performance data to the public via its website, but must provide paper and electronic copies to the Commission and Public Counsel.	Ex. 1681, section 14.2.

B. SGAT COMPLIANCE ISSUES

70 The *34th Supplemental Order* required Qwest to file an SGAT in compliance with the requirements of the order by June 11, 2002. Qwest filed its compliance SGAT on June 11, 2002. AT&T filed comments on Qwest's compliance filing on June 18, 2002.

71 This order identifies whether the changes Qwest has made in its June 11 SGAT filing comply with the *34th Supplemental Order*. Where Qwest has proposed different SGAT language, or the parties contest whether SGAT language complies with Commission orders, the Commission discusses the issue, and either finds the language complies or directs Qwest to make changes to the SGAT to comply with Commission orders. Where the Commission finds that Qwest's revisions to the SGAT comply, the SGAT revisions are identified in a chart listing the issue number as assigned during the workshop, the Commission order and ordering paragraph, the change required by the order, and the SGAT section or appendix that complies.

1. WA-I-5: CLEC selection of the Point of Interconnection

72 Paragraphs 17 and 18 of the *34th Supplemental Order* required Qwest to amend the SGAT to allow the use of Direct Trunked Transport facilities to connect the Qwest serving wire center to the POI, if the POI is located at a Qwest tandem.

73 **Qwest.** Qwest modified SGAT section 7.3.2.1.1 to address the issue, but did not modify section 7.1.2.1, which describes and defines the Qwest-provided DS1 and DS3 facilities CLECs may use for interconnection arrangements.

74 **Discussion and Decision.** Because Direct Trunked Transport would logically fall into the category of "Qwest-provided DS1 and DS3 facilities" that CLECs could use for interconnection, the SGAT section defining such facilities should include Direct Trunked Transport as well as Entrance Facilities. Qwest, therefore, must modify the first sentence in SGAT section 7.1.2.1 as follows:

> Interconnection may be accomplished through the provision of a DS1 or DS3 entrance facility, Direct Trunked Transport, or both.

2. WA-CL2-15, WA-UNE-C-11, WA-EEL-5 – Qwest's Obligation to Build/Disclosure of Retail Build Policies

77 Paragraph 38 of the *34th Supplemental Order* ordered Qwest to provide copies of its detailed build policies, and deferred the question of whether CLECs should be entitled to review actual build documents pending a review of the build policies Qwest provided.

78 **Qwest.** On June 11, 2002, Qwest filed confidential documents outlining its build criteria for various retail services. The documents outline the build criteria for DS1 and DS3 facilities. The documents set forth Qwest's general guidelines for how projects will be prioritized for construction, including specific cost criteria to be used in the decision-making process. The policy states, however, that other factors may be considered on an individual case basis. On June 18, 2002, Qwest responded to Bench Request No. 60, which asked Qwest to identify the effective date of the documents, as well as where the documents are located and updated within Qwest.

77 Qwest has also modified the SGAT to include a provision that would allow CLECs to review reports of actual builds, subject to the confidentiality provisions of SGAT section 5.16. *See Ex. 1807*, §9.1.2.1.5.

78 **Discussion and Decision.** The availability of actual build reports, coupled with the dissemination of Qwest's build criteria for DS1 and DS3 retail facilities, should provide CLECs with adequate information to determine whether parity exists between Qwest's build policies for retail and wholesale customers. The Commission, therefore, approves the language in SGAT section 9.1.2.1.5.

3. WA-3-4: Terms and Conditions for Access to Right-of-Way Agreements

79 Paragraph 45 of the *34th Supplemental Order* required Qwest to modify SGAT section 10.8.2.27 to reflect AT&T's proposed language on pages 3 and 4 of Exhibit 1522, except for the changes related to section 10.8.2.27.4.

80 **Qwest.** Qwest's SGAT reflects the required changes to sections 10.8.2.27.2 and 10.8.2.27.3. In SGAT section 10.8.2.27.1, however, Qwest omitted the following sentence: "If Qwest has a copy of the agreement Qwest will provide the agreement to the CLEC at the same time that it provides the matrix to the CLEC." SGAT section

10.8.2.27.4, as filed with the Commission, prohibits CLECs from disclosing the contents, terms, or conditions of right-of-way agreements to employees engaged in product management, as well as other employees. *See Ex. 1807.*

81 **AT&T.** In comments filed on June 18, 2002, AT&T points out that SGAT section 10.8 and exhibit D in the Utah SGAT Lite filed on June 6, 2002 contain numerous provisions that differ from those in the June 11, 2002 Washington SGAT. *AT&T's Response to Qwest's Notice of Updated Statement of Generally Available Terms and Conditions as of June 11, 2002, at 1-2 (AT&T's Response).* AT&T states that for purposes of resolving issues concerning access to right-of-way agreements, AT&T would accept the revisions to section 10.8 and Exhibit D as they were actually filed in Utah.

82 **Discussion and Decision.** The only remaining disputed issue for Checklist Item No. 3 that was discussed in the *34th Supplemental Order* was the language in SGAT section 10.8.2.27.4. The Commission's request to the parties to file settled SGAT language from Utah and other states was limited to SGAT section 10.8.2.27.4. The discussions and evidence considered in Utah that led to the filing of the Utah SGAT Lite, which addresses all of SGAT section 10.8 and Exhibit D, were not presented or considered in Washington. The Commission, therefore, will not entertain AT&T's proposal to accept the entire section 10.8 and Exhibit D of the Utah SGAT Lite. We will focus our decision only on the Utah language agreed upon for SGAT section 10.8.2.27.4.

83 Qwest's SGAT section 10.8.2.27.4 would prohibit CLEC product management employees from accessing right-of-way agreements. In the SGAT Lite that Qwest filed in Utah on June 6, 2002, in compliance with Utah orders concerning this issue, there was no such restriction for product management employees.[11] In that SGAT, Qwest represents the revisions as "post-workshop consensus language that complies with the Utah MTE/ROW Orders." Product management employees, who may be responsible for contacts with customers, should not be precluded from reviewing right-of-way agreements. Production management employees may require access to that information to determine if a customer's needs will be met by similar access to a building.

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[11] *Qwest's Notice of Updated Section 10.8 and Exhibit D to Statement of Generally Available Terms and Conditions to Comply with Commission Orders*, filed in Utah Docket No. 00-049-08, dated June 6, 2002.

84 Qwest must amend SGAT section 10.8.2.27.4 in the Washington SGAT so that the second-to-last sentence reads as follows:

> CLEC further agrees that CLEC shall not disclose the contents, terms, or conditions of any agreement provided pursuant to Section 10.8.2.27 to any CLEC agents or employees engaged in sales or marketing efforts on behalf of CLEC.

Qwest must also modify section 10.8.2.27.1 to add the omitted sentence.

4. WA LOOP 3(a)/3(b): Access to LFACS and MLT – Access to Back Office Information

85 Paragraphs 57 and 66 of the *34th Supplemental Order* required Qwest to provide CLECs access to all back office information pertaining to loop qualification accessible to any Qwest personnel, within the same time intervals Qwest provides the information to its own retail personnel. The Commission ordered Qwest to delete the following phrase from SGAT section 9.2.2.8 on page 126 of Exhibit 1667: "To ensure parity with Qwest retail operations." *34th Supplemental Order, ¶¶57, 66.*

86 **Qwest.** In its June 11, 2002 compliance SGAT, Qwest deleted the parity language in SGAT section 9.2.2.8. *See Ex. 1807.* Qwest also added a new SGAT section, 9.2.2.8.6, containing the procedures CLECs must use when loop make-up information for a facility is not contained in the loop qualification tools, as well as the timetable Qwest will follow in providing the information to CLECs. *Id.*

87 **AT&T.** AT&T concurs with the language Qwest included in SGAT section 9.2.2.8.6, but points out that there is similar, but not identical language in SGAT section 9.2.2.8. *AT&T's Response at 4.* AT&T assumes that this repetition is inadvertent and requests that Qwest delete the last half of SGAT section 9.2.2.8. AT&T states that if the duplicate language in 9.2.2.8 is deleted, it will consider the issue closed. *Id.*

88 **Discussion and Decision.** A review of SGAT sections 9.2.2.8 and 9.2.2.8.6, as well as previous discussions of this issue, indicates that the procedures for manual look-up of loop information contained in SGAT section 9.2.2.8 have been superseded by Qwest's new section 9.2.2.8.6. In order to reduce possible confusion over the

differences in the two sections, Qwest must delete the portion of SGAT section 9.2.2.8 beginning with "If the Loop make-up information for a particular facility" and ending at the end of the paragraph. With this modification, we find the new language in SGAT section 9.2.2.8.6 acceptable.

5. WA LOOP 3(a)/3(b): Access to Spare Loop Information Where IDLC Systems are Deployed

89 Paragraph 74 of the *34th Supplemental Order* provided guidance to the parties' continuing discussions about language in SGAT section 9.2.2.1.3.1 regarding access to spare loop information where IDLC systems are deployed, and that section's relationship with language concerning access to loop information contained in SGAT section 9.2.2.8 and its subsections.

90 **Qwest.** Qwest made no changes to the SGAT in response to paragraph 74 of the *34th Supplemental Order*.

91 **AT&T.** AT&T observes that Qwest made no changes to the SGAT for this issue. *AT&T's Response at 3-4.* AT&T suggests modifications to SGAT section 9.2.2.1.3.1 to refer to SGAT section 9.2.2.8 as controlling the procedures for access to information, and to state that Qwest may recover its costs for mediated access in the same manner as Qwest recovers OSS transition costs.

92 **Discussion and Decision.** The modifications proposed by AT&T to SGAT section 9.2.2.1.3.1 succeed in cross-referencing the two SGAT sections, and in clarifying the procedures for access and cost recovery for access to spare loop information. Qwest, therefore, must modify SGAT section 9.2.2.1.3.1 as reflected on pages 3 and 4 of AT&T's Response.

6. Section 272(e)(1)

93 In paragraphs 125 and 126 of the *34th Supplemental Order*, the Commission required that, to the extent that Qwest's ordering processes for long distance exchange access and telephone exchange access are the same as those for exchange access in the local market, Qwest must reflect in its chart whether the definitions and calculations used in the reporting measures required under section 272(e)(1) are consistent with the applicable PIDs for exchange access in the local market. The Commission also

required Qwest to address the seeming inconsistencies in its statements in order to give this Commission confidence that it will be able to demonstrate its compliance with section 272(e)(1), and in particular, how Qwest will disaggregate its data as required by the FCC.

94 **Qwest.** Qwest filed a pleading with the Commission on June 11, 2002, in response to the Commission's order. Qwest attached a revised chart reflecting its section 272(e)(1) obligations, modified to include definitions and calculations for each measure proposed for inclusion. For the measures that are identical to established PIDs, the definitions and calculations are the same as for the PIDs. The cover pleading also states that Qwest has modified its EXACT system to pick up the customer name from the ASR to identify the customer and thereby identify the BOC affiliates included in the calculations.

95 **Discussion and Decision:** The modification Qwest proposes to its EXACT system should work to produce the information necessary for compliance with section 272(e)(1). Likewise, Qwest's revised chart of reporting measures for provisioning of exchange access and telephone exchange access complies with the Commission's *34th Supplemental Order*. With these changes, we find that Qwest has complied with the requirements of section 272(e)(1), and section 272 overall.

7. Compliant SGAT Language

96 For the issues identified in the table below, Qwest's SGAT and related documents comply with the Commission orders indicated in the table:

Issue No.	Order and Paragraph	Change Required by the Order	Reference and SGAT Section
WA-I-5	*34th Supp. Order*, ¶18.	Qwest must clarify the language in section 7.3.2.1.1 to address situations where the POI is at a tandem switch and entrance facilities charges would not apply between the POI and the Qwest serving wire center nearest to the CLEC switch.	Ex. 1807, section 7.3.2.1.1

WA-CL2-15, WA-UNE-C-11, WA-EEL-5	*34th Supp. Order*, ¶32.	Qwest must modify the SGAT to reflect AT&T's proposed modifications to SGAT sections, as reflected in Exhibit 1516.	Ex. 1807, sections 9.1.2.1, 9.1.2.1.3, 9.1.2.1.3.1, and 9.1.2.1.3.2
WA-CL2-15, WA-UNE-C-11, WA-EEL-5	*34th Supp. Order*, ¶33.	Qwest must modify SGAT section 9.19 as reflected on Exhibit 1517, except that the phrase "or when CLEC elects to request construction in lieu of having an order held for lack of available facilities" should not be deleted.	Ex. 1807, section 9.19
WA LOOP 3(a)/3(b)	*34th Supp. Order*, ¶65.	Qwest must allow CLECs to audit back office information pertaining to loop information.	Ex. 1807, section 18.1.1
WA LOOP 3(a)/3(b)	*34th Supp. Order*, ¶66.	Qwest must modify the sentence added to SGAT section 9.2.2.8, and the second sentence of SGAT section 18.1.1.	Ex. 1807, sections 9.2.2.8, 18.1.1
Number Portability	*34th Supp. Order*, ¶¶104-5.	Qwest must modify SGAT section 10.2.5.3.1, as it appears in Qwest's April 5 SGAT by deleting the words "try to." Qwest must also modify section 10.2.2.4 by deleting the last sentence.	Ex. 1807, sections 10.2.5.3.1, 10.2.2.4

8. Effective Date of SGAT

97 Qwest requests in its June 11, 2002, Notice of Updated Statement of Generally Available Terms and Conditions that the Commission allow the seventh revised SGAT to become effective as of July 10, 2002. *See Ex. 1805 at 6.* As discussed

above, the seventh revised SGAT and exhibits, specifically Exhibit K – the QPAP, do not yet comply with the Commission's orders. Qwest must file a revised SGAT including a revised Exhibit K with the Commission by Tuesday, June 25, 2002. If that SGAT and Exhibit K comply with the requirements discussed above in this order, the Commission will allow that SGAT and all exhibits to become effective as of July 10, 2002.

V. FINDINGS OF FACT

98 Having discussed above in detail the oral and documentary evidence received in this proceeding concerning all material matters, and having stated findings and conclusions upon issues at impasse between the parties and the reasons and bases for those findings and conclusions, the Commission now makes and enters the following summary of those facts. Those portions of the preceding detailed findings pertaining to the ultimate findings stated below are incorporated into the ultimate findings by reference.

99 (1) Qwest Corporation, formerly known as and sometimes referred to in this Order as U S WEST Communications, Inc., is a Bell operating company (BOC) within the definition of 47 U.S.C. section 153(4), providing local exchange telecommunications service to the public for compensation within the State of Washington.

100 (2) The Commission is an agency of the State of Washington vested by statute with the authority to regulate the rates and conditions of service of telecommunications companies within the state, to verify the compliance of Qwest with the requirements of section 271(c) of the Telecommunications Act of 1996, and to review Qwest's Statement of Generally Available Terms, or SGAT, under section 252(f)(2) of the Act.

101 (3) Section 271 of the Act contains the general terms and conditions for BOC entry into the interLATA market.

102 (4) Pursuant to 47 U.S.C. section 271(d)(2)(B), before making any determination under this section, the FCC is required to consult with the state commission of any state that is the subject of a BOC's application under section 271 in order to verify the compliance of the BOC with the requirements of section 271(c).

103 (5) Pursuant to 47 U.S.C. section 252(f)(2), any BOC statement of terms and conditions filed with the state commission under section 252(f)(1) must comply with sections 251 and 252(d) and the regulations there under in order to gain state commission approval.

104 (6) At paragraph 51 of the *30th Supplemental Order*, the Commission specifically limited application of the revenue cap to the payments under the QPAP.

105 (7) Paragraph 56 of the *30th Supplemental Order* requires Qwest to update section 12 of the QPAP to reflect the use of current ARMIS Net Revenue data rather than 1999 ARMIS results.

106 (8) During the June 5 hearing, Qwest agreed to modify section 12.1 as reflected in Exhibit 1687.

107 (9) Qwest had an opportunity to raise the issue of critical values for Tier 2 payments in its petition for reconsideration and did not.

108 (10) Qwest's response to Bench Request No. 57 demonstrates that Qwest's proposal to modify the critical value used to determine Tier 2 payments would significantly lower Tier 2 payments made to the state.

109 (11) Qwest has not modified SGAT section 8.4.1.10 as required by paragraph 28 of the *33rd Supplemental Order*.

110 (12) During the June 5 hearing, Qwest and the Joint CLECs agreed upon SGAT and QPAP language concerning collocation payments.

111 (13) In its response to Bench Request No. 54, Qwest provided a copy of the April 11, 2001, order entered in Colorado concerning reporting of special access performance measures, as well as a description of the reporting process for Washington state.

112 (14) Qwest agreed during the June 5 hearing to include the line sharing performance measure in Attachment 1 of the QPAP. In addition, the Joint

CLECs agreed with Qwest's proposal that the PIDs be included as Exhibit B to the SGAT.

113 (15) Qwest proposes to replace section 16 of the QPAP with a new section 16, which it describes in Exhibit 1680 as "the most recent and final CPAP language related to the six-month review, with modifications Qwest believes are appropriate in light of the differences between the two plans."

114 (16) During the June 5 hearing, Qwest agreed to delete sections 11.3.1 through 11.3.3 of the QPAP and to modify the QPAP to delete references to the Special Fund.

115 (17) Qwest has replaced the language in section 15 of the QPAP as requested in paragraph 241 of the *30th Supplemental Order*, but has modified section 15.1 to include an additional sentence concerning coordination with other state and regional audits.

116 (18) Qwest has modified section 11.2 of the QPAP as required by paragraph 220 of the *30th Supplemental Order*, except that Qwest included additional language concerning payment via electronic fund transfers that does not form a complete sentence.

117 (19) The parties agreed during the June 5 hearing to add language to section 11.2 of the QPAP appearing in Exhibit 1687.

118 (20) Qwest has modified SGAT section 7.3.2.1.1 as required by paragraph 17 and 18 of the *34th Supplemental Order*, but has not modified section 7.1.2.1, which describes and defines the Qwest-provided DS1 and DS3 facilities CLECs may use for interconnection arrangements.

119 (21) On June 11, 2002, Qwest filed confidential documents outlining its build criteria for DS1 and DS3 retail facilities. The documents describe Qwest's general guidelines for how projects will be prioritized for construction, including specific cost criteria to be used in the decision-making process. On June 18, 2002, Qwest filed a response to Bench Request No. 60, identifying the effective date of the documents, as well as where the documents are located and updated within Qwest.

120 (22) Qwest has modified the SGAT to include a new section, 9.1.2.1.5, which provides that CLECs may review reports of actual builds, subject to the confidentiality provisions of SGAT section 5.16.

121 (23) Paragraph 45 of the *34th Supplemental Order* required Qwest to modify SGAT section 10.8.2.27 to reflect AT&T's proposed language on pages 3 and 4 of Exhibit 1522, except for the changes related to section 10.8.2.27.4.

122 (24) Qwest has modified its SGAT to reflect the changes required for sections 10.8.2.27.2 and 10.8.2.27.3, but omitted a sentence in SGAT section 10.8.2.27.1.

123 (25) Qwest has modified SGAT section 10.8.2.27.4, to prohibit CLECs from disclosing the contents, terms, or conditions of right-of-way agreements to employees engaged in product management, as well as other employees.

124 (26) Qwest has deleted the parity language in SGAT section 9.2.2.8, as required by paragraphs 57 and 66 of the *34th Supplemental Order*, and has added a new SGAT section, 9.2.2.8.6, containing the procedures CLECs must use when loop make-up information for a facility is not contained in the loop qualification tools, as well as the timetable Qwest will follow in providing the information to CLECs.

125 (27) Qwest made no changes to the SGAT in response to paragraph 74 of the *34th Supplemental Order*.

126 (28) AT&T has proposed modifications to SGAT section 9.2.2.1.3.1 to refer to SGAT section 9.2.2.8 as controlling the procedures for access to information, and to state that Qwest will recover its costs for mediated access in the same manner as Qwest recovers OSS transition costs.

127 (29) In response to paragraphs 125 and 126 of the Commission's *34th Supplemental Order*, Qwest filed a pleading with the Commission on June 11, 2002, providing a revised chart reflecting its 272(e)(1) obligations, and describing modifications to Qwest's EXACT system.

VI. CONCLUSIONS OF LAW

128 (1) Having discussed above in detail all matters material to this decision, and having stated general findings and conclusions, the Commission now makes the following summary conclusions of law. Those portions of the preceding detailed discussion that state conclusions pertaining to the ultimate decisions of the Commission are incorporated by this reference.

129 (2) The Commission has jurisdiction over the subject matter of this proceeding and the parties to the proceeding.

130 (3) The cap on 36 percent of ARMIS net revenue is limited to payments made under the QPAP. Consistent with paragraphs 65 and 66 of the *33rd Supplemental Order* concerning the election of remedies under the QPAP, the cap does not limit liquidated damages under any interconnection agreement or any payments made for the same underlying activity or omission under any contract, order, or rule.

131 (4) Exhibit 1682, the summary of the PEPP collaborative, does not demonstrate the "expectation" Qwest alleges concerning the application of critical values for Tier 2 measures. Because we cannot verify the content of Qwest's conversation with the FCC concerning Tier 2 critical values, we will apply less weight to the evidence.

132 (5) Due to the significant effect on Tier 2 payments of Qwest's proposal to modify critical values, and because Qwest failed to raise the matter in its petition for reconsideration, we reject Qwest's request to modify the critical value for Tier 2 payments.

133 (6) The information Qwest provided in response to Bench Request No. 54 is sufficient to address our concerns about Qwest's reporting of special access performance measures in Washington state.

134 (7) In paragraph 135 of the *30th Supplemental Order*, the Commission intended that Qwest increase the payments for high-value services, but not lower payments for low-value services. Although Qwest may have misinterpreted

the Commission's intent and would have sought reconsideration of the issue, it is now too late for Qwest to seek reconsideration.

135 (8) Because it is unclear whether future events may require changes to a performance assurance plan, the QPAP should not be self-limiting. Performance assurance plans should remain flexible to address issues that may arise over time, including, but not limited to whether performance measures must be adjusted. States must retain authority for ongoing oversight over performance assurance plans and retain flexibility over how a plan should be changed.

136 (9) Qwest made its proposal for changes to section 16 of the QPAP after the Commission entered an order on Qwest's petition for reconsideration. Because Qwest has made its proposal so late in this proceeding, and because it appears that Qwest's proposal would significantly limit the modifications that could be made to the QPAP, we deny Qwest's request to modify section 16 of the QPAP as set forth in its compliance filing.

137 (10) Qwest's proposed modification to section 15.1 of the QPAP does not comply with the Commission's *30th* and *33rd Supplemental Orders*. Qwest's language imposes mandatory requirements on the Commission that may limit the Commission's ability to conduct an audit under the QPAP, independent of an audit conducted by another state or multi-state process.

138 (11) Except for the issues discussed in this order, Qwest's QPAP complies with certain requirements of the Commission's *30th* and *33rd Supplemental Orders*, as set forth in paragraph 69 of this order.

139 (12) The SGAT section defining facilities that CLECs may use for interconnection should include Direct Trunked Transport as well as Entrance Facilities, as Direct Trunked Transport logically falls into the category of "Qwest-provided DS1 and DS3 facilities" that CLECs may use for interconnection.

140 (13) The availability of actual build reports, coupled with the dissemination of Qwest's build criteria for DS1 and DS3 retail facilities, should provide CLECs with adequate information to determine whether parity exists between Qwest's build policies for retail and wholesale customers.

141 (14) Product management employees, who may be responsible for contacts with customers, should not be precluded from reviewing right-of-way agreements, as the employees may require access to that information to determine if a customer's needs will be met by similar access to a building.

142 (15) The procedures for manual look-up of loop information contained in Qwest's SGAT section 9.2.2.8 have been superseded by Qwest's new SGAT section 9.2.2.8.6. Retaining both sections in the SGAT may cause confusion.

143 (16) AT&T's proposed modifications to SGAT section 9.2.2.1.3.1 succeed in cross-referencing the two SGAT sections, and in clarifying the procedures for access and for cost recovery for access to spare loop information.

144 (17) Qwest's chart of reporting measures for provisioning of exchange access and telephone exchange access, and Qwest's proposed modification to its EXACT system, comply with paragraphs 125 and 126 of the *34th Supplemental Order*. Qwest has demonstrated its compliance with the requirements of section 272(e)(1), and section 272 overall.

145 (18) Except for the issues discussed in this order, Qwest's SGAT complies with certain requirements of the Commission's *34th Supplemental Order*, as set forth in paragraph 96 of this order.

146 (19) Qwest's seventh revised SGAT and exhibits, specifically Exhibit K – the QPAP, does not comply with the Commission's orders.

147 (20) If Qwest files an SGAT and Exhibit K that comply with the requirements set forth in this order, the Commission will allow the SGAT and all accompanying exhibits to become effective as of July 10, 2002.

VII. ORDER

148 IT IS ORDERED That Qwest must file a complete, revised SGAT, including an Exhibit K, or QPAP, on June 25, 2002, that complies with the following requirements:

149 (1) Qwest must modify QPAP section 12.1 as reflected on page 7 of Exhibit 1689, except that Tier 2 assessments or payments made by Qwest shall be subject to the revenue cap.

150 (2) Qwest must modify section 12.1 as reflected in Exhibit 1687.

151 (3) Qwest must modify sections 7.2, 7.3, 9.1, 9.1.1, and 9.1.2 of the QPAP to remove the changes reflected in Exhibit 1681 that do not address requirements from the *30th* or *33rd Supplemental Orders*.

152 (4) Qwest must include in the QPAP and SGAT to be filed on June 25, 2002, the language the parties have agreed to concerning collocation payments and WAC 480-120-560.

153 (5) Qwest must add the line sharing performance measure to Attachment 1 of the QPAP and modify section 20 of the SGAT as reflected in Exhibit 1687.

154 (6) Qwest must modify Table 2A of the QPAP to increase the base value of payments for residential and business resale, and UBL-2 wire/analog loops to $150.

155 (7) Qwest must modify section 16 of the QPAP as ordered in paragraph 146 of the *30th Supplemental Order*.

156 (8) Qwest must modify the QPAP to delete sections 11.3.1 through 11.3.3 and all other references to the Special Fund.

157 (9) Qwest must remove from section 15.1 of the QPAP the additional language Qwest proposes to address coordination with other state and regional audits.

158 (10) Qwest must modify the QPAP to include in section 11.2 of the QPAP the language the parties have agreed to, reflected in Exhibit 1687.

159 (11) Qwest must modify the first sentence in SGAT section 7.1.2.1 as set forth in paragraph 74 of this order.

160 (12) Qwest must amend SGAT sections 10.8.2.27.1 and 10.8.2.27.4 as set forth in paragraph 84 of this order.

161 (13) Qwest must delete the portion of SGAT section 9.2.2.8 beginning with "If the Loop make-up information for a particular facility" and ending at the end of the paragraph.

162 (14) Qwest must modify SGAT section 9.2.2.1.3.1 as described in paragraph 92 of this order.

DATED at Olympia, Washington and effective this 20th day of June, 2002.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

MARILYN SHOWALTER, Chairwoman

RICHARD HEMSTAD, Commissioner

PATRICK J. OSHIE, Commissioner

EDI Implementation Guidelines for IMA

05/03/02

Qwest Communications, Inc.

EDI Implementation Guidelines – for Interconnect Mediated Access (IMA)
Version 10.0

Date

May 3, 2002

Prepared by:
Qwest Communications, Inc. (Qwest)
Implementation Team

For questions regarding this document, please contact

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Abstract:

This document will assist CLECs in understanding and successfully managing the process of implementing EDI trading capabilities between their organization and Qwest. The information in this document is specific to the use of the EDI interface to Interconnect Mediated Access system and should not be construed as being applicable to other EDI interfaces available from Qwest.

Document Information

Document Owner: Qwest EDI Lead Implementation Project Manager

Document History

All revisions made to this document are listed here in chronological order.

Version	Date	Description
1.0	01/07/00	Initial Distribution
2.0	04/12/00	Revised Distribution
3.0	12/08/00	Revised Distribution
4.0	04/23/01	Revised Distribution Note: VER 4.00 represents a rearrangement of prior IMA EDI information and the incorporation of Facility-Based Directory Listing implementation guidance. Changes to this document are reflected in archived redline/revision copies. Also, Certification Testing is now known as Controlled Production.
5.0	07/25/01	Revised to include Stand Alone Test Environment Implementation guidance and Service Bureau EDI Implementation Guidelines
6.0	10/11/01	The requirement for BANs to be loaded for EDI users was removed and a supplemental Order flow to Section 3, was added to the Technical Information.
7.0	11/09/01	Changed 'Testing' to 'Progression'. Added SATE data addition process. Moved information to Appendix A. Updated Appendix B - Service Bureau URL links are live. Explained use of TPRs. Explained External Address Worksheet.
8.0	11/30/01	Clarifications included: Process for addition of data to the SATE environment

		-Process for negotiating manually-generated responses during the Progression Phase - Interaction of the Interoperability environment with Qwest OSS - Minimum FBDL testing requirements for Progression and Controlled Production - URLs were added/updated as necessary.
9.0	01/21/02	Section of FBDL removed- now an IMA product. Explanation of SATE VICKI added. Flow diagrams added. Staffing Plan added as Appendix C
9.1	02/18/02	Flow diagrams changed. Clarification of combining Interoperability and SATE in Progression Testing. The inability to submit a supplemental order via the GUI when initial order was sent via EDI and vice versa. Clarification on Non-Fatals sent after an FOC. Clarification of minimum test requirements for Implementation and Migration
10.0	05/03/02	Restructure of process information to improve flow. Clarification of minimum test requirements for Implementation and Migration.

Important: This document has been through a formal review process. To the best of our knowledge it is accurate Qwest Communications, Inc. reserves the right to make further modifications, as necessary.

Qwest Information Technologies
EDI Implementation Guidelines – for Interconnect Mediated Access (IMA)

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1. Introduction

Purpose

This document assists Competitive Local Exchange Carriers (CLECs) in understanding and successfully managing the process of implementing EDI trading capabilities between their organization and Qwest.

Audience

This document is intended for organizations wishing to implement wholesale trading capabilities with Qwest for the exchange of Pre-Order, Order, and post-Order information via the IMA EDI interface. It also contains information regarding the Qwest Stand Alone Test Environment (SATE) that can be utilized for either regression testing of EDI interface software or progression testing that is related to the implementation of an IMA release. Service Bureaus, as related to an Implementation project, are covered in Appendix B.

Scope

This document provides a general overview of the EDI Implementation Process. Additional information and documentation will be provided during implementation support meetings. The information in this document applies to the use of the IMA EDI interface and should not be construed as being applicable to other EDI/electronic interfaces available from Qwest.

Sections in this Guide

This document is divided into three sections addressing the Implementation Process in terms of both the business and technical information. Following the Introduction, the Implementation Activities section addresses the Trading Partner requirements and processes in an EDI implementation project (or migration). The Technical section addresses system and interface issues, and the data syntax/business rules necessary to successfully create and submit electronic information via EDI to Qwest systems.

Acronyms

BA	Business Analyst (EDI Implementation Team)
CLEC	Competitive Local Exchange Carrier
CMP	Change Management Process
CM	Configuration Management
EDI	Electronic Data Interchange
FBDL	Facility Based Directory Listings
IPM	Implementation Project Manager (EDI Implementation Team)
IMA	Interconnect Mediated Access
IT I&D	Information Technologies Implementation and Deployment
LBA	Lead Business Analyst (EDI Implementation Team)
LOC	Listing Operations Center
LSR	Local Service Request
LIPM	Lead Implementation Project Manager (EDI Implementation Team)
LSOG	Local Service Ordering Guidelines
LSS	Listing Services System
LTS	Lead Technical Support Engineer (EDI Implementation Team)
OBF	Ordering and Billing Forum
OSS	Operational Support Systems
SATE	Stand Alone Test Environment
SYAD	System Administrator
TSE	Technical Support Engineer (EDI Implementation Team)
VICKI	Virtual Interconnect Center Knowledge Initiator

2. Implementation Activities

The use of EDI provides an effective mechanism to automate the communication and processing of Order information and to reduce manual processes. The EDI Implementation Process will progress according to an agreed upon plan and timeline. The typical project phases for those CLECs implementing a given release will include:

1. **Initial Communications:** During this phase, all activities to initiate a CLEC's implementation are conducted, including the Kickoff conference call.

2. **Implementation or Migration Project Plan Negotiation:** During this phase, the Implementation or Migration Project Plan is proposed and negotiated.

3. **Requirements Review:** The Requirements Review phase provides an opportunity for a CLEC to review Qwest's EDI system and business requirements and ask any questions they may have regarding those requirements.

4. **Firewall and IA-to-IA ConnectivityTesting:** During this phase, CLEC connectivity is established and tested. This phase includes the set up of the circuit, pushing of firewall rules, and IA configuration.

5. **Progression Testing**: This phase affords the CLEC the opportunity to validate their technical development efforts and to quantify LSR processing results. Qwest provides two environments for progression testing, Interoperability and SATE. A CLEC may use either environment or the combination of the two for Progression Testing.

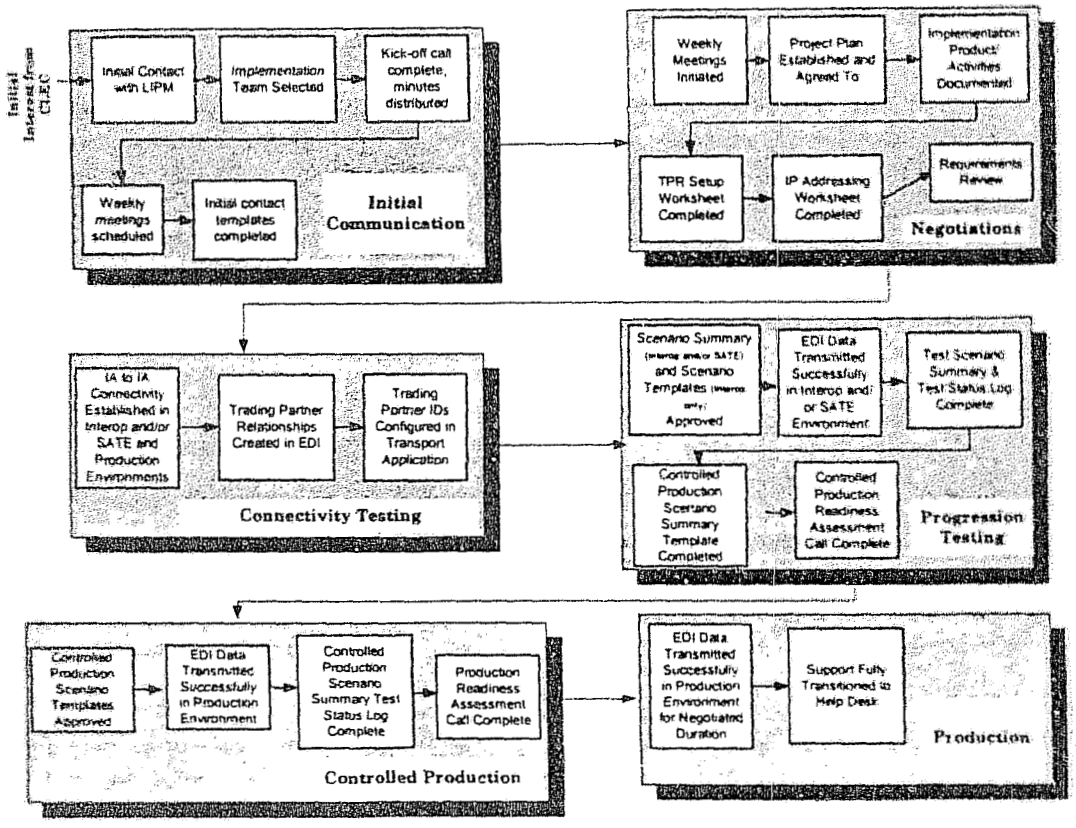
   If a CLEC chooses to test in both environments as part of a single Progression Testing Phase, the details of such an arrangement will be determined on the regularly scheduled CLEC implementation calls and reflected in the project plan. Additionally, certain activities, such as connectivity, may have to be repeated for each environment. During testing, it is the CLEC's responsibility to navigate between the two environments.

6. **Controlled Production:** This phase consists of the submission of CLEC requests to the Qwest production environment for provisioning, as production orders. Qwest and the CLEC use Controlled Production results to determine operational readiness for full Production turn-up.

7. **Production:** The CLEC is certified and able to submit full volumes of production LSRs and pre-order transactions to Qwest.

Figure 1 provides an overview of the steps in each phase of a standard EDI Implementation process. Some activities are precursors to others that follow. Others may be done in parallel. For example, requirement review and Scenario template development may occur while connectivity is being established. The Firewall Rules and IA-to-IA Connectivity testing phase steps can be environment specific with certain tasks needing to be repeated for each environment that the CLEC would like to utilize.

Figure 1 IMA EDI Implementation Process Overview



Note: Serial Progression through the phases is not required as noted within the detailed processes

CLECs have the ability to utilize SATE to test EDI functionality without supervision or direct support separate from an Implementation or Migration. This process is called Regression Testing and occurs only in the SATE environment. Additionally, Third-Party Software Vendors or Service Bureaus may test their EDI with Qwest IMA EDI as part of a Regression Test, and should contact the LIPM directly, as they will not have an assigned Qwest Service Manager (see cover page for contact number). Additional information regarding Regression Testing can be found later in this document under the topic Regression Testing.

Chart 1 summarizes the relationship between IMA EDI Implementation testing phases and IMA EDI environments, specifically which environment(s) can be used for each testing phase.

Chart 1 IMA EDI Testing Phases vs. Environments

Environments: / Testing Phases:	Interoperability	SATE	Production
Progression	✓	✓	
Regression		✓	
Controlled Production			✓

Initial Communications

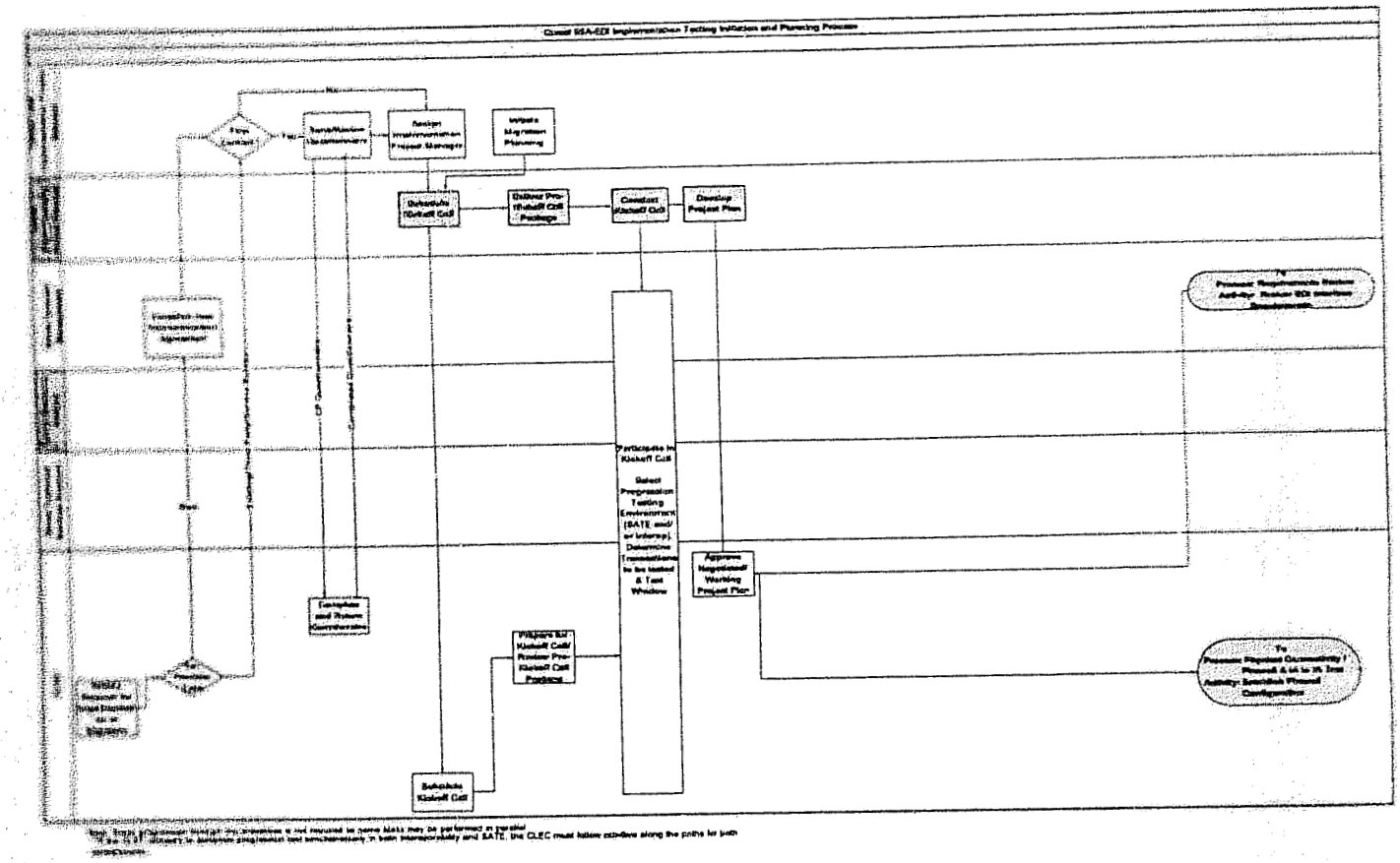
This section explains the objectives of the Initial Communications activity regarding EDI trading capabilities. The Initial Communications discussion is intended to accommodate:

- A general description of the EDI interface
- An overview of the EDI Implementation Process
- Identification of applicable EDI documentation resources
- Determination of the specific EDI functionality to be implemented by the CLEC

Each CLEC will be provided with a Qwest EDI Implementation Team. The Team members will work with the CLEC throughout the CLEC's EDI Implementation. Each Qwest EDI Implementation Team will consist of:

- Implementation Project Manager: Responsible for facilitating meetings, coordinating overall Project Plan, and is the primary point of contact for CLEC implementation process.
- Business Analyst: Responsible for providing assistance with the business rules and processes associated with the products offered by Qwest via EDI.
- Technical Support Engineer: Responsible for facilitating the implementation processes from a systems standpoint.

Initial Communications and Project Plan Negotiations Flow Diagram



Initial Communications Activities

When a CLEC is interested in implementing EDI, the Qwest Service Manager will put them in contact with the Lead Implementation Project Manager (LIPM) who will then provide an Initial Contact Questionnaire for the CLEC to complete and return. When the LIPM receives the completed Questionnaire, an Implementation Project Manager (IPM) will be assigned and a kickoff call will be scheduled. If a Third-Party Software Vendor or Service Bureau wants to use SATE for regression testing, they will contact the LIPM directly (see cover page for phone number) as they will not have a Qwest Service Manager.

The following activities will occur as part of the project initiation meeting (Kickoff call) between Qwest and the CLEC:

- Provide overview of the EDI Interface to Qwest IMA ordering systems
- Review of Qwest Data Transport Requirements
- Introduce Qwest and CLEC team members and identify roles and responsibilities

- Identify the objectives and scope of the products to implement
- Identify the available EDI interface release version and the timeframes within which the Implementation Project steps will be performed
- Review the Implementation Guidelines and the Implementation Processes
- Discuss the Progression Testing environment options – SATE and/or Interoperability environment. Negotiation of manually-generated Post-Order transaction responses, if the interoperability environment is chosen or SATE is used without VICKI
- Review documentation resources
- Discuss administrative processes

Initial Communications Phase Completion

The initial communications phase will be considered complete with the initiation of weekly project status calls by the CLEC.

Project Plan Development/Negotiation

A formal Implementation/Migration Project Plan that represents the milestones and responsibilities of all parties throughout the planned EDI implementation or migration process will be mutually negotiated. Regularly scheduled conference calls will be conducted to review progress, answer questions, and identify and communicate resolution of issues. The respective project managers will be responsible for maintaining and monitoring progress within the Project Plan. If Progression Testing occurs in the interoperability environment, Qwest will negotiate with the CLEC the number of, and manner in which, manual post-order transactions will be returned to the CLEC. A mutual negotiation and approval process will be used to manage changes to schedules as recommended or required by either party. All parties will give sufficient advance notice to the other party to allow adequate analysis of the impact of any proposed schedule changes.

The inability of either party to meet any of the milestones contained in the Implementation or Migration Project Plan on the date(s) identified may result in the need to renegotiate a revised Project Plan. All revised plans will be developed based on the availability of resources from within the respective organizations and may contain dates that are substantially different from those described in the original plan.

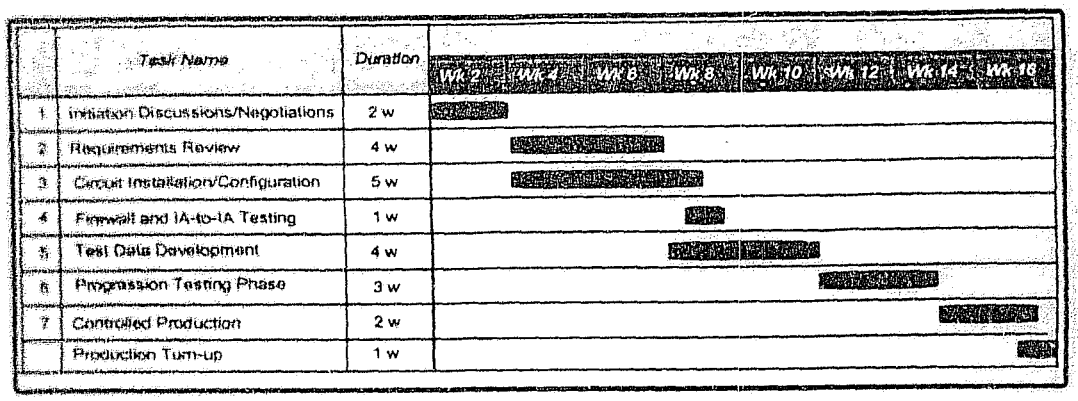
For Regression Testing in SATE a formal Usage Plan will be developed to indicate the volume and timing of SATE activity.

The development of, and agreement to, a formal Implementation/Migration Project Plan or SATE Usage Plan is the pre-requisite to beginning the Implementation Process or SATE regression testing activity.

Typical Implementation Timeline

The following diagram illustrates a typical implementation timeframe (Figure 2). Actual implementation duration will depend on the number of EDI transactions to be implemented, resource availability, project scope, and other factors.

Figure 2 Sample Implementation Project Timeline (Illustrative Only)



This diagram presents a high-level description of implementation phase with typical timelines for the implementation of one to three (1-3) EDI transaction types. If a CLEC desires to implement more than three EDI transactions and/or Complex Facility Based Directory Listings[1], the project team will adjust the timelines accordingly.

Qwest recommends that a phased approach be used when implementing multiple EDI transactions. Using a phased approach, the CLEC chooses the EDI transactions that are most important to their business plan. The most important EDI transactions would be implemented first. Additional EDI transactions would then be implemented in phases during the implementation that is already underway or once the initial EDI transactions are already in production. A detailed Project Plan representing each phase will be mutually defined. The plans will describe the specific activities to be performed in support of each phase of implementation for each EDI transaction.

Regression testing (by a CLEC, Third Party Software Vendor, or Service Bureau) would also include the same initial activities, steps 1,3, and 4 above. In the discussion of these steps in the following sections of this document, requirements noted for 'CLECs' will also pertain to Service Bureaus and Third-Party Software Vendors. Further information for Service Bureaus can be found in Appendix B – Service Bureau EDI Implementation Guidelines.

[1] If CLEC elects to implement Complex Facility Based Directory Listings, the Testing timeline may extend to seven weeks due to the complexity of this product.

Project Plan Negotiation Phase Completion

This phase of the EDI Implementation will be considered complete with the creation of an agreed upon project plan.

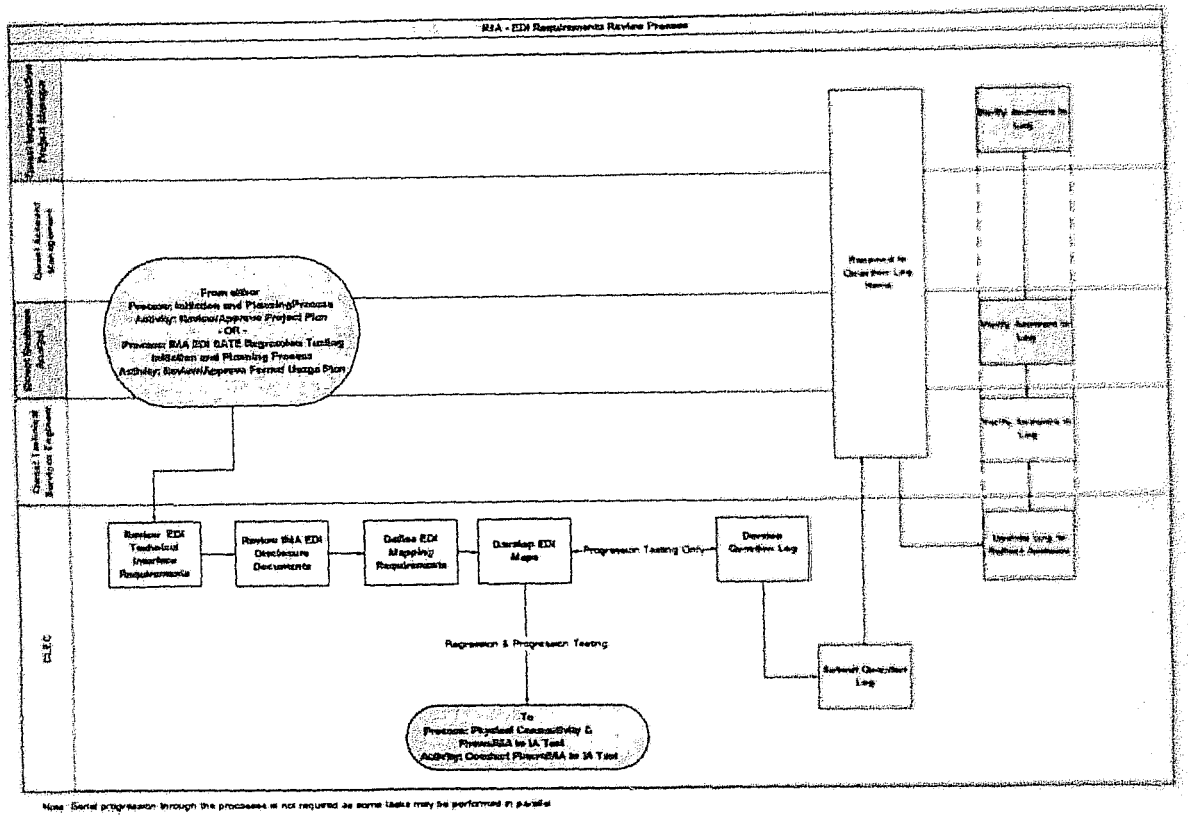
Requirements Review

A critical factor in a successful implementation is a thorough understanding by the CLEC of the Qwest EDI interface. The requirements review phase of implementation will provide the CLEC with an opportunity to develop a clear understanding of Qwest requirements for IMA. This review is critical to the CLEC who must:

- Develop and define the business processes and procedures necessary to support the use of their EDI interface for IMA transactions.
- Develop the appropriate documentation (i.e., Methods and Procedures) necessary to support the use of the EDI interface by CLEC personnel.
- Perform any necessary database gap analysis for the purpose of ensuring that all data fields that carry the EDI information can be successfully populated.
- Identify appropriate data values.
- Select Pre-Order transactions to support the intended products to be ordered through EDI.

  NOTE: Qwest strongly recommends the use of Pre-Order transactions to assist CLECs in achieving Order content accuracy, reducing rejection rates, and improving Service Order flow-through.

Requirements Review Process Flow



Requirements Review Activities

While it is the CLEC's responsibility to perform a thorough review of all Qwest requirements, Qwest BAs will provide support to clarify issues and answer questions regarding the EDI interface business rules, requirements, and the Implementation Process.

1. The CLEC reviews Qwest requirements as documented in the Disclosure Document and other documents listed in the "Qwest Document Overview" section of this document.
2. Questions arising from the CLEC's review of EDI requirements will be captured on a Question Log by the CLEC.
3. The Question Log, with questions populated by the CLEC, will be submitted to Qwest.
4. Qwest will provide answers to outstanding questions and the CLEC will update the log to reflect their understanding of the answers provided.
5. Qwest will review the answers entered by the CLEC in the log after which the CLEC may indicate that a question may be closed if it has been adequately answered.

Requirements Review Phase Completion

The Requirements Review phase of the implementation will be considered complete when the CLEC determines that they have adequately reviewed Qwest's requirements documentation. The CLEC may decide to continue use of the Question Log throughout the implementation.

Qwest Documentation Overview

The following documents provide additional information on the Implementation Process , IMA EDI Requirements, or are designed to capture necessary business and configuration parameters. Distribution of these documents will occur as needed during the course of the implementation project.

Distributed prior to the kickoff call:

- Kickoff Agenda
- Question Log Template
- Generic Project Plan
- Contact List Template
- Qwest and Industry Website URLs

Distributed after the kickoff call:

- IP Addressing Worksheet
- Trading Partner Identifier Worksheet
- Scenario Summary Template
- Scenario Template(s)
- IIMA FBDL Test Bed Data

Distributed during the Progression Testing phase:

- Qwest IMA EDI Troubleshooting Procedures

Additional information can be found on the IMA EDI website www.qwest.com/wholesale/IMA EDI, including:

- EDI Implementation Guide

- Frequently Asked Questions
- IMA EDI SATE Data Document (Release Specific)
- IMA Corrective Procedures and Error Codes
- IMA FBDL Corrective Procedures and Confirmation/Error Codes
- Link to Disclosure Document (Release Specific)
- VICKI Path Document
- SATE Data Request Form
- Errors List (Release Specific)
- Populated EDI X12 Mapping Examples (Release Specific)

Information specific to each new release is made available to the CLEC based on the schedule in Table 1.

Table 1: Qwest IMA EDI Disclosure Document Publication Schedule

PUBLICATION	SCHEDULED DELIVERY
Draft Disclosure Document	73 days before Release Date
Disclosure Document	45 days before Release Date
Change Summary	45 days. before Release Date
Disclosure Document Addendum #1	2 Wks. after Release Date
Disclosure Document Addendum #xx	As Required to notify CLECs of system bugs

Disclosure Document

The Qwest EDI Disclosure Documents present Qwest EDI interface requirements on a transaction or product-specific basis. The Disclosure Document is issued and available on the Qwest website five weeks prior to each release with a change summary from the prior release. When the Disclosure Document for a release is available, a release notification is distributed to the CLECs.

The content of the document may change after issuance, as the release is not yet deployed. To notify CLECs of any changes to the Disclosure Document, Qwest will issue an Addendum to the Disclosure Document two weeks after the release is issued. The Addendum will be placed on the Qwest website and a Release Notification will be distributed to the CLECs. Additionally, the Disclosure Document will be updated to reflect the latest changes and the individual transaction chapters will show an updated date in the chapter title to indicate that the content in that chapter has been updated.

The Disclosure Document contains a chapter for each transaction or product. Each chapter contains the following sections:

- Business Description—provides a general overview of the business functionality and describes the Local Service Ordering Guidelines (LSOG) forms to be used when submitting a particular pre-order transaction or ordering a particular product
- Business Model—describes the electronic communication that comprises the complete business transaction cycle for a particular EDI functionality and presents the sequence by which these electronic communications will be exchanged. This appears as an appendix for all order products.
- Trading Partner Access Information—outlines data values for the ISA and GS segments, describes delimiter use, and indicates the version of the industry standard upon which an EDI transaction or Order is based
- Mapping Examples—defines the syntax and structure of the EDI transaction data
- Data Dictionary—offers a description of the individual EDI segments and elements that are contained within a particular transaction

Disclosure Appendices contain:

- Developer Worksheets
- IMA Additional Edits
- Change Summaries
- Generic Order Flow Business Model

The content of the Disclosure Document is described in further detail in the Technical Section of this document.

The disclosure documents can be found at:

http://www.qwest.com/disclosures/netdisclosure409.html

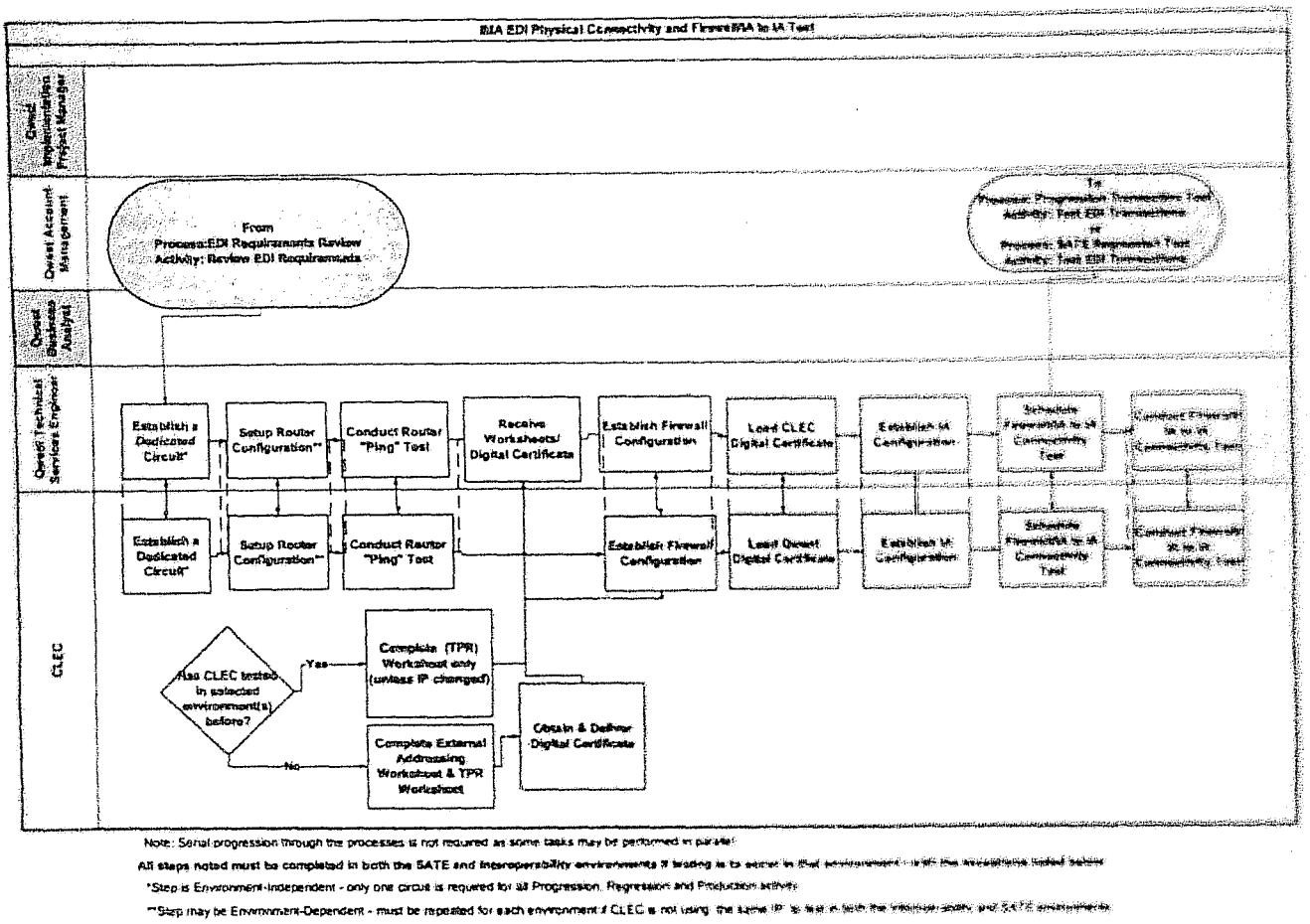
Establishing a Dedicated Circuit and Connectivity Testing

A dedicated circuit is needed before implementing the Qwest IMA EDI interface, regardless of environments(s) to be utilized. This will provide a secure network to send and receive data between Qwest and the CLEC, providing an efficient means to transport high volumes of data.

The same circuit can be used to connect to the production environment, the interoperability environment, and SATE simultaneously.

It is feasible to share a circuit already being used between Qwest and the CLEC (or a Service Bureau). If a circuit is shared, it is critical for the circuit owner to monitor the transmission volumes as performance issues could be impacted. Qwest will require a letter of authorization (LOA) from the circuit owner when a circuit is shared.

Establishing a Dedicated Circuit and Connectivity Testing Process Flow



Note: Serial progression through the processes is not required as some tasks may be performed in parallel.

All steps noted must be completed in both the SATE and Interoperability environments if testing is to occur in that environment - with the exceptions noted below.

*Step is Environment-Independent - only one circuit is required for all Progression, Regression and Production activity.

**Step may be Environment-Dependent - must be repeated for each environment if CLEC is not using the same IP address in both the Interoperability and SATE environments.

Establishing a Dedicated Circuit and Connectivity Testing Activities

1. Establish a Dedicated Circuit

The dedicated circuit can be ordered from the carrier of the CLEC's choice. Qwest is able to accommodate a Frame Relay circuit or a point-to-point connection. Currently, Qwest does not support a dial up application or an ISDN circuit for the IMA EDI interface. The bandwidth requirements for connectivity to the IMA EDI interface are a T-1, fractional T-1, or 56K line. Determining the bandwidth sizing is a function of estimating the number of concurrent users accessing an application, the number of applications riding on the facility, and the contentions for access between those 'user instances'. Qwest recommends that a facility engineer be consulted to determine the bandwidth size required to accommodate the CLEC's specific needs.

Qwest requires that the CLEC's circuit terminate at a Qwest data center demarcation point. These demarcation points are located in Denver, Colorado and Omaha, Nebraska.

When a CLEC or Service Bureau requires use of multiple circuits, two options are available and should be chosen based on the CLEC's Implementation Plan. The Data Network Information and Requirements Form is used to communicate selection of one of the following two options to Qwest:

Option 1. Load Balancing - allows transmissions to be distributed across multiple circuits.

Option 2. Redundancy - allows transmissions to travel over the secondary route, in the event of a circuit failure.

If further circuit information is needed, please contact your Qwest EDI Implementation team.

2. Setup Router Configuration

The CLEC's circuit will need to be connected to the Qwest router located at one of the two data centers. This will require an internal circuit order to be issued and provisioning can take approximately 30 to 45 days from the date the request is correctly submitted. The internal order will not be placed until a Qwest circuit ID, Qwest order number, and a due date is provided by the CLEC to the Qwest EDI Implementation team. This information identifies the terminating point of the CLEC's incoming circuit.

The router configuration step completes the physical network connection when access is granted from the CLEC's external registered IP addresses to the Qwest firewall. To initiate the router configuration request, all data elements on the Data Network Information and Requirements Form must be filled out and returned to the Qwest EDI Implementation Team. It is expected that Qwest router configuration will be completed within five (5) business days from the date the request for access is submitted.

3. Conduct Router "Ping" Test

Upon completion of the necessary connectivity configuration requirements, a router hardware connectivity test (ping) is scheduled. The testing of network connectivity may take as little as one day. However, if access to the external circuit is not readily available, this activity could be rescheduled. This test is the last phase in completing the physical connectivity configuration to the IMA EDI application. Connectivity testing usually consists of Qwest and the CLEC pinging and telnetting each other's systems and verifying the responses were as expected. The intent of this test is:

- To verify that the physical requirements of the connectivity configuration have been met by Qwest and the CLEC.

- To ensure that EDI hardware of both parties is able to communicate effectively over the circuit.

4. Establish Firewall Configuration

Qwest must establish the CLEC as a Trading Partner on the firewall.

a. After the development of an agreed-upon project plan, Qwest will send the CLEC an IP Addressing Worksheet. The IP Addressing Worksheet is used by Qwest to establish its Firewall configuration. The IP Addressing worksheet will display the unique IP addresses used by Qwest in the Interoperability, SATE, and Production environments.

b. The CLEC will complete this worksheet to provide Qwest their IP addresses. The CLEC will be required to use a unique IP/port combination between the test and production environments. However, a CLEC can choose to use the same IP/port combination for both the SATE and Interoperability environments.

   If the same ID is used for Test and Production by the CLEC then Qwest will modify the port number to which the CLEC sends. This ensures to Qwest that test transactions will not be sent to the production environment by the CLEC.

c. Once the Qwest TSE receives the External Address worksheet from the CLEC, Qwest will initiate the addition of these IP addresses to the Qwest firewall rules. The addition of new firewall rules will take five (5) business days.

5. Exchange and Load Digital Certificates

Subsequent to the connectivity test, the CLEC must obtain a signed-authorized Digital Certificate. Digital Certificates are required and take approximately four to five business days to obtain. A Service Bureau must obtain a unique, signed-authorized digital certificate for each CLEC using the Service Bureau (See Appendix B, Service Bureau EDI Implementation Guidelines). [Please refer to the requirements of TCIF for further explanation regarding the use of digital certificates.]

Once the CLEC has obtained a Digital Certificate, the certificate should be sent to Qwest. Qwest will send the CLEC Qwest's digital certificate. Both parties should load the received certificate into their systems.

6. Establish IA and Trading Partner Configurations

Qwest must also establish the CLEC as a Trading Partner within the translator. The TPR Worksheet is used by Qwest to establish its IA-to-IA configuration for the CLEC. Qwest recommends the established Trading Partner Relationship (TPR) remain the same for the Testing (SATE and/or Interoperability) and Production environments.

a. The Qwest TSE will complete a draft TPR worksheet and send this to the CLEC.

b. The CLEC should review the worksheet and return it with any changes or approval within five (5) business days of receipt.

c. Once approval of the TPR worksheet is granted from both parties, Qwest will configure the TPRs within Interoperability and/or SATE within five (5) business days. Qwest can place these TPRs into the production environment within five business days of completion of Progression testing.

Firewall/IA to IA Connectivity Test

Once a hardware router connectivity 'ping' test has been successfully completed, a Firewall and IA-to-IA Connectivity testing call will be scheduled to occur a few days prior to the start of the Progression Testing Phase. This test will verify the communications between the trading partner and Qwest.

Firewall and IA-to-IA connectivity is established during each phase of implementation:

- Progression (Interoperability and/or SATE)
- Controlled Production

To provide assistance with any connectivity issues that might arise, it is recommended that the following CLEC technical personnel join this Firewall and IA-to-IA configuration Testing call:

- Security/firewall technician
- Transport/connectivity technician
- Tester

Entrance Criteria – Firewall and IA-to-IA Testing

Before the Firewall and IA-to-IA Testing can occur, the following steps must be completed:

- A dedicated circuit must be in place, and the hardware connectivity test must be completed.
- The CLEC must have installed and configured the Interactive Agent software.
- The CLEC must have returned the IP Addressing Worksheet and the Trading Partner Identifier Worksheet form to Qwest.
- Qwest must establish the CLEC as a trading partner on its systems.
- Qwest and the CLEC must configure their systems to allow for electronic transaction or Order data to be sent between one another.

- Exchange of Digital Certificates between Qwest and the CLEC must be completed.

Process - Firewall and IA-to-IA Testing

The following steps will occur during Firewall and IA-to-IA Testing:

1. In the Project Plan, a mutually agreed upon date for Firewall and IA-to-IA Testing will be established and a testing call will be set up for this date. At the agreed upon date/time, representatives for the CLEC and Qwest will join the call.

2. The CLEC will send Qwest an 850 transaction with invalid data therefore inducing a BPL system error (or one of their approved test case scenarios).

3. When the 850 transaction is received, Qwest will send the CLEC a 997 functional acknowledgement and the appropriate 855 response if the transaction passes X-12 standard edits. A 997 functional acknowledgement from the CLEC for the Qwest response completes this cycle. If problems arise during this process step, each problem/issue will be reviewed and resolved with the necessary project team members via scheduled conference calls.

Successful completion of these steps will confirm that the Firewall and the IA configuration has been correctly configured.

Exit Criteria – Firewall and IA-to-IA Testing

To demonstrate successful Firewall and IA-to-IA Testing, the following must occur:

- Qwest must receive an 850 transaction generated by the CLEC.
- CLEC must acknowledge receipt of the Qwest 997 indicating receipt of the 850.
- The CLEC must receive the 855 response from Qwest.
- Qwest must receive from the CLEC the 997 associated with the 855 from Qwest.
- Qwest and the CLEC must agree that the test was successful and Firewall and IA-to-IA configuration has been correctly established.

Establishing a Dedicated Circuit and Connectivity Testing Phase Completion

This phase will be considered complete with the completion of the connectivity test in all applicable environments (SATE, Interoperability, and Production). Each test will be considered complete when each of the exit criteria are satisfied.

CONTINUATION

[1]

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Scenario Summary and Template Development and Approval

During Progression Testing and Controlled Production, the set of required Scenarios that are to be tested will be mutually agreed upon and represented by the CLEC on a Scenario Summary. The following bullets indicate the activities to be performed during this process depending upon the testing phase and environment utilized.

- For Progression Testing in the Interoperability environment and Controlled Production, the CLEC will submit the Scenario Summary and individual Scenario Templates. The Qwest BA will review both sets and work with the CLEC until the Summary is approved and all Scenario Templates include data that can be submitted via EDI. (See 'Scenario Creation' in Progression and Controlled Production sections).

- For Progression Testing in the SATE environment, CLECs will submit only the Scenario Summary using an adequate description of the expected results with the actual scenario number from the SATE data document to represent the scenarios on the Scenario Summary. The Qwest BA will review the SATE Summary with the CLEC making the corrections needed for approval.

- For Progression Testing in both the Interoperability and SATE environments, the CLEC will complete a Scenario Summary document indicating the environment in which each scenario will be tested. Additionally, the CLEC will submit the individual Scenario Templates for the scenarios to be tested in the Interoperability environment. The Qwest BA will review the submitted documents and work with the CLEC until the Summary is approved and all Scenario Templates include data that can be submitted via EDI. (See 'Scenario Creation' in Progression and Controlled Production sections).

For any transactions to be sent to Qwest via EDI, data for the transmittal must be correctly structured. IMA and FBDL Scenarios contain the written data that will comprise the electronic information to be submitted in the transaction. The Scenario data used in either the SATE or Interoperability environment must comply with the Developer Worksheet guidelines in terms of format, syntax, and business rules that govern the electronic data transfer process.

Scenario Summary Review Approval Process

The Scenario Summary review process for Progression Testing and Controlled Production will occur as follows:

1. The CLEC populates the Scenario Summary template with the scenarios the CLEC plans to test, with the expected responses. The Scenario Summary should represent the required Scenarios to be tested (Pre-Order transactions, product Order/Activity Types, Post-Order transactions) along with the required responses for each test Scenario. The scenarios on the Summary document should use an adequate description of expected results. The CLEC should ensure that the Scenario Summary includes transactions that will meet the minimum testing criteria for the phase of the test. These criteria are detailed in the scenario summary

completion section of the Progression Testing or Controlled Production section of this document, as well as in Appendix D.

2. The Qwest BA determines whether the CLEC has included appropriate scenarios on the Summary to meet the minimum requirements for Progression Testing, Controlled Production, or Migration to a new release. The BA then reviews the Summary and provides revision marks and comments to the CLEC.
3. The CLEC corrects the Scenario Summary based upon any feedback from Qwest and resubmits it to the Qwest BA review.
4. Tasks 2 and 3 repeat until the Scenario Summary is correct and approved by Qwest.

Scenario Review and Approval Process

The individual **Scenario Template** review process for Progression Testing via the Interoperability environment and for Controlled Production will occur as follows:

1. The CLEC populates the Scenario Templates. The populated Scenario Templates must reflect the actual data (correctly entered on the template) that the CLEC intends to send on the individual EDI submittals. The cover page of each Scenario Template should explain the intent and identify any specific data that is incorporated in that scenario to generate the error/response being tested. The Scenario review will be based in part upon what is indicated on the cover page, so clarity and accuracy are important. For example, if the Scenario is meant to test an error condition, the item(s) causing the error should be explained on the Scenario cover page.
2. The Qwest BA reviews the individual Scenario Templates according to the guidelines established this document and against the approved Scenario Summary. Qwest then provides the revision marks and comments back to the CLEC.
3. The CLEC corrects the Scenario Templates based upon any feedback from Qwest and resubmits them to the Qwest BA for review.
4. Tasks 2 and 3 repeat until the Scenario Templates are correct and approved by Qwest.

The CLEC sends all final copies of the Scenario Summary and individual Scenario Templates to the Qwest BA. These final versions should exactly match the EDI information as it is actually submitted and successfully tested.

While reviewing the Scenario Templates, for either Progression Testing via the Interoperability environment or the Controlled Production Phase, the Qwest BA will perform the following data validations, as appropriate:

- The address will be validated.

- The AN will be validated.
- The transaction will be reviewed to ensure that all necessary fields are populated correctly and that all business rules outlined in the appropriate release-specific Disclosure Document and Developer Worksheets were followed.
- USOCs and FIDs will be reviewed to ensure that they are formatted correctly.
- NC/NCI Codes will be validated against IMA, not against the CLEC contract.

Scenario Review Cycle

For each set of ten (10) Scenario Templates for Progression Testing in the Interoperability environment submitted to the Qwest BA, the CLEC should expect a five (5) business-day turn-around on each Qwest review cycle. For each set of five (5) Controlled Production Scenarios submitted, the CLEC should expect a four business-hour turn-around on each Qwest review cycle. However, if the CLEC is using SATE for Progression Testing, Qwest recommends that the CLEC begin to complete the Controlled Production Templates as early as possible in the implementation process.

If the number of scenarios is extensive, it is expected that a subset will initiate the review cycle and the remainder will be submitted, reviewed, and returned in a 'phased' sequence (or as negotiated). This will allow the returned set to be corrected by the CLEC while Qwest is reviewing the remainder. This may also alert the CLEC to initial errors that can be corrected on subsequent scenarios before being submitted to Qwest for review. Depending on the nature and number of errors identified during review, multiple review/revision cycles may extend the actual project timeline.

Comments Log

The Comments Log is used by the Qwest BA to provide all comments regarding Scenario Templates to the CLEC. The log also provides a reference of all historical comments made regarding specific Scenario Templates. The comments will be in a table that provides a cross-reference to indicate the Scenario number and field to which the comments apply, in addition to the reason why the noted item is an issue.

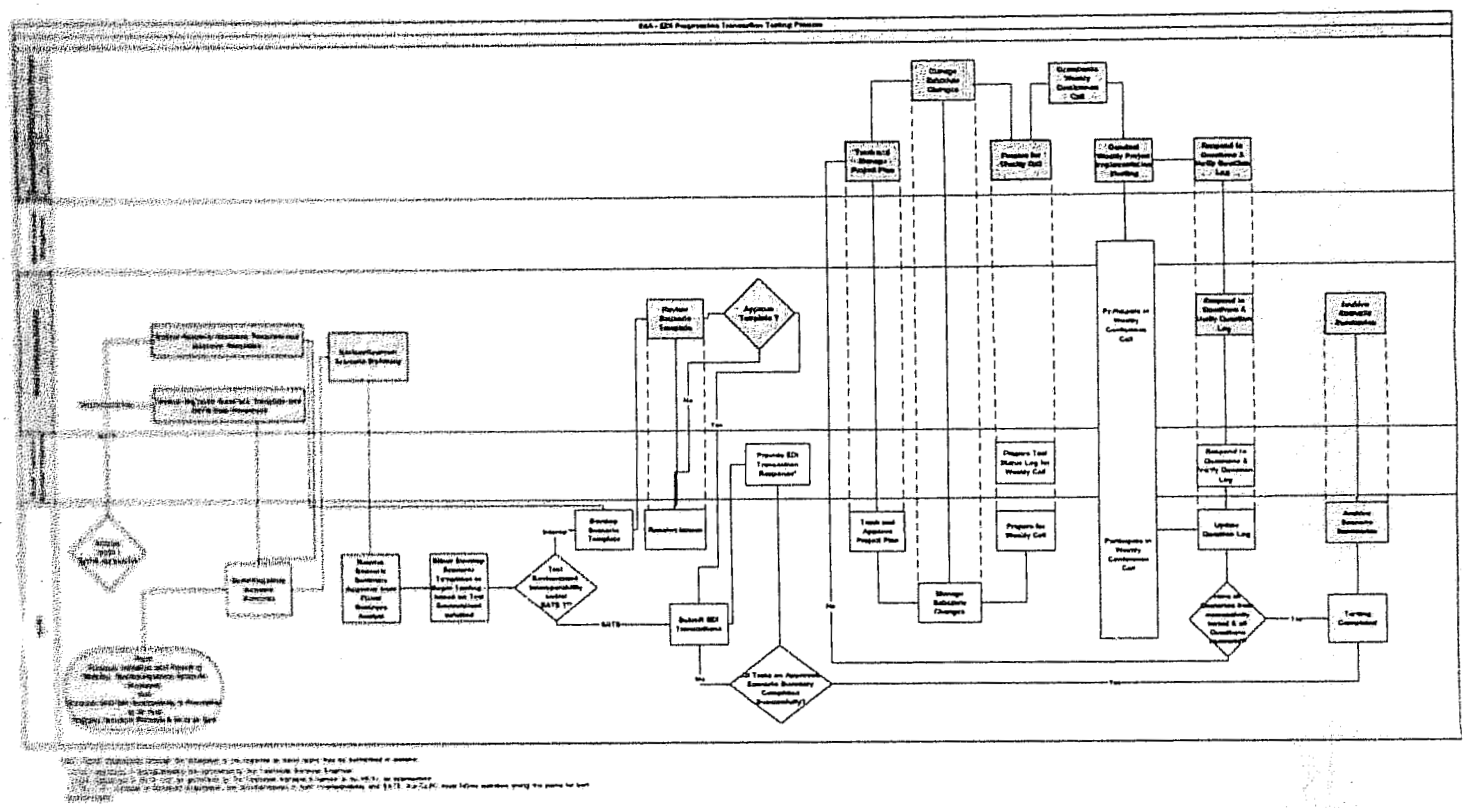
Example of a Scenario Template Table in the Comments Log:

PON	Description	Comments
LOOP1	New Loop	• LOCNUM (EUI7) is required on loop Orders.

Progression Testing Phase

The Progression Testing Phase affords the CLEC the opportunity to validate their technical development efforts and to quantify LSR processing results. Progression Testing will identify the CLEC's ability to submit correct EDI transactions through the IMA system.

Progression Testing Process Flow



Progression Testing Activities

1. Choose a Test Environment

Qwest makes two environments available for CLEC use during the Progression Testing phase: Interoperability and SATE. These testing environments are described in more detail in the following sections of this document. –Table 2 below identifies the functionality provided by each environment.

Table 2 SATE vs. Interoperability Functionality

SATE	Interoperability
Flow Through	No Flow Through
Automated Responses	Manual Responses
Provided Test Data	CLEC must use valid Qwest data
Common Products Supported (See page 31)	All IMA products supported

A CLEC may choose to use one or both of Qwest's two testing environments. If a CLEC chooses to use both environments during a single implementation or migration, the CLEC should indicate on the scenario summary which environment will be used to test each scenario

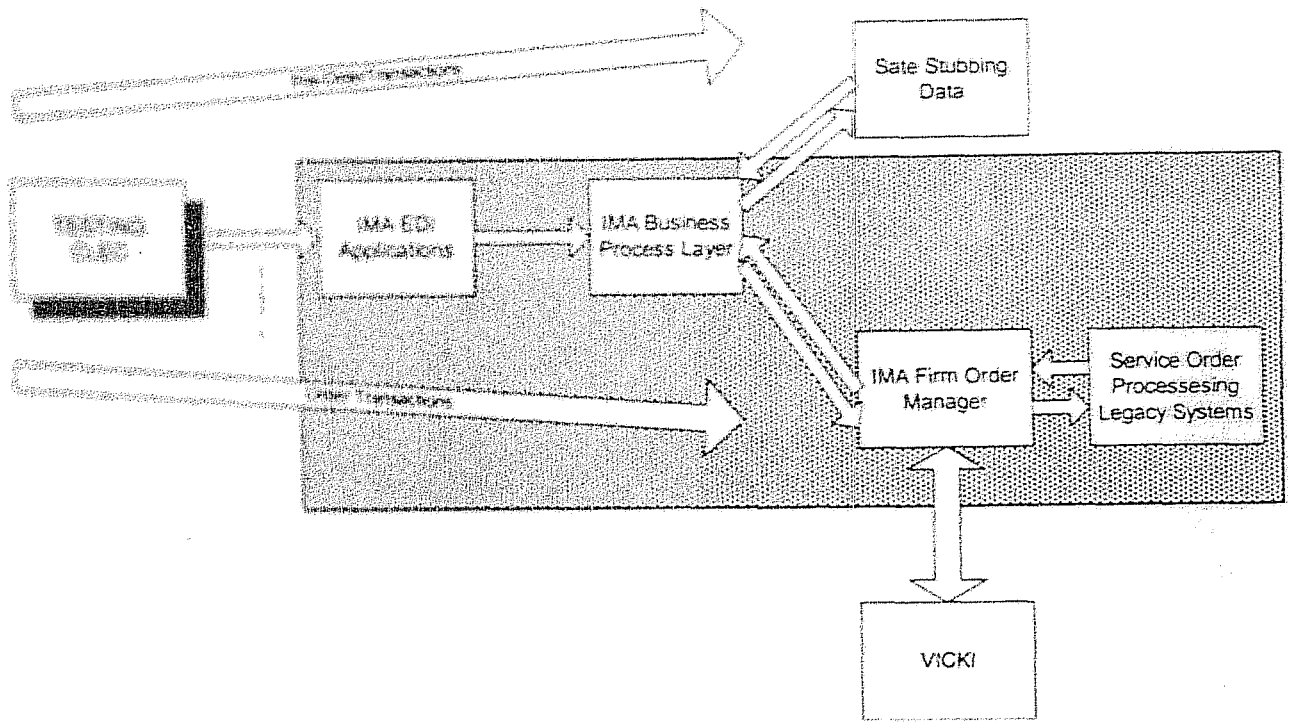
Stand Alone Test Environment Overview

Qwest has developed a Stand-Alone Testing Environment (SATE) to take Pre-Order and Order requests, pass them to the stand-alone database, and return responses to the SATE user. SATE uses test account data and requests that are subjected to the same IMA EDI edits as those used in production. For SATE users, Qwest will provide the account data (see IMA EDI SATE Data Document). Order scenario submissions do not leave the SATE testing environment and do not affect the existing production data, nor are they provisioned while in use for the Progression Testing Phase.

The goal of SATE is to supply a test environment that can be used to accomplish the following:

- Test an EDI application against real IMA functionality - SATE provides an unsupervised test environment that does not rely on real production systems but, at the same time, interacts with the SATE user's application in the same manner as IMA EDI production systems.
- Test EDI maps via consistent responses – a primary benefit of both regression and progression testing.
- Run Pre-Order transactions, Orders, and Post Order transactions, including cancellations and Supplemental transactions, and receive error messages and consistent responses as a result.
- Practice the creation and submission of LSRs via the EDI interface.
- Enable the CLEC to identify where to review their business processes and modify the technology that supports their EDI interface.
- Provide automated post-order responses using VICKI.
- Provide the ability to test whether a given LSR would flow-thru in the Qwest SOP's real-time environment.

SATE System Layout



All systems in the shaded area are copies of the production systems. SATE houses simulated legacy system data and responses, known as stubs.

SATE Supported Transactions and Products

The following 850/860 transactions and all responses associated with them are included in the current release of the EDI Stand-Alone Test Environment:

Pre-Order

- Address Validation (Numbered Addresses only)
- Appointment Scheduling
- Cancel TN/Appointment
- Connecting Facility Assignment
- Facility Availability (Convert POTS to Unbundled Loop, POTS Facility Availability)
- Meet Point Query
- Raw Loop Data Query
- Customer Service Record Query[2]
- Service Availability
- TN Reservation Query (with TNSR following)

[2] FTP or e-mail requests will not be returned; the appropriate 855 response will be returned.

- Loop Qualification Query

Order

- Centrex Plus
- Directory Listing Only
- Local Number Portability
- Loop with Number Portability (LNP only)
- POTS Resale
- Shared Loop
- Unbundled Loop
- UNE-P Centrex
- UNE-P POTS
- Unbundled Distribution Loop
- Unbundled Distribution Loop with NP

Post Order

- FOC
- Completion
- Reject
- Jeopardy
- Status Update
- Non-Design
- Pending Service Order Notice (PSON)

Note: Additional functionality can be agreed upon and added in later releases. Requests for transactions not currently supported may be requested via CMP.

SATE Transaction Responses

In SATE, Pre-Order and Order transactions are created using Qwest provided data that when submitted to SATE, will return consistent responses. These responses will enable the SATE user to test the EDI mapping structure, as well as ensure that these responses can be successfully received and interpreted by the CLEC.

SATE's VICKI (Virtual Interconnect Center Knowledge Initiator) functionality will allow a CLEC to submit a Local Service Request (LSR) in the Stand Alone Test Environment (SATE) and receive specific expected responses. The set of responses produced from chronological system events is known as a "Path". The paths are listed in detail in the SATE VICKI Path document. In VICKI, automated responses available include FOCs, Status Updates, and Completions. If a desired path includes manually generated responses, such as a Jeopardy or Manual Reject, the response is still listed in this document, however, instead of a time delay, the phrase "Manually Generated" is shown. When a path ends in a manually generated response, the LSR will be included in a Qwest manual work queue to trigger the response to be sent to the CLEC.

The automated replies from the Stand-Alone system will remain consistent over time. For example, a Raw Loop Data query for a given phone number will always give the same reply. The only case where this will not be true is on related scenarios and the data saved in them. For example, in the case of POTS Resale, an edit is done on whether a phone number has been reserved. A CLEC may

therefore have an LSR error if the TN is not reserved, but the same LSR would go through if a phone number had been reserved. Another case where saved data will be used, making replies differ, is LSRs with Supplementals.

Unless the data document indicates otherwise, the system generated error codes and messages returned in SATE will exactly mirror the Production environment. As some responses in SATE and production are manually generated, the verbiage used in SATE on outbound response may not match what a CLEC may receive in production, nor represent the actual message/data content expected from the result of the transaction or Order.

SATE does not mimic the timing of responses in production. Pre-Order responses and BPL errors are system-generated in real-time from SATE.

Where CSRs are requested via e-mail or FTP, the appropriate 855 response will be generated. The CSR will not be sent via e-mail or FTP.

CLECs may escalate a technical inquiry or a Progression response request to their assigned Implementation Project Manager. If technical problems are experienced in SATE, Progression users should contact their assigned TSE; Regression users should send an e-mail to:

sateedi@qwest.com

SATE Multi-Release Support Schedule

At a minimum, the SATE environment will support any releases that are currently available for implementation in IMA. New releases of IMA are planned for release on the IMA EDI Stand-Alone Test Environment approximately thirty calendar days prior to their release into production unless that release is deemed to be in 'red testing status'. Red testing status indicates that the IMA release's system testing effort has discovered significant issues that place the release in jeopardy. There will be no mid-cycle data conversion in SATE. The sunset dates for SATE will be the same as for the IMA Production releases.

SATE Functionality – Assumptions

Interface

- The IMA EDI Stand-Alone Test Environment will run EDI only. No IMA GUI access is provided.

Availability - Days/Hours of Operation

- Effective May 27, the SATE system will be available from 6 am to 6 pm Mountain Time (MT) on Monday through Friday. Technical support will be provided from 8 am to 6pm. Prior to May 27, the SATE system is available from 8 am to 6pm. Limited after-hours technical support, as available, may be provided upon request.

Usage Limits

- Qwest reserves the right to limit the number of transactions or Orders submitted by any single SATE user where such usage levels could jeopardize or diminish the usefulness of SATE to other users; SATE is not to be utilized for load testing.

Transaction and Order Data Retention

- The IMA database designed to hold appointments, LSRs, and other data specific to the transactions being performed via the EDI submittals will be completely cleared of all SATE-user-submitted data 30 days after the transactions are submitted. This will impact transactions and Orders that depend on related Transaction Numbers or Purchase Order Numbers (PONs) being in the system, such as SUPs, etc. Regression SATE users must anticipate this and plan their testing accordingly. The Implementation Project Manager will assist Progression users of SATE in test scheduling.

Adding Additional Data to SATE

The SATE Data Document contains data available in the SATE system for CLEC use in testing their IMA EDI interface. The SATE Data Document is updated for new releases any time a product is added or a system change occurs that impacts the Data Document. In the course of testing their interface, a CLEC may need additional data added to the SATE system to support their testing. If such additional data is needed, the data request process is used.

The process for adding additional data to SATE is:

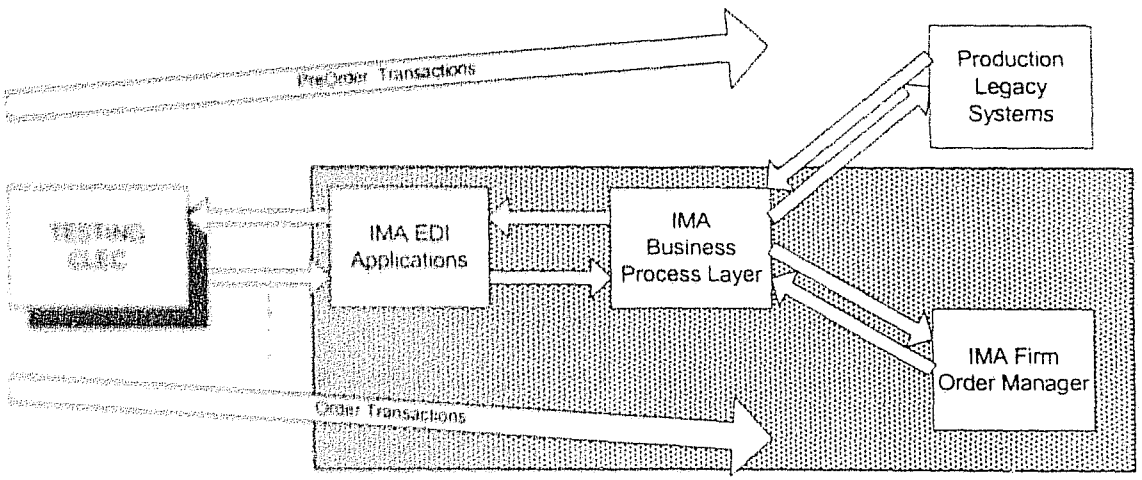
- With a new data request, the CLEC completes a Data Request Form and will be asked to provide options for times they are available to meet for an initial and second meeting. The initial meeting can occur as early as the day after Qwest receives the data request. The second meeting will be three days after the initial meeting at the earliest. Both meetings will be scheduled based upon the CLEC's availability.
- The form can be obtained from the Implementation Team or found on the Qwest IMA EDI web site:
  http://www.qwest.com/wholesale/IMA_EDI/document.html
- When completing the form, the CLEC should provide a detailed explanation of the data request. This explanation needs to include comprehensive detail that will allow Qwest to

clearly understand the request. The CLEC then submits the completed Data Request Form to [redacted].

- When Qwest receives the data request, Qwest will send an e-mail message to the CLEC stating that the request was received and accepting a time for the initial meeting.
- During the initial meeting, Qwest will review the data request with the CLEC to ensure a common understanding of the request.
- Within two business days of the initial meeting, Qwest will either send approval of the request or schedule a second meeting with the CLEC.
- During the second meeting, Qwest will work with the CLEC to resolve any open questions that Qwest has regarding the data request.
- When the intent of the request is understood, the Qwest SATE Data Document coordinator will e-mail the data to be added to SATE to the requesting CLEC. This e-mail will request concurrence from the CLEC that the data included in the e-mail will satisfy the request. The day following the second meeting Qwest will provide approval of the request, assuming there are no open issues being researched by the CLEC. With the receipt of a concurring e-mail from the CLEC, the request is considered approved.
- Within ten business days of the approval, Qwest will load the approved data into SATE.
- When the data is loaded, the SATE Data Coordinator will send an e-mail to the requestor stating that the data has been loaded into SATE and it is available for testing use.
- Although Qwest replicates all new data to all SATE CLEC accounts as part of loading new data, the data document will only be updated when multiple CLECs request similar data.

Interoperability Environment Overview

The IMA interoperability environment is a production copy of IMA.



All systems in the shaded area are copies of production systems.

Order data in the Interoperability environment is validated against the Production OSS legacy system information and must pass all BPL edits as if it was to be provisioned. However, the order is not passed to the OSS legacy system for provisioning during the Progression Testing phase and order scenario submissions do not leave the Interoperability environment.

For the scenario to be successfully processed in the Interoperability environment, the CLEC must supply valid account data. This means that the account information must exist within the Qwest systems and be valid in terms of its account owner (Qwest or CLEC), account number, status, end user, related content and format.

In the IMA Interoperability environment, Progression Testing involves the CLECs using their own account data for creating scenarios on Qwest-provided templates, obtaining approval on these scenario templates, and then submitting a minimum set of test scenarios for all transactions they wish to perform in Production.

The accounts used by a CLEC in the Progression Testing Phase will be left intact in Qwest production systems. Orders that mimic an eventual production order may thus be used in the Interoperability environment for the Progression Testing Phase. Once successfully Progression tested, these may then be submitted in Controlled Production and provisioned.

For FMOL, the scenario test bed data is provided.

Supported Transactions – Interoperability

All transactions supported by the production IMA release are supported in the Interoperability environment.

Multi-Release Support Schedule – IMA Interoperability

The IMA Interoperability environment will support all releases supported in Production. New releases of IMA are planned for release in the Interoperability environment thirty calendar days prior to their release in Production unless that release is deemed to be in 'red testing status'. Red testing status indicates that the IMA release's system testing effort has discovered significant issues that place the release in jeopardy. There will be no mid-cycle data conversion in the Interoperability environment.

Transaction Responses – Interoperability

Pre-Order and Order data in the IMA Interoperability environment is validated against Qwest OSS legacy system information and system-generated error messages are returned from the BPL edits. Therefore the system-generated responses returned match those expected in production. IMA Interoperability Post-Order responses are manually generated and may include Rejects, FOCs, Jeopardies, Status Updates, and Completions. Verbiage on these outbound manually-generated

Post-Order responses created by a tester in Interoperability may not exactly match the message generated by the ISC representative on a similar production transaction.

IMA FBDL responses are system generated and based on the pre-defined scenario test bed data that is submitted for testing. For FBDL, there are no 860 transactions nor Completion responses, only 855 transaction responses. FBDL status and error codes are system generated (see IMA FBDL EDI Transaction Processing in Technical section of this document).

In Interoperability, the timing of responses is not meant to mirror production.

2 Scenario Summary Creation - Progression

To prepare for IMA Progression Testing, the CLEC sends Qwest a Scenario Summary for review. For SATE and FBDL in the Interoperability environment, the scenarios on the summary must utilize the scenario number from the data document to enable Qwest to verify these against the source document. If the CLEC is testing in both the Interoperability and SATE environments, the CLEC must indicate in which environment the scenario will be tested. Further information regarding the completion of the scenario summary can be found in the Scenario Summary and Template Development and Approval section of this document.

As referenced in the Scenario Summary and Template Development and Approval section of this document, the Scenario Summary must fulfill testing of all Progression Testing minimum testing requirements. The minimum set of required Scenarios is dependent on the transactions (including Pre-Order, Order, and Post-Order) that the CLEC intends to utilize in production via EDI. Guidance for the minimum number and type of Scenarios is reflected in the following requirements:

IMA Pre-Order Transactions - Progression Testing minimum requirements:

1. The CLEC must test every 850 and 860 Pre-Order transaction being implemented.
2. For every 850 and 860 Pre-Order transaction being implemented, the CLEC must test every Query and Selection Type associate with each transaction.
3. For every Pre-Order transaction Query and Selection Type being implemented, the CLEC must test every 855 and 865 Response Type associated with each Query and Selection Type.

IMA LSR Order and Post-Order Transactions - Progression Testing minimum requirements:

1. The CLEC must test every 850 LSR Order transaction and every associated Activity Type being implemented.
2. The CLEC must test at least one 860 supplemental transaction per product being implemented
3. The CLEC must receive either an 855 or 865 FOC for every Product/Activity Type combination being implemented.
4. The CLEC must receive at least one 865 Completion for every product being implemented.
5. The CLEC must test all three 860 supplemental transaction types (1=Cancel Order, 2=Change Due Date, 3=Other Change) with at least one being tested *after* the original order passes the BPL, but *before* it receives any 855 response.
6. The CLEC must have at least one transaction correcting a System Reject and one correcting an ISC Reject.

3. The CLEC must test every 855 and 865 Response Type on the Scenario Summary (excluding 855 Status Update, unless it is being implemented). In addition, at least one 865 response must be tested as the next response *after* receiving an 850 FOC.

NOTE - Once initial Progression Testing for a release is complete, implementation of additional LSR products need only meet requirements 1 through 4 above, while additional Activity Types for previously tested products need only meet requirement 3 above.

The IMA LSR Order Scenario submittals used for the Progression Testing Phase are not sent to the legacy systems to affect the existing production data, and are not provisioned. Thus the accounts used by a CLEC in the Interoperability environment will be left intact in Qwest production systems. Test data accounts are provided by Qwest and submitted by the CLEC in SATE; therefore no production accounts are involved.

IMA FBDL Order and Post-Order Transactions - Progression Testing minimum requirements:

1. The CLEC must test every 850 FBDL Order transactions and all associated Activity Types being implemented.
2. The CLEC must receive at least one positive 855 DSRED for every Listing Type/ Activity Type combination being implemented. A positive DSRED is one returned with an 'Accepted' status or an 'Aeknowledge - With Detail and Change' status that is not the fault of the CLEC.
3. The CLEC must test every 855 Response Type on the Scenario Summary.

NOTE - Once initial Progression Testing for a release is complete, implementation of additional FBDL Listing Types need only meet requirements 1 and 2 above, while additional Activity Types for previously tested products need only meet requirement 2 above.

For FBDL, Qwest provides the data to the CLEC for Listing Type testing. Listing Types may include Non-Complex – "Straight Line" and "Straight Line Under" (SLU) or Complex "Caption" listings containing multiple sub-level details (indention). Listings Type may include the following Activity Types - New (C), Change (C), Delete (D), CLEC-to-CLEC conversion (W), and Outside Move (O). The CLEC will select and use the Qwest-provided data to correctly populate the Progression Scenarios for submittal to the FBDL Interoperability testing environment.

3. Scenario Creation, when Applicable

After the CLEC receives approval of the scenario summary, if they are testing in the Interoperability environment, the CLEC should populate Scenario Templates for each scenario. Further information regarding the population of these templates can be found in the Scenario Summary and Template Development and Approval section of this document.

For FBDL testing, Qwest provides test bed data to the CLEC. The CLEC will use the data to populate the Scenario template. The cover page of each Scenario should explain the intent of that request. The Scenario review will be based in part upon what is indicated on this page, so clarity and accuracy are important.

4. Conducting the Progression Test

Progression Testing Entrance Criteria

To begin Progression Testing, each of the following criteria must be met:

- Successful completion of Firewall and IA-to-IA Connectivity testing in the chosen (Interoperability and/or SATE) environment
- Approval of the negotiated Project Plan
- Completion and approval of a Scenario Summary
- Completion and approval of agreed upon Progression Testing Scenario Templates (for Interoperability Environment)
- Resource availability of LSS (for FBDL Testing).

Progression Testing Process

The Progression Testing process is executed as follows:

1. The Qwest test environments will be available for testing during posted times and TSEs will be available on testing days as scheduled and agreed.
2. The CLEC submits test transactions, according to the approved scenario summary. For testing in the interoperability environment, the scenarios should be approved by the BA prior to submission.
3. Qwest generates the expected test 997, 855, and 865 responses based on the Scenario Summary or in the SATE input remarks.
4. A call will be scheduled (typically on a daily basis) to provide an opportunity for CLEC and Qwest testing representatives to interact and discuss the testing results.

Progression Testing Exit Criteria

Progression Testing will be considered complete when the CLEC has met each of the following criteria:

- Completion of all agreed upon test Scenarios
- Demonstrated ability of the CLEC to send valid 850 and, when applicable, 860 transactions.
- Confirmation of the ability of the CLEC to receive from Qwest the 997 and all applicable response transactions as identified in the Scenario Summary.
- Demonstrated ability of the CLEC to generate 997 functional acknowledgements in response to Qwest transactions.
- Confirmation of the ability of the CLEC to notify user of responses generated by Qwest, to indicate whether the submitted transaction or product Order was successfully processed and notify the user of the Qwest-generated error message, as appropriate.
- Confirmation of the ability of the CLEC to detect processing failure of transactions within any component of the CLEC EDI environment
- Submittal of a list of CLEC points-of-contact for after-hours and emergency issues.

  (See 'CLEC Roles and Responsibilities' in the Production section).

Progression Testing Phase Completion

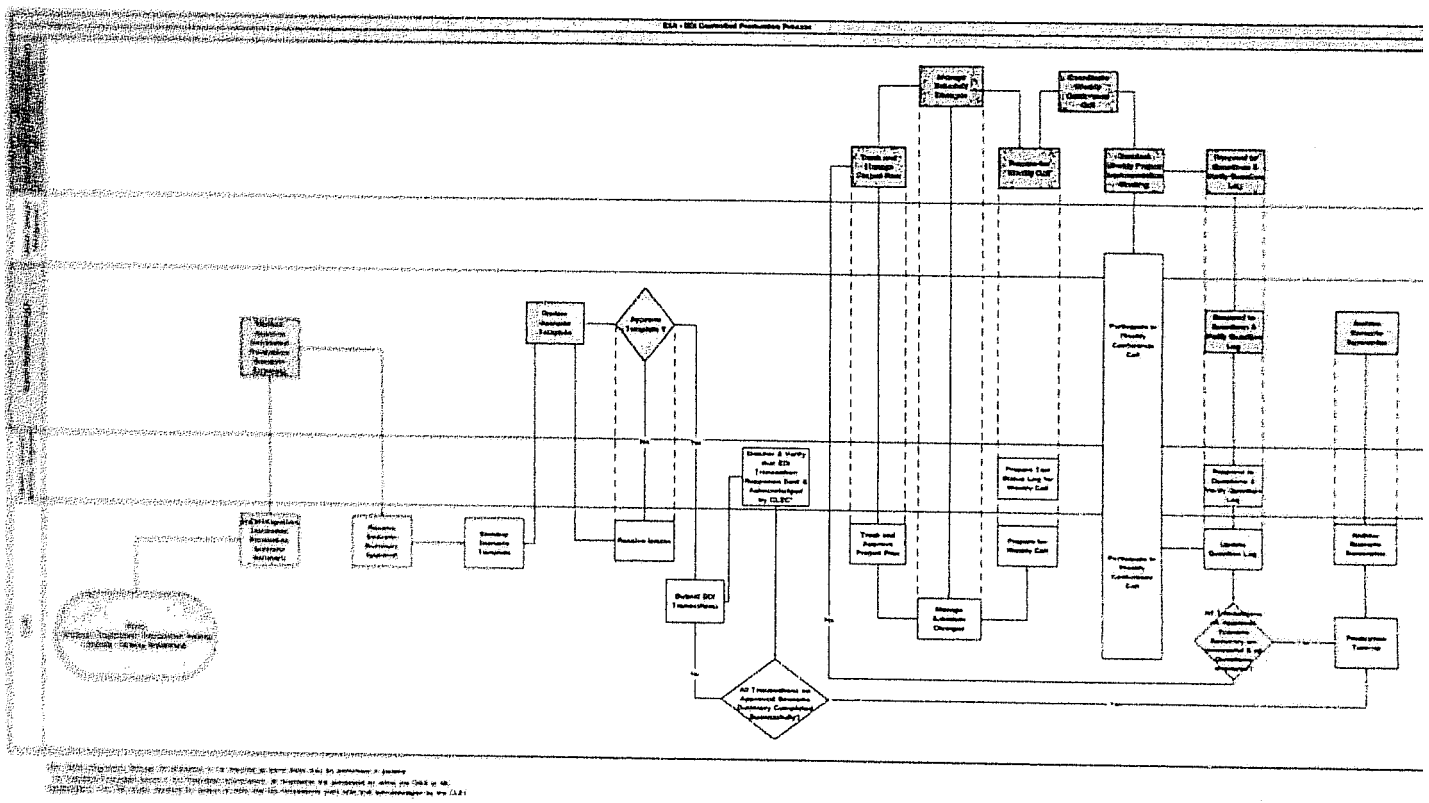
This phase will be considered complete when each Progression Testing exit criteria are satisfied.

Controlled Production Phase

Definition

Controlled Production is permitted after the successful completion of the Progression Testing Phase. The Controlled Production process is designed to validate the ability of the CLEC to transmit EDI data that meets X12 standards and complies with Qwest business rules. Controlled Production consists of the submission of requests to the Qwest production environment for provisioning as production Orders. Qwest and the CLEC use Controlled Production results to determine operational readiness for full Production turn-up.

Controlled Production Process Flow



Controlled Production Activities

1. Scenario Summary Creation

The CLEC will need to create a scenario summary that meets the following minimum testing criteria for Controlled Production. Further information regarding the creation of the scenario summary can be found in the Scenario Summary and Template Development and Approval section of this document.

IMA Pre-Order Transactions - Controlled Production minimum testing requirements:

1. The CLEC must test every 850 and 860 Pre-Order transaction being implemented.
2. For every 850 and 860 Pre-Order transaction being implemented, the CLEC must test every Query and Selection Type associate with each transaction.
3. For every Pre-Order transaction Query and Selection Type being implemented, the CLEC must test at least one positive 855 and 865 Response Type associated with each Query and Selection Type.

IMA LSR Order and Post-Order Transactions - Controlled Production minimum testing requirements:

1. The CLEC must test every 850 LSR Order transaction and every associated Activity Type being implemented.
2. The CLEC must test at least one 860 supplemental transaction per product being implemented.
3. The CLEC must receive either an 855 or 865 FOC for every Product/Activity Type combination being implemented.
4. The CLEC must receive at least one 865 Completion for every product being implemented.

NOTE - Implementation of additional Activity Types for Progression tested products need only meet requirement 3 above.

IMA FBDL Order and Post-Order Transactions - Controlled Production minimum testing requirements:

1. The CLEC must test every 850 FBDL Order transactions and all associated Activity Types being implemented.
2. The CLEC must receive at least one positive 855 DSRED for every Listing Type/ Activity Type combination being implemented. A positive DSRED is one returned with an 'Accepted' status or an 'Acknowledge - With Detail and Change' status that is not the fault of the CLEC.

NOTE - Implementation of additional Activity Types for Progression tested products need only meet requirement 2 above.

2. Scenario Creation – Controlled Production

Controlled Production scenarios require the use of 'live' account and valid Order data. When possible, Orders with extended due dates can be used for Controlled Production. This provides flexibility in case problems arise while entering the Order. If, due to system problems, an Order could not be sent via EDI in time to make the due date, the Order would need to be sent via an alternate process and a new Order Scenario developed. Extended due dates may allow this re-work to be avoided.

In the Controlled Production Phase, the CLEC must supply valid account data and populate the Scenario Templates correctly in order for the submitted EDI requests to be successfully processed and become Qwest Service Orders. This means that the account information must exist within the Qwest Production systems and be valid in terms of the account owner (Qwest or CLEC), account number, end user, account status, and related content and format.

IMA Controlled Production Scenarios will be provisioned as indicated on the Scenario Summary.

Scenarios can be utilized in the Progression Testing Phase and then submitted (and actually provisioned) in Controlled Production.

For further information regarding the creation of Scenarios, please see the Scenario Summary and Template Development and Approval section of this document.

3. Executing the Controlled Production Test

Entrance Criteria – Controlled Production

To begin Controlled Production, each of the following criteria must be met:

- Progression Testing Phase has been successfully completed
- A Controlled Production Scenario Summary is approved
- At least one Controlled Production Scenario Template is approved
- Tested TVRs are loaded into Qwest Production environment
- Firewall rules are pushed to Production

Process – Controlled Production

The Controlled Production process will be as follows:

1. Qwest and the CLEC agree on a set time for testing.
2. The Production environment will be available for testing during this daily period.
3. After the Scenarios have been approved by Qwest as represented on the Scenario Summary, the CLEC sends these test Scenario 850 (and 860 for IMA) transactions electronically to Qwest.
4. Qwest monitors the transaction flow for submitted transactions during the testing period, including functional acknowledgements from the CLEC system.
5. A call will be scheduled (typically on a daily basis) to provide an opportunity for CLEC and Qwest testing representatives to interact and discuss the testing results.

Exit Criteria – Controlled Production

Controlled Production will be considered complete when the CLEC has met each of the following criteria:

- Completion of all agreed upon scenarios as identified in Controlled Production Scenario Summary.
- Demonstrated ability of the CLEC to send valid 850 and, when applicable,860 transactions as identified in the Controlled Production Scenario Summary.
- Confirmation of the CLEC's ability to receive from Qwest the 997, and all applicable responses as identified in Controlled Production Scenario Summary.
- Demonstrated ability of the CLEC to generate 997 functional acknowledgements in response to Qwest responses.
- Confirmation of the ability of the CLEC to notify its users of responses generated by Qwest, to indicate whether the submitted transaction/product Orders were successfully processed.
- Confirmation of the ability of the CLEC to detect transactions processing failure within any component of the CLEC EDI environment.
- Updating of the list of CLEC points-of-contact for after-hours and emergency issues (Also see CLEC Roles and Responsibilities section).

The Controlled Production exit criteria listed above must be satisfied for a transaction type before it can be utilized by the CLEC in the Qwest production environment. When meeting the above requirements for Controlled Production, any given product/activity type can be phased into production, as CLEC client data becomes available to be provisioned. A CLEC can move into IMA

Production with one or more products when any of the products being implemented for that release receives an RSI Completion and at least one product being implemented for that release has also received an RSI FOC for a Supplemental transaction.

Controlled Production Phase Completion

This phase will be considered complete when each Controlled Production exit criteria are satisfied for each product that the CLEC desires to implement.

Production

Postcut Support Procedures/Contacts

EDI support to IMA CLEC's who have recently implemented production trading will be provided as follows:

IMA Timeframe	Technical Support	Contact Information
After production turn-up - First three days	EDI Implementation Project Manager	Phone/Pager will be provided
After production turn-up - After four thru five days	Qwest IT Wholesale Help Desk	1-888-796-9102
After Migration - First Five Days	EDI Implementation Project Manager	Phone/Pager will be provided
After Migration - After First Five Days	Qwest IT Wholesale Help Desk	1-888-796-9102

Qwest IT Wholesale Systems Help Desk Roles and Responsibilities

Qwest IT Wholesale Systems Help Desk (WSHD) personnel will provide information and resolution for IMA EDI transaction processing problems that are caused by failure of Qwest EDI environment hardware or software components. This resolution may be in the form of direct action or through escalation to the appropriate individuals within Qwest.

If the WSHD can not resolve the issue during the initial phone call, they will escalate to Tier 2 Production Support. The Tier 2 Support Team will then resolve and close the issue directly with the person that reported the issue.

Limitations for Qwest EDI Support

The Qwest IT Wholesale Help Desk is not designed to provide assistance with transaction failure caused wholly or in part by failure of any component of the CLEC EDI processing environment.

Questions regarding Order content, Order writing procedures or transaction status should be referred to the Qwest Interconnect Service Center Help Desk or the CLEC Qwest Service Manager.

The CLEC is also responsible for maintaining the following information for their customer records:

Name, address and telephone number
Circuit ID information provided by Qwest at the time the Unbundled Loop was provisioned
Port assignment information

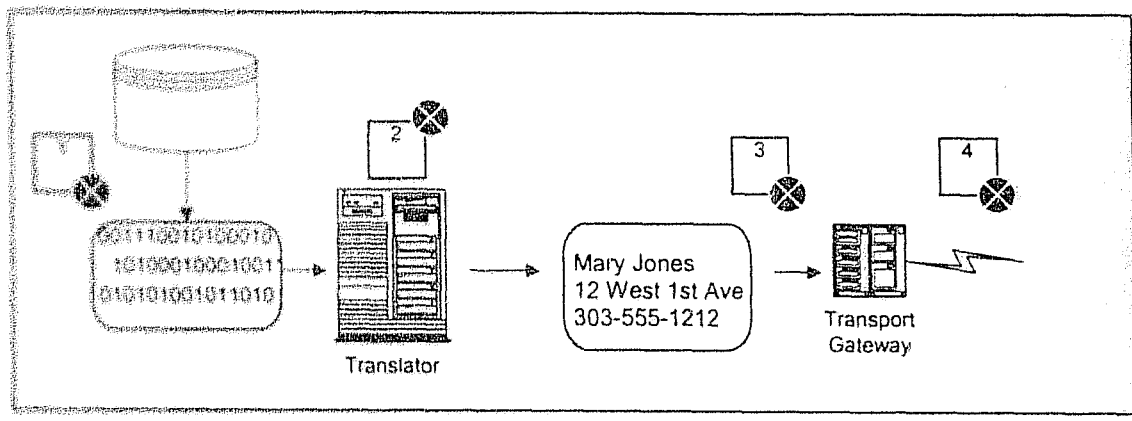
CLEC Roles and Responsibilities

If CLEC resources are not able to be contacted when EDI production problems arise, Qwest reserves the right to suspend the CLEC trading partner relationship until such contact can be made.

CLEC systems must be up to receive Qwest transmissions/responses during Qwest IMA EDI posted hours of operation in order to prevent backlog issues within Qwest systems.

Before contacting Qwest support, the CLEC should perform a thorough analysis of the components within their EDI environment (see Diagram below) to insure that transaction failure is not a result of anomalies within their system. The following EDI environment items should be verified before contacting Qwest:

1) Flat file generation
2) Successful translation
3) Successful hand-off to transport
4) Successful transport to Qwest



The detailed steps for this verification are as follows:

1) Check the PON in the *<CLEC internal OSS system>*
   - Was the 850 sent successfully?
   - Was a 997 received for all messages sent to Qwest?
   - What is the error text in any return messages from Qwest?

2) Make sure the IA connection is operating properly.
3) Compare the response times to the limits set in the Interconnect Agreement.
4) Review all associated messages for the PON in Question.
5) Have the following information already gathered before contacting Qwest Help Desk:
    - TXNUM or PON #/Ver# and CCNA
    - Date and approximate time of transmission
    - Document/transaction type (e.g. 850CSRQ, 860SUPP, etc.)
    - Description of problem
    - List of all associated transactions/responses
    - <CLEC> Support Points of Contact (See Table 2)

Further information is provided in the Qwest IMA EDI Troubleshooting Guide provided from the Qwest Implementation Project Manager during the Progression Testing phase.

Migrating to a New Release

Release Lifecycles

The Qwest EDI interface architecture provides the capability for multiple releases to be in production at a given time. This design allows a CLEC to continue production use of a particular release while performing the development necessary to migrate to a more current release. It is important that the CLEC be aware of the retirement date for the current release they are implementing, or currently using, and be prepared to migrate to a subsequent release as appropriate. EDI releases have predetermined sunset timeframes, after which point they will be unavailable for use. It is the CLEC's responsibility to be aware of these timeframes and plan accordingly. Release timeframes are updated and posted to the CMP website located at:

http://www.qwest.com/wholesale/cmp/osscalendar.html

Note: Use of the GUI interface, which is always the most current release, concurrently with a prior version of EDI may not be viable due to differences between the two releases.

Migrating to a New Release

Qwest supports a multi-release strategy for its EDI Interface. Information regarding the release schedule is posted on Qwest's Wholesale website. Specific EDI related dates for each release are issued five (5) weeks prior to the date the release is to be installed and implemented in Production by Qwest in the new release's Recertification memo.

Qwest currently uses the following guidelines regarding the availability and retirement of releases:

- Each new release is scheduled to be available in the Interoperability and SATE environment thirty (30) days prior to its implementation in the production environment.
- IMA EDI releases are supported six (6) months after the next release is implemented.
- Release guidelines in the recertification memo are provided to the CLECs forty-five (45) days prior to a release. These include the dates by which a CLEC must begin Progression testing for a given release and when transactions on that release must be in Production by the CLEC. If these dates are not met by the CLEC, the CLEC must implement the next release instead.

These guidelines are designed to ensure the CLEC's successful implementation or migration and to minimize the risk associated with development and deployment of new software. Variations to this schedule may become necessary and any such changes will likewise be published to CLECs via the normal CMP communication channels.

Recertification Requirements

Recertification is the process by which CLECs demonstrate the ability to correctly generate and accept transactions that were updated for the new release. For each release, Qwest will determine which transactions require the CLEC to perform recertification testing. For a given release, it is possible that only some of the transactions will require recertification by the CLEC. That decision by Qwest will be based upon the following factors:

- Mapping changes
- Changes to Qwest business rules enforced by the system

Transactions requiring recertification will be made known to the CLEC in the Recertification Notice, issued with the Disclosure Documents for the new release. As detailed in the minimum requirements below, a migration test will be required for each product.

At the time a CLEC migrates to a new release, any transaction(s) that the CLEC does not yet have in production using a current IMA EDI version is considered to be a new implementation effort. These transactions must be implemented using all Phases of the implementation lifecycle as defined in this document. In some releases existing transactions are updated with significant additions that add business rules and/or large map changes (for example, the large CSR functionality that was included in Release 6.0). If the CLEC intends to use the new functionality, they will be required to perform a new product implementation of this transaction. This will entail Progression Testing and Controlled Production submittal of scenarios that reflect the new functionality. CLECs not intending to use the new functionality will be allowed to recertify existing functionality that is still available in the new release.

Please note that point releases (i.e. 8.01) do not require recertification.

To recertify or migrate a given transaction, the CLEC must perform the following minimum test requirements in the Interoperability or SATE environment:

IMA Pre-Order Transactions - Recertification/migration minimum requirements:

Recertification or Migration:

The CLEC must successfully test every 850 and 860 transaction being migrated using at least one associated Query or Selection Type. A successful transaction is one that receives a positive 855 or 865 Response Type (i.e. 'Good' or 'Exact Match' response).

IMA LSR & FBDL Order Transactions – Recertification/migration minimum requirements:

Recertification:

The CLEC must successfully test every 850 and 860 transaction for each product being migrated if the product is listed in the Recertification Notice. Transactions must use the associated activity types being migrated based on the '*and*' vs. '*or*' logic in the Recertification Notice. A successful transaction is one that passes the BPL (i.e. does not receive an 855 or 865 System Reject).

Migration:

The CLEC must successfully test at least one 850 or 860 transaction for each product being migrated if the product is not listed in the Recertification Notice. Transactions must use at least one of the associated activity types being migrated. A successful transaction is one that passes the BPL (i.e. does not receive an 855 or 865 System Reject).

IMA Post-Order Transactions - Recertification/migration minimum requirements:

Recertification:

The CLEC must test every 855 and 865 response type being migrated if listed in the Recertification Notice. Please note that the 855 and 865 Fatal responses can either be System Rejects or ISC Rejects as they both use the same EDI map.

Migration:

The CLEC must test at least one of either the 855 or 865 transaction for each response type being migrated if not listed in the Recertification Notice. Please note that the 855 or 865 Fatal response can either be a System Reject or ISC Reject as both use the same EDI map.

There are many factors that will influence the CLEC's migration plan. These influences and the process for migration are discussed further in the following section of this document.

Migration Process

CLECs will be reminded in writing of their need to migrate to a new release prior to the next release being implemented. For migration, the CLEC will follow the same process as an initial implementation except that Controlled Production is exempted on any EDI transaction that successfully completed Controlled Production testing in a prior release. Any activity types for a given product not successfully tested in Controlled Production in a prior release will not be migrated under this exemption.

When ready to begin the migration, the following steps will be followed by the CLEC:

1. Contact the Qwest-assigned EDI Implementation Project Manager.
2. Attend an initial migration meeting call to discuss Recertification, migration strategy, and 'mid-cycle' data conversion.

3. Develop a migration Project Plan and mutually agree to assist in the scheduling of appropriate resources. This plan will acknowledge the 'blackout dates' during which resources and systems may be unavailable to the Recertification/migration project.
4. Complete a Scenario Summary that includes tests to comply with all minimum testing requirements for a new release.
5. Perform the Progression Testing Phase per the minimum testing requirements for those transactions that are to be migrated to the new release. The CLEC will be expected to execute the required minimum test case scenarios in the Interoperability or SATE environment and provide Qwest the PONs of the successful Scenarios. This will allow Qwest to verify during its Migration Readiness Assessment that the CLEC is ready to move into production on the new release.
6. Conduct Migration Readiness Assessment after the completion of testing.

Migration Exit Criteria

Migration will be considered complete when the CLEC has met each of the following criteria:

- Completion of all agreed upon Migration/Recertification scenarios as identified in Migration Scenario Summary.
- Demonstrated ability of the CLEC to send valid 850 and 860 transactions (as applicable).
- Confirmation of the CLEC's ability to receive from Qwest the 997 response transactions as identified in the approved Scenario Summary.
- Demonstrated ability of the CLEC to generate 997 functional acknowledgements in response to Qwest transaction/product Order responses.
- Confirmation of the ability of the CLEC to notify its users of responses generated by Qwest, to indicate whether the submitted transaction/product Order was successfully processed.
- Confirmation of the ability of the CLEC to detect transaction processing failure within any component of the CLEC EDI environment.
- Verification that the list of CLEC points-of-contact for after-hours and emergency issues remains current.

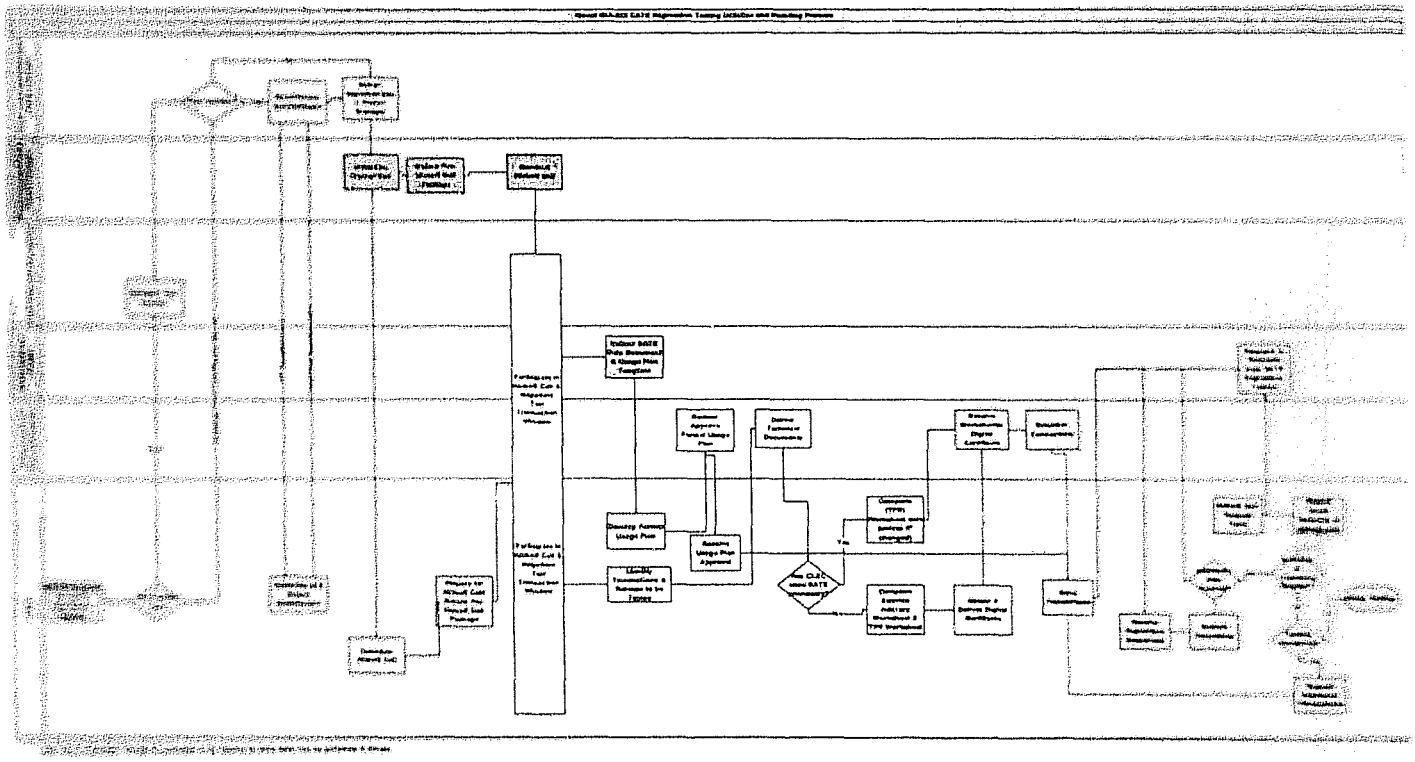
IMA Data Conversion

As part of the IMA migration process, Qwest provides 'mid-cycle' data conversion. With data conversion, any requests in the IMA database for the old release are converted to data compatible with the new release. Data conversion can occur together with the migration to the new release, or after the migration has occurred. However, Qwest has blackout dates when data conversion cannot be performed including the week before or after a new IMA release is deployed. If data conversion is not performed at the time the new release is placed into production, the CLEC will need to maintain the old release interface to be able to receive any responses generated from Qwest on the unconverted transactions/Orders. This approach by the CLEC will only work until Qwest no longer supports the older release.

Regression Testing

For CLECs, Service Bureaus, and Third Party Software Vendors wishing to test EDI functionality without supervision or direct support, Qwest permits access to SATE for what is referred to as "regression" testing. Although SATE access and regression usage is permitted, Qwest provides no "certification" to Service Bureaus or Third-Party Software Vendors. The CLEC, Third-Party Software Vendor, or Service Bureau contacts the LIPM to express an interest in regression testing. The LIPM will assign an IPM (if no relationship to Qwest exists). Access to SATE for this purpose then requires the Initial Discussion, negotiated regression Usage Plan, Requirements Review, Circuit Installation/Configuration, and Firewall and IA-to-IA Testing requirements as described in prior sections of this guide (see Typical Implementation Timeline). Regression testing is primarily for those with 'no intent' toward meeting any Qwest entry or exit criteria within an Implementation process. This testing approach is represented on a Usage Plan that indicates the intended testing activities and timeline. Qwest personnel resources are not tasked to directly support regression SATE users.

Regression Testing Process Flow



Regression Testing Activities

The process for regression testing in the Stand-Alone Test Environment is as follows:

1. The CLEC account and identity are established in SATE by Qwest.
2. Qwest provides data documents that describe the test accounts and valid data
3. The SATE user completes a Usage Plan indicating the EDI transactions that the CLEC plans to submit during testing. The Usage Plan template will be provided to the CLEC during the Regression Test Kickoff call. The Usage Plan is intended to provide Qwest an estimate of the number of each type of transaction that the CLEC intends to test in regression testing. When completing a usage plan, CLECs should remember that the SATE system is not designed to support CLEC volume or capacity testing.
4. Qwest will evaluate the Usage Plan to ensure that the SATE system will be able to support the CLEC's proposed usage. All current usage plans will be evaluated together to ensure that the total planned usage by all CLECs can be supported. If the Usage Plan changes by an order of magnitude (i.e. if 100 planned transactions were to change to 1000 transactions) during regression testing, the regression user must resubmit the Usage Plan showing the increase to the IPM for approval.
5. Upon Qwest's approval of the Usage Plan, the SATE user can begin submitting EDI transactions to the Stand Alone Test Environment. Responses to order transactions should be requested using SATE's VICKI functionality.
6. The SATE user monitors their testing results.
7. Determination of cause and effect relationships between submitted data and the results obtained is the responsibility of the SATE regression user. When a SATE regression user needs assistance, technical support will be provided via e-mail at {sateedi@Qwest.com}. A reply will be provided within five (5) business days of the technical inquiry. Qwest will also address and publish common SATE user questions in the Frequently Asked Questions document, available via the Web site.

SATE regression users may escalate a technical inquiry request to their assigned Implementation Project Manager.

Appendix A depicts the comparison of IMA SATE Regression testing to Progression testing in SATE or the Interoperability environment.

Change Management Process

Qwest facilitates a regularly-scheduled forum in which Qwest and the CLECs communicate about Operational Support System (OSS) interface changes, release lifecycles, release notifications, and communication intervals. The Qwest CLEC Industry change management forum is referred to as the Change Management Process (CMP).

Qwest encourages CLECs implementing an IMA EDI interface to participate in the CMP process. Online registration can be found on the CMP website page. Release notifications, team meeting information, and change requests are also provided to all registered team members via e-mail. For further CMP information, please refer to the following website:

http://www.qwest.com/wholesale/cmp/index.html

During testing with CLECs, situations may occur that require Qwest to submit a Change Request internal to Qwest to fix an issue in Qwest's code or documentation. When an issue is discovered that substantially impacts a CLEC's ability to use a transaction in EDI, Qwest will notify all CLECs that are using this transaction via e-mail within three (3) business-days. Upon approval of project plan or regression Usage Plan, CLECs are added to the e-mail distribution. The IPM will also request e-mail addresses for the appropriate recipients of this notification. This notification will include a description of the problem and, if known, a potential fix date. If a fix date is not known, Qwest will update all impacted CLECs with the fix date when known. CLECs intending to implement new transactions will be informed of any known issues for that transaction during the Kickoff call.

If the SATE, the interoperability environment, or a transaction of either environment becomes unavailable, Qwest will send an e-mail notification to all impacted CLECs within four (4) business hours. This e-mail will contain a description of the impacted environment or transaction and when known an estimated fix time. A second e-mail will be distributed informing the CLECs when the environment or transaction becomes available for testing.

3. TECHNICAL INFORMATION

The technical information section of this document is organized in the same sequence as the Disclosure Documents (distributed with each release) according to the following outline:

IMA EDI Transaction Flow – Normal/Exception/Supplemental
FBDL EDI Transaction Flow – Normal/Exception/Supplemental

Trading Partner Access Information
- Overview – Functional Group Envelope – Routing Information
- ISA Table Information
- GS Table Information
- Mapping Example

Mapping Examples
Data Dictionary
Developer Worksheets

IMA EDI Transaction/Product Order Processing

The IMA Order process is initiated by the submission of a request transaction to Qwest. The CLEC transmits the request using the EDI 850 transaction set (or 860 transaction set for a supplemental request). Qwest will translate and forward the data to the appropriate Qwest internal system. The request will activate one of the following responses from Qwest:

NOTE: The following responses DO NOT apply to FBDL.

- 855 FOC – This indicates that the 850 request was successfully received and has been posted to internal provisioning systems as an 'order' (one or many).

- 865 FOC – This indicates that the 860 supplemental request was received and the original request was changed (or cancelled). The 865 FOC indicates that the request has posted to internal provisioning systems as an 'Order' (one or many) or a change to an Order, or the internal service Order originally created has been cancelled.

- "System Generated" 855/865 FATAL – This response from Qwest indicates that the BPL detected an error in the inbound transaction and did not post the transaction to internal Qwest databases. The "system-generated" FATAL ERROR response contains data fields that allow the CLEC to determine what type of error was generated in the BPL. To correct a request fatally rejected by the BPL, the CLEC must resubmit the original 850/860 transaction with the necessary changes/corrections. Qwest will acknowledge the successful receipt of the corrected LSR as a valid service request with an 855/865 FOC as described above.

- Interconnect Service Center (ISC) –generated 855/865 Non-Fatal. Non-fatal errors are errors that occur after the order has successfully gone through the IMA. To correct a non-

local case, the CLEC may send a corrected request with the same PON and incremented version to correct the errors or they may choose to call the ISC representative to discuss the errors.

- Interconnect Service Center (ISC) generated 855/865 FATAL – This response from Qwest indicates that the request successfully passed BPL "system-generated" edit processing, but Qwest ISC personnel detected an error in the transaction that prohibited the request from being entered into the Qwest provisioning systems as a viable 'order'. The ISC fatal error response contains data fields that will allow the CLEC to determine what type of error the QWEST ISC generated. To correct a request rejected by the ISC, the CLEC must resubmit the request with an 860 transaction using the same PON and an incremented version number with the necessary changes/corrections. Qwest will acknowledge the successful receipt of the corrected LSR as a valid service request with an 855/865 FOC as described above.

  NOTE: The CLEC can send an 860 Supplemental Request before the CLEC receives the 865 from Qwest, if necessary.

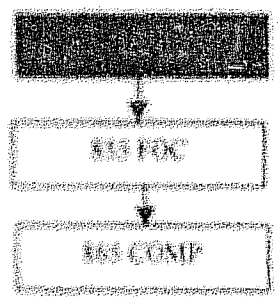
  NOTE: If an LSR was submitted via EDI, all supplemental activities must be submitted via EDI.

IMA 850 LSR Transaction Initiation/Responses/Resolution

The following diagrams illustrate typical EDI transaction flows between the CLEC and Qwest for IMA transactions. The Qwest IIPL will perform mechanized validation edits upon receipt of the transaction. If the inbound transaction fails these edits, an error will be returned to the CLEC and the request will not be posted to Qwest systems. If the request successfully passes all mechanized edits, the request will either be posted to Qwest flow-through processing or will be passed to the Qwest EC for review and manual processing.

> Note: In the diagram below, transactions sent by the CLEC are shown in shaded boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997's) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997.

Normal Flow

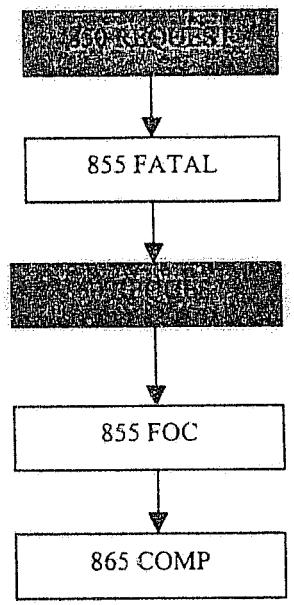


The diagram above depicts the normal transaction flow of an 850 LSR. The 850 LSR is submitted to Qwest via IIPL. If the 850 LSR passes all IIPL edits it is written to the IMA database. The processing of the 850 LSR generates an 855 FOC and eventually an 865 Completion.

The following diagram depicts the appropriate resolution for the failure of a request at the BPL:

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997.

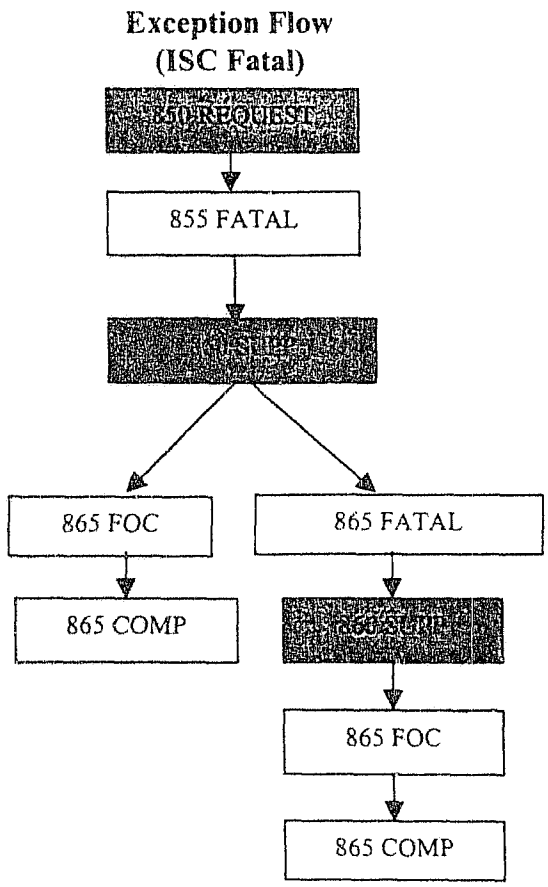
Exception Flow
(BPL Fatal)



If the CLEC receives an 855 FATAL error message generated by the system, the CLEC should review the message and determine the cause of failure. The CLEC must resubmit a corrected 850 transaction, as the original request was never posted to Qwest systems. The original PON should be sent with the corrected request. The version number should remain the same as the one used in the original transaction. If the corrected 850 LSR passes all BPL edits, it is written to the IMA database. The processing of the corrected 850 LSR generates an 855 FOC and eventually an 865 Completion.

The following diagram depicts the flow of an 850 LSR that passes the BPL and is rejected to the CLEC by the Qwest ISC personnel.

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997.



In response to an 855 FATAL generated by the ISC, the CLEC should submit an 860 supplemental to communicate the appropriate corrections to the original 850 request. The CCNA/PON combination that was contained in the original request must be used; the version number must be incremented by one and the SUP field must be populated.

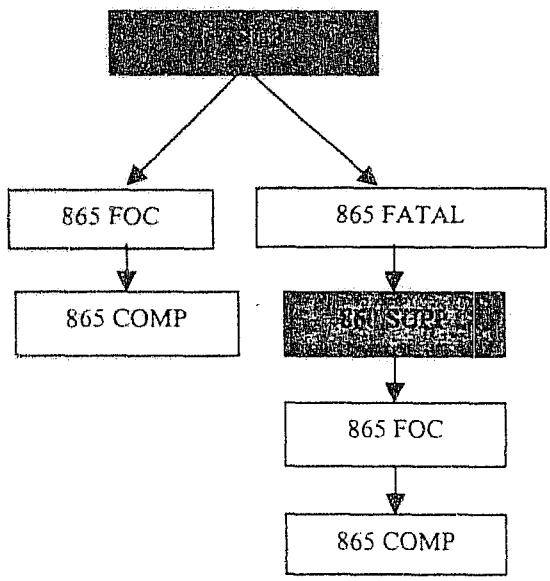
If the CLEC receives an 865 FATAL after the 860 supplemental request, the CLEC must review the 865 FATAL and determine the cause of failure. The CLEC must then resubmit a corrected 860 with the same PON and an incremented version number.

The corrected 860 LSR passes all BPL edits and is written to the IMA database. The processing of the corrected 860 LSR generates an 865 FOC and eventually an 865 Completion.

The following diagram depicts the flow of an 860 Supplemental. An 860 Supplemental (SUP) is issued when the CLEC has a need to change an 850 Purchase Order before or after it is posted in Qwest's SOP. If an 860 SUP is sent prior to a response being received for the original 850 transaction (i.e. an 855 response) the 860 replaces the original 850, and only an 865 response will be sent. There will be no 855 response generated.

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997.

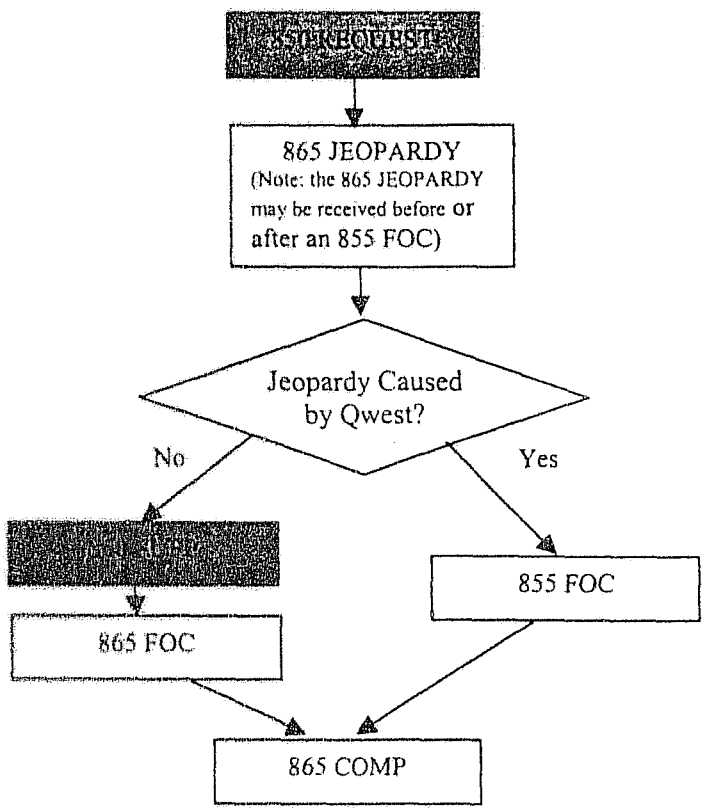
Supplemental Flow



The following diagram depicts the appropriate resolution for a Jeopardy:

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997.

Jeopardy Flow



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

FBDL EDI Transaction Processing

The FBDL EDI order process is initiated by the submission of an 850 request transaction to Qwest. The CLEC transmits the request using the EDI 850 transaction set. Qwest will translate and forward the data to the appropriate Qwest LSS system. The request will activate the following response from Qwest:

Functional Acknowledgements (997s) must be exchanged between Qwest and the CLEC in response to every transaction except a 997. A negative (-997) indicates that the entire PON has failed the x12 edits (translator level) and it has not been forwarded to the LSS Input Interface Validation Program for content edits.

855- If it is returned with either an "AT" or "AC" status, this indicates that the 850 request was successfully received and has been posted (AT) or partially posted (AC) to the internal LSS provisioning systems as a listings 'order' (one or many). An 855 with a status of "RF" indicates that the entire PON or request failed.

FBDL 850 Transaction Initiation/Responses/Resolution

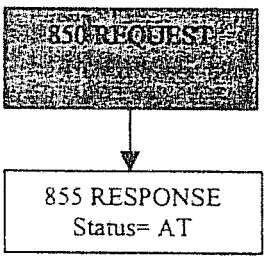
The following diagrams illustrate typical FBDL EDI transaction flows between the CLEC and Qwest for the FBDL product. LSS will perform a batch job late in the evening. If the entire inbound transaction fails the x12 translator edits, a -997 error will be returned and the request will not be posted to Qwest systems. If all or part of the request successfully passes, the successful portion of the request will be posted to Qwest LSS Database and the incorrect section(s) will be returned to the CLEC with error codes noted, at the PON and line level, on each invalid item. Any subsequent re-submittal to correct/complete the listing request data will need to:

- Only include (recap) the main listing.
- Include/correct the data that was not already posted as indicated by the error codes.

The following diagram depicts the normal transaction flow of an 850 FBDL request. The 850 FBDL request is submitted to Qwest via EDI. If the 850 FBDL request passes all X12 edits it will be passed to LSS. The processing of the 850 FBDL request generates an 855 FBDL response after the LSS processing and will be returned to the CLEC the following day.

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram.

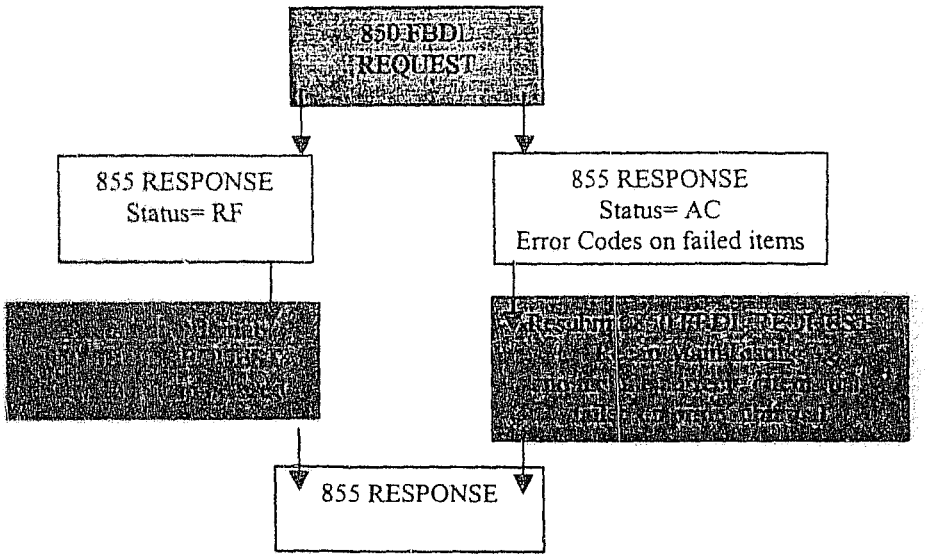
FBDL Normal Flow



The following diagram depicts the appropriate resolution of any failure of a FBDL request:

Note: In the diagram below, transactions sent by the CLEC are shown in gray boxes and transactions sent by Qwest are shown in white boxes. Functional Acknowledgements (997s) are not shown in this diagram but must be exchanged between Qwest and the CLEC in response to every transaction except a 997. Supplemental transactions are not permitted for FBDL requests.

FBDL Error Flow



When the CLEC receives an 855 FBDL response with error message(s) the next day after it was processed by the LSS system, the CLEC should review the message(s) and determine the cause of error. An "RF" response indicates that the entire PON has failed and it can be corrected and resubmitted using the same PON since it has no data posted to the LSS database. For a status of "AC", the CLEC must submit a corrected 850 transaction, correcting only the incorrect portions, since the some part of the request was posted to Qwest systems. Do not use the same PON as submitted on the original; if the CLEC desires to relate the corrected request with an original transaction version, the original PON can be incremented with an alpha and numeric suffix (a1, a2, etc.). If no errors are returned the following day on the 855 response then the submittal is correct, the 850 FBDL is processed, and the request data is written to the LSS database. FOCs and Completion notices are not generated on FBDL transactions.

Trading Partner Access Information

Trading Partner Relationship/Transport

Before a CLEC can use the EDI interface, the initial communications with the Implementation Team must occur. Once this is in place, the CLEC identity, dedicated circuit, IP addresses, and Digital Certificates can be implemented to enable the electronic exchange of information.

Qwest uses the Interactive Agent (IA) as a means to support the exchange of EDI data between trading partners within the telecommunications industry. The Telecommunications Industry Forum (TCIF) has suggested the use of the IA as the method in which trading partners exchange EDI data because it allows for an open architecture, is simple to design, is easy to implement, and provides for a secure transaction environment. Please be advised that Qwest will require the following to be performed annually:

Re-exchange of Digital Certificates
Reconfiguration of IA (Interactive Agent)
Firewall and IA-to-IA Testing

The IA functions as an interface between the EDI translator and the network firewall. It can best be described as added functionality to the Transmission Control Protocol/Internet Protocol (TCP/IP) with Secure Sockets Layer Version 3 (SSL3). TCP/IP with SSL3 is the actual transport mechanism whereby data is physically sent from one network server to another within a secured context. TCP/IP with SSL3 offers:

- *confidentiality*, through the use of user-specified encryption algorithms
- *integrity*, through the use of user-specified cryptographic hash function
- *authentication*, through the use of X.509 v3 public key certificates
- *non-repudiation*, through the use of cryptographically-signed messages3

The IA controls the transport process and performs the following functions:

- Directs and maintains the transport session
- Determines where the EDI data is being sent to or being received from
- Encodes EDI files that are to be transmitted to a CLEC

[3] Garfinkel, Simson and Gene Spafford. Web Security and Commerce, O'Reilly Nutshell, June 1997, Pg. 215.

- Decodes EDI files that are received from a CLEC
- Initiates and terminates the TCP/IP with SSL3 processes
- Logs the transmission status for auditing and/or trouble shooting purposes
- Allows for error handling and recovery, in the event an Interactive Agent session is terminated due to technical failures

An additional benefit of the IA is that it allows for the transport mechanism to listen for incoming data on two ports. This allows for high priority data to be sent to one port for immediate processing and normal priority data to be sent to another port for scheduled processing. TCIF has defined pre-Order request transactions as high priority data and Order request transactions as normal priority data. TCIF has designated port number 6998 for high priority transactions and port number 6999 for normal priority transactions. The IA *listens* on these two ports for incoming data. TCIF does not recommend which port numbers should be used for outgoing data.

The *Electronic Communications Interactive Agent Functional Specification* details the technical requirements needed to design and implement the Interactive Agent. The final Issue 2 document was approved as "TCIF-98-006 Issue 2" dated 12/06/98. Qwest is compliant with this standard and is currently using this in production. Documentation regarding this can be found at **HTTP://www.atis.org** under the heading "Draft Interactive Agent Specification, version 2". The following section references the Trading Partner Access Information (TPA) section of the Disclosure Document. It also describes the usage and formulation of:

- ISA and IEA Interchange Control Header and Trailer segments
- GS and GE Functional Group Header and Trailer segments.

The typical transaction data sequence (indented by segment) is exemplified by the following outline:

ISA – sender/receiver identity

GS – functional group/routing/Order type/industry standard version

ST – LSR, EUI, Order detail

SE – end of ST segment

GE – end of GS segment

IEA – end of ISA segment

The TPA section of the Disclosure Document defines the Qwest requirements for Date and Time fields, EDI delimiters, and fields used in the EDI transactions that are specific to Qwest. Included in

the Disclosure Document is an Industry Standards Table illustrating OBF and SOSC issues and the X12 Standard related to each OBF Form.

The following is an example of the ORDERING FUNCTION / PRODUCT ID matrix for the POTS product transaction. The Product ID column indicates the typical transaction set that may be passed between the Qwest Business Processing Layer (BPL) and the EDI Translator at Qwest.

ORDERING FUNCTION	PRODUCT ID
POTS Service Request	850POTS
POTS Service Request Supplemental	860POTS
Firm Order Confirmation	855FOC
Firm Order Confirmation on Supplemental	865FOC
Non Fatal Error Response	855NF
Non Fatal Error Response on Supplemental	865NF
Fatal Error Response	855FATAL
Fatal Error Response on Supplemental	865FATAL
Jeopardy	865JEOP
Status Update	855SU
Completion	865COMP

The Product ID field (suffixed with the proper IMA/FBDL Version) will appear in the GS segments that are passed between the CLEC and Qwest. Examples of the Functional Group Envelope and Routing Information GS segments appear in the next section.

Overview: Functional Group Envelope/Routing Information

Separate maps have been created for the individual transactions. EDI envelopes are used for the initiation of translation processing and to invoke the correct map in Qwest systems. The Functional Group Header segment (GS) and the Functional Group Trailer segment (GE) are wrapped around the transaction data. In order to optimize interactive performance, only one EDI Transaction can be included within each Functional Group Envelope. The following is an example of an EDI transaction received at Qwest for a POTS Order that complies with this policy. In the example (see next page), the transaction information for one single item is represented by the data that begins with the ST segment and ends with the SE segment

EXAMPLE EDI TRANSACTION:

```
ISA|00|          |00|          |ZZ|COPROVIDERO     |ZZ|QWESTO
|990203|1526|U|00401|000000055|0|P|>
GS|PS|COPROVIDERO|POTS08|19980203|1526|0055|X|004010
ST|850|0014
BEG|00|SS|R42POT001BILL||19991001
REF|11|303-555-1111|AN
REF|SU|C|RTR
PAM|Q0|1|EA
DTM|097|19990715|1332
DTM|150|19990915
SI|TI|RE|EB
SI|TI|AA|C
SI|TI|TY|2A
N1|78|299
PER|AG|Bill|TE|303-555-3333|||EM|Bill7@Qwest.com
POL|1|1|EA|||ZZ|EU_SA
N1|IT|ROBERT & BILL
N4|PORTLAND|OR|97230||RJ
NX3|01|1200
NX2|02|MAIN
PO1|2|1|EA|||ZZ|RE
SI|TI|SA|C|TN|303-555-2222
REF|IX|1|LNUM
SLN|FA|1|A|1|EA
SI|TI|SA|A|SF
SLN|FA|2|A|1|EA
SI|TI|SA|T|SF
CTT|2
SE|36|0014
GE|1|0055
IEA|1|000000055
```

The CLEC must always refer to the appropriate issue of the Disclosure Document for release-specific formatting rules.

ISA TABLE

At the outer levels of the envelope are the ISA (Interchange Control Header) and the IEA (Interchange Control Trailer) segments. The ISA identifies the sender and receiver of this document, and Qwest and the CLEC will have agreed upon the values used for these. In this example, the sender is COPROVIDERO and the receiver is QWESTO.

ISA and IEA definitions:

The ISA segment is the Interchange Control Header
The IEA segment is the Interchange Control Trailer

The following table outlines data to be included in the ISA Header used between the CLEC and Qwest. (Please refer to the appropriate Disclosure Document for release-specific ISA Table information.) Each element, or field, in the ISA segment has a fixed length, indicated in the column labeled "Length". Alpha fields should be padded with blanks, and numeric fields should contain leading zeroes.

The CLEC and Qwest agree to the following (example) routing information:

	SENT TO QWEST	RECEIVED FROM QWEST	LENGTH
ISA01	*'00' (No Authorization information present)*	*'00' (No Authorization information present)*	02
ISA02	***Spaces** (Authorization information)*	***Spaces** (Authorization information)*	10
ISA03	*'00' (No Security information is present)*	*'00' (No Security information is present)*	02
ISA04	***Spaces** (Security Information)*	***Spaces** (Security information)*	10
ISA05	*CLEC TP qualifier*	*'ZZ' (Mutually Defined)*	02
ISA06	*CLEC TP ID*	*'QWESTO' (Note: This Trading partner ID is used only for Qwest Order and post-Order transactions. The "O" is the unique identifier.)*	15
ISA07	*'ZZ' (Mutually Defined)*	*CLEC TP qualifier*	02
ISA08	*'QWESTO' (Note: This Trading partner ID is used only for Qwest Order and post-Order transactions. The "O" is the unique identifier.)*	*CLEC TP ID*	15
ISA09	*Date of the interchange. YYMMDD*	*Date of the interchange. YYMMDD*	06
ISA10	*Time of the interchange. HHMM (24 Hour Clock)*	*Time of the interchange. HHMM (24 Hour Clock)*	04
ISA11	*'U' (U.S. EDI Community of ASC X-12, TDCC, and UCS)*	*'U' (U.S. EDI Community of ASC X-12, TDCC, and UCS)*	01
ISA12	*'00402' (Interchange Version ID)*	*'00402' (Interchange Version ID)*	05
ISA13	*Sender's translator assigned sequential control number (must be unique)*	*Sender's translator assigned sequential control number (must be unique)*	09
ISA14	*'0' (No acknowledgment requested)*	*'0' (No acknowledgment requested)*	01
ISA15	*'P' (Production data)*	*'P' (Production data)*	01
ISA16	*> (hex 0x3e) (Sub-element Separator)*	*> (hex0x3e) (Sub-element Separator)*	01

Note: The ISA element is NOT a variable length.

This is an example of how the ISA Header will look in the EDI transaction:
ISA|00| |00| |ZZ|COPROVIDERO |ZZ|***QWESTO*** |991210|0900|U|00401|000000019|0|P|>

GS Table Information

GS and GE Segment Definitions

The GS segment is the Functional Group Header
The GE segment is the Functional Group Trailer

The third field, or element, within the GS segment (represented in the GS Table example below) by the data (POTS08) is the Receiver Code. This identifies the transaction as a POTS Order and this transaction is then routed to the proper map for this business function based on that value. To designate a different transaction, for example Loop Service with Number Portability, this value will change to the unique value defined for that transaction or product, in this case LSNP08. In this manner, the proper map will be triggered to accommodate the business function being requested. The CLEC and Qwest agree to the routing information that is defined in the IMA/FBDL EDI Disclosure Document.

The following tables provide an example of the GS Segments that are used within the POTS ordering function.

The CLEC and Qwest agree to the following (example) routing information:

	SENT TO QWEST	**RECEIVED FROM QWEST**
GS01	SEE GS TABLE BELOW	SEE GS TABLE BELOW
GS02	*CLEC TP ID*	SEE GS TABLE BELOW
GS03	SEE GS TABLE BELOW	*CLEC TP ID*
GS04	*Date of the functional group. CCYYMMDD*	*Date of the functional group. CCYYMMDD*
GS05	*Time of the functional group. HHMM (24 hour clock)*	*Time of the functional group. HHMM (24 hour clock)*
GS06	*Sender's translator assigned sequential control number (must be unique)*	*Sender's translator assigned sequential control number (must be unique)*
GS07	*'X' (Accredited Standards Committee X-12)*	*'X' (Accredited Standards Committee X-12)*
GS08	*'004020' (Version)*	*'004020' (Version)*

GS Table

The CLEC and Qwest agree to the following (example) routing information:

ORDERING FUNCTION	**QWEST SEND/ RECEIVE**	**DOCUMENT**	**GS01 VALUE**	**GS02 VALUE**	**GS03 VALUE**
POTS Service Request	Receive	850POTS	PO	*CLEC TP ID*	POTS08
Firm Order Confirmation	Send	855FOC	PR	FOC08	*CLEC TP ID*
Loop Service with Number Portability	Send	850LSNP	PO	CLEC TP ID	LSNP08

The following is an example of the GS Segment for each of the POTS ordering functions:

POTS Service Request:
Field GSnn:

```
   01          02          03          04       05 06 07  08
GS|PO|COPROVIDERO|POTS08|19991210|0900|01|X|004010
```

Firm Order Confirmation:
Field GSnn:

```
   01       02             03          04       05 06 07  08
GS|PR|FOC08|COPROVIDERO|19991210|0905|01|X|004010
```

Mapping Example and Data Dictionary Items:

Time Zone Format Used in EDI Transaction

Qwest recommends that all times shown in the DTM|097 segment be represented in accordance with the Mountain Time Zone.

Exceptions to Certain Segment Rules

Qwest has made a change to the maximum segment use in three defined cases:

- The maximum use of NX2 segments has been changed to greater than 1 (>1).
- The maximum use of SI segments has been changed to greater than 1 (>1).
- In the Service Availability Response (SAR) and the Customer Service Record Response (CSRR) transactions, the maximum use of the SLN segments has been changed to greater than 1 (>1).

EDI Delimiters

The element separator will be represented as a pipe (i.e., |). The hexadecimal equivalent for this symbol is **7C**. The sub-element separator will be represented as the greater than sign (i.e., >). The hexadecimal equivalent is **X3E**. The segment separator will be the linefeed character. The hexadecimal equivalent is **0A**.

Fields Specific to Qwest

Order fields that are specific to the Qwest implementation were added to selected LSOG forms and are indicated by an alpha character following the field number, i.e. (EU-19a). These fields are not defined in the OBF form for the corresponding LSOG issue. Qwest does provide information regarding proper use of these fields on the Developer Worksheets.

Industry Standards Table:

OBF FORM	OBF ISSUE	EDI SOSC ISSUE	X12 STANDARD
Local Service Request	LSOG5	Issue 9	004020
End User Information	LSOG5	Issue9	004020
Resale	LSOG5	Issue9	004020
Directory Listing	LSOG5	Issue 9, when applicable	004020
Directory Service Request	LSOG5	Issue 9	004020
Firm Order Confirmation	LSOG5	Issue 9	004020
Non Fatal Error Response	LSOG5	Issue 9	004020
Fatal Error Response	LSOG5	Issue 9	004020
Jeopardy	LSOG5	Issue 9	004020
(Status Update)	LSOG5	Issue 9	004020
Completion	LSOG5	Issue 9	004020

997 Acknowledgements

When Qwest receives and processes the transaction a 997 Functional Acknowledgement will be returned to the CLEC (as previously discussed in the Transaction Flow Diagrams). The purpose of the 997 is to acknowledge the receipt and translation status of a transaction set at the EDI translator/gateway. The translator will return a positive (+997) acknowledgement to the sender when an inbound transaction passes EDI edits. The translator will return a negative (-997) acknowledgement to the sender when the inbound transaction set does not meet the ANSI ASC X12 syntax rules. The sender of the transaction set being acknowledged with a '-997' is responsible for correcting any errors and resubmitting the transaction.

The following is an example of a 997 for the POTS Order that passed the EDI edits.

ISA|00| |00| |ZZ|QWESTO |ZZ|COPROVIDERO|991104|1538|U|00401|000000164|0|P|>
GS|FA|POTS08|COPROVIDERO|19991104|1538|165|X|004010
ST|997|0395
AK1|PO|00055
AK2|850|0014
AK5|A
AK9|A|1|1|1
SE|6|0395
GE|1|165
IEA|1|000000164

It is required that all transactions received by Qwest or by the CLEC are acknowledged in this manner. The only exception to this is that 997 Functional Acknowledgements are not acknowledged. The level of the acknowledgment will stay at the AK1 and AK2 level as shown; the AK3 and AK4 segments, which provide detail acknowledgement reporting, will not be used. Please refer to the appropriate IMA/FBDL EDI Disclosure Document for release-specific formatting information.

Qwest has implemented a 997 Functional Acknowledgement Reconciliation Process. The purpose of this process is to ensure that CLECs are receiving and acknowledging Qwest IMA EDI outbound transactions. If Qwest has not received a 997 Functional Acknowledgement within 48 hours of sending a transaction from IMA EDI, the Qwest Technical Support Engineer will contact the CLEC to initiate an investigation to determine whether there is a problem on either the Qwest or CLEC side of the interface.

Mapping Examples

Qwest will provide the CLEC with mapping examples of all EDI transactions in the Disclosure Document. It is expected the CLEC will use the mapping examples as a reference when developing their internal interactive EDI system.

The body of each EDI Mapping Example consists of three sections:

- Header: The Header identifies with which transaction the mapping example is associated.
- Legend of Symbols: The Legend of Symbols provides the CLEC with definitions of the symbols Qwest uses throughout the body of the mapping example.
- EDI mapping example: This section details the transaction in an EDI format that is consistent with Qwest business requirements.

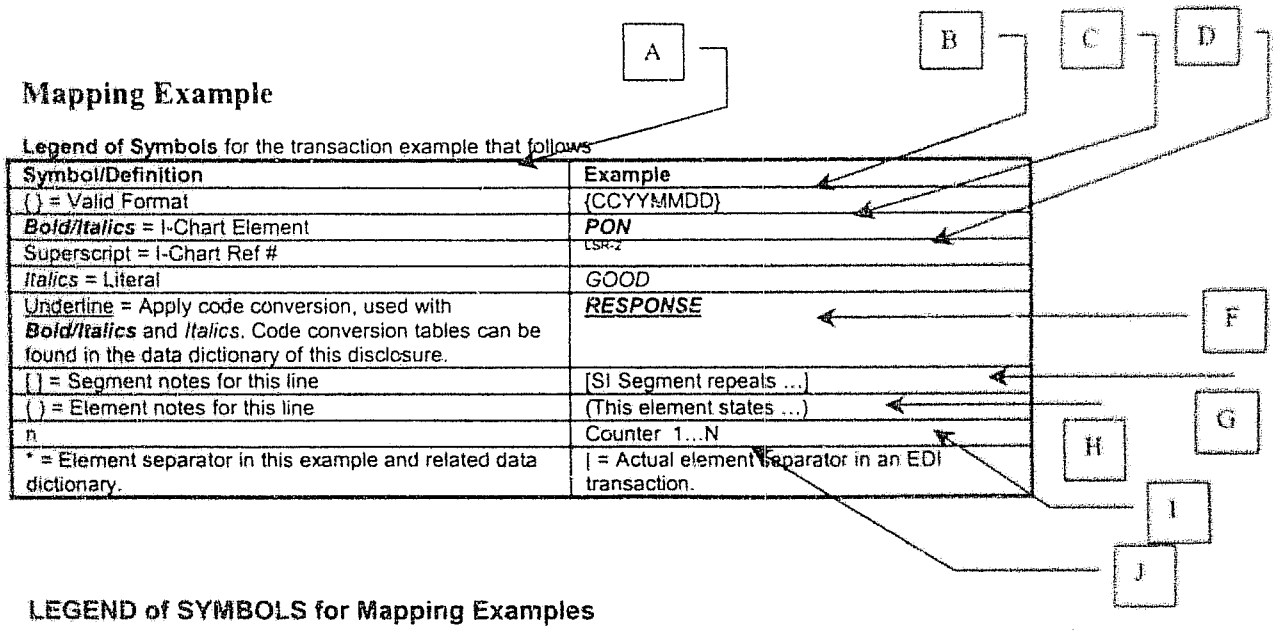
The following diagram and legend explain the mapping example information (as also provided in the IMA/FBDL EDI Disclosure Document). Please refer to the appropriate Disclosure Document for release-specific mapping information at the following web site:

http://www.qwest.com/disclosures/netdisclosure409.html

Mapping Example

Legend of Symbols for the transaction example that follows

Symbol/Definition	Example
( ) = Valid Format	{CCYYMMDD}
Bold/Italics = I-Chart Element	***PON***
Superscript = I-Chart Ref #	CSR-2
Italics = Literal	*GOOD*
Underline = Apply code conversion, used with ***Bold/Italics*** and *Italics*. Code conversion tables can be found in the data dictionary of this disclosure.	***RESPONSE***
[ ] = Segment notes for this line	[SI Segment repeats ...]
( ) = Element notes for this line	(This element states ...)
n	Counter 1...N
* = Element separator in this example and related data dictionary.	| = Actual element separator in an EDI transaction.



LEGEND of SYMBOLS for Mapping Examples

A. The header includes the title of the transaction. Each individual transaction Qwest supports has its own Mapping Example.

B. If the need arises, the appropriate format for the data contained by the element can be found within curved braces after the field name. An example would be the standard date format, with two places each for the century, year, month, and day: {CCYYMMDD}.

C. ***Bolded and italicized*** field names correspond to the field name in the developer worksheets associated with this transaction.

D. The superscripted identifier following a field name that is ***bolded and italicized*** indicates the developer worksheet to be referenced and the field number to be referenced for clarification.

E. *Italicized* text indicates that the field should contain the text exactly as shown. For instance, *GOOD* indicates that the word "GOOD" should be placed in the field.

F. Field names that are underlined indicate that a code conversion is occurring in the Qwest EDI system. Please refer to the Data Dictionary of the appropriate Disclosure Document for release-specific code conversion information.

G. Square brackets [segment info...] surround notes that pertain to a particular segment.

H. Element Notes (element info...) appear inside regular parenthesis and immediately follow the element to which they pertain.

I. A lower case "n" in an element denotes that the element should contain an integer value that increments by one each time the loop is repeated. The first PO1 loop should have a counter value of 1, the second should have a counter value of 2, and so on.

J. Asterisks are generally accepted as an element delimiter for EDI data, so they have been used in the Mapping Examples for readability. However, the element delimiter will be the pipe symbol (|) in the actual EDI transactions that are exchanged.

POTS Mapping Segment Example

ST*850*TRAN SET CONTROL #
BEG*00*SS*PON[LSR-2]**PO Date (See Trading Partner Access Information)
REF*11*AN[LSR-7]*AN
REF*11*EAN[EU-35]*EAN
REF*4N*BI1[LSR-52]*BI1
REF*12*BAN1[LSR-53]*BAN1
REF*4N*BI2[LSR-54]*BI2
REF*12*BAN2[LSR-55]*BAN2
REF*JB*PROJECT[LSR-17]
REF*SU*RTR[LSR-24]*RTR
REF*CO*RPON[LSR-44]*RPON
REF*1V*RORD[LSR-45]*RORD
PAM*48*PG_OF_[LSR-10] (1st 2 Bytes)*EA
PAM*47*PG_OF_[LSR-10] (2nd 2 Bytes)*EA
PAM*KC*DQTY[EU-5]*EA
PAM*63*LQTY[LS-5, LSNP-5]*EA
PAM*OC*NPQTY[LNP-5, INP-5]*EA
SAC*N**TI*EXP [If this segment appears then EXP[LSR-22] = "Y"]
SAC*N**TI*EEH [If this segment appears then AENG[LSR-26] = "Y"]
SAC*N**TI*OAC [If this segment appears then ALBR[LSR-27] = "Y"]
DTM*097*D/TSENT {CCYYMMDD}[LSR-11]*D/TSENT {HHMM}[LSR-11]
DTM*150*DDD{CCYYMMDD}[LSR-12]***TM/RTM*APPTIME{HHMM-HHMM}[LSR-13]
DTM*992****TM/RTM*DFDT[LSR-16]
DTM*270*DATED{CCYYMMDD}[LSR-30]
SI*TI*RE*REQTYP[LSR-19]
SI*TI*AA*ACT[LSR-20]
SI*TI*TY*TOS[LSR-38]
SI*TI*NC*NC[LSR-40]
SI*TI*NI*NCI[LSR-41]
SI*TI*NJ*SEC NCI[LSR-43]
PID*S**TI*AH***SO-RSQ*CHC[LSR-18]
PID*S**TI*CONVIND***SO-RSQ*CONVIND[LSR-20a]
PID*S**TI*AN***SO-RSQ*SCA[LSR-28]
PID*S**TI*AO***SO-RSQ*AGAUTH[LSR-29]
PID*S**TI*BI***SO-RSQ*FBI[EU-37]
PID*S**TI*AP***SO-RSQ*AI[LSR-34]
PWK*DW*NS*1*DG*91*DRC[LSR-90]

Data Dictionary

Each transaction or product-specific chapter within the Qwest IMA/FBDL EDI Disclosure Document contains a Data Dictionary describing the individual fields and appropriate values in an EDI transaction set.

The Data Dictionary is divided into two sections. The first section illustrates the segments used in the EDI transaction in the order they appear and indicates which segments are included in the Header, the Detail, and the Summary sections of the transaction set to be sent to Qwest. Segments that are part of the ANSI X12 transaction set, but that are not used by Qwest, are not included in the Data Dictionary. Below is a partial example of this section:

3.1.1 850 POTS Service Request (850POTS)

Functional Group ID=PO

Introduction:

The 850 POTS service request will be used by the Co-Provider to initiate a service request to U S WEST.

This implementation guideline references the following:
1. LSOG3 and U S West assigned fields
2. ANSI ASC X12 Version 4010
3. TCIF Customer Service Guidelines Issue 9

Notes:

This 850 Transaction includes the mappings for End User(Disconnect), Resale, Multi-Line Hunting and Hunting, Directory Service Request, and Directory Listing.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BEG	Beginning Segment for Purchase Order	M	1		
	030	REF	Reference Identification	O	>1		
	093	PAM	Period Amount	O	10		
			LOOP ID - SAC			10	
	120	SAC	Service, Promotion, Allowance, or Charge Information	O	1		
	130	DTM	Date/Time Reference	O	10		
	165	C	Service Characteristic Identification	O	>1		
	190	PID	Production Description	O	200		
			LOOP ID - N9			1000	
	293	N9	Reference Identification	O	1		
	300	MSG	Message Text	O	1000		
			LOOP ID - N9			1000	
	293	N9	Reference Identification	O	1		
	300	MSG	Message Text	O	1000		

This section of the Data Dictionary also documents the four major references from which the configuration and data values are based. The four references are Local Service Ordering Guidelines (LSOG), Qwest specific fields, ANSI ASC X12, and TCIF Customer Service Guidelines. Together, these documents provide the means necessary for the CLEC to understand and prepare the transaction sets used to pass information between Qwest and CLECs.

This second section of the Data Dictionary repeats the segments and displays them broken down into their respective elements. Only elements that are used in sending information to Qwest are shown. This section includes the Segment Identification, its Level, Usage, Max Use, Purpose and any Semantic Notes. Accompanying the segment's element description is the Reference Designation, the ANSI X12 Data Element reference number, and the Element Name with its attributes. The element description includes notes that will enable the CLEC to understand what type of information and what code values Qwest expects within the element. The diagram below is an example of the information found in this section:

Segment: **BEG** Beginning Segment for Purchase Order
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates
Syntax Notes:
Semantic Notes: 1 BEG05 is the date assigned by the purchaser to purchase order
Comments:
Notes: BEG*00*SS*PON(LSR-2)**PO Data (See Trading Partner Agreement)

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	BEG01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M ID 2/2
>>	BEG02	92	Purchase Order Type Code Code specifying the type of Purchase Order SS Supply or Service Order	M ID 2/2
>>	BEG03	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser PON(LSR-2) = Purchase Order Number	M AN 1/22
>>	BEG05	373	Date Date expressed as CCYYMMDD PO Date = Purchase Order Date (See Trading Partner Agreement)	M DT 8/8

Each pertinent segment is illustrated in this fashion and each element description includes notes pertaining to its use. For example, in the **BEG01** description, the code '00' is shown as the value to be used. A reference to the relevant developer worksheet is indicated when the element's code value is further defined in the developer worksheets provided to the user. The BEG03 description, for example, includes the following reference:

PON (LSR-2) = Purchase Order Number

In this reference, LSR-2 refers to the LSR developer worksheet field that describes the PON field.

Please refer to the appropriate Disclosure Document for release-specific Data Dictionary Information at the following website:

http://www.qwest.com/disclosures/netdisclosure409.html.

Developer Worksheets

The Qwest Developer Worksheets contain the Qwest business rules that identify how the CLEC is to correctly format and populate Qwest EDI requests. The Developer Worksheets summarize the business rules for each field on a request and within each transaction or Order form segment. Qwest LSOG forms used for a transaction are described with the rules regarding how each field is used including:

- Business rules,
- Field length, field characteristics
- Valid values.

The following pages explain the layout and content of a Qwest Developer Worksheet, (Figure 3) and an explanation of each component identified on the example layout.

Beginning with release 8.0, Pre-Order, Developer Worksheets will contain an additional column. This column, 'LSOG 5 Ref", indicates the LSOG 5 reference number for all OBF supported fields. Where this column is blank, the field can be construed as Qwest-specific.

IMPLEMENTATION AREAS	PROGRESSION Interoperability Environment	PROGRESSION Stand Alone Environment	REGRESSION Stand Alone Environment
Testing Process	CLEC submits approved scenarios to Interoperability environment	CLEC creates/submits scenarios to SATE environment until successful and notifies Qwest of successful PONs	SATE user creates and submits scenarios; reviews the responses; corrects and resubmits until successfully processed
EDI Response	Provided by TSEs Qwest provides responses as negotiated in the Project Plan	Provided by TSEs and VICKI Qwest provides responses automatically through VICKI function. See SATE VICKI Path Document for further information.	Provided by TSEs and VICKI Qwest provides responses automatically through VICKI function. See SATE VICKI Path Document for further information
Testing Calls	As scheduled in Project Plan	As scheduled in Project Plan	NONE
Testing Success	Monitored and verified by Qwest TSE during Test Calls with CLEC	CLEC corrects/submits scenarios until successful and notifies Qwest of PONs to be used for documenting correct testing success; Qwest verifies user-indicated PONs/INQNUMs as successful and indicates successful completion on the Scenario Summary	Determined by SATE user.
Number of Transactions Permitted	As negotiated in Project Plan	As negotiated in Project Plan	As negotiated in Usage Plan
Technical Support	CLEC is provided technical support as negotiated in the Project Plan	CLEC is provided technical support as negotiated in the Project Plan	Technical support provided via e-mail FAQs posted on website
Controlled Production	SAME*	SAME*	Not Applicable

(* Requirements are same as in adjacent column marked SAME* - see requirement details in this Guide)

NOTE: Before entering the Controlled Production Phase, TPR configuration verification (TCV) is required for those transactions being implemented.

Appendix B

Service Bureau EDI Implementation Guidelines

July 1, 2002

Version 3.0

Version Updates:

Version 1.0 – Original Version
Version 2.0 – Incorporates Stand Alone Test Environment (SATE) references
Version 3.0 - Defined Trading Partner Configuration Verification testing (TCV) and clarifies circuit sharing LOA requirements. Changed 'CLEC' to 'CLEC'

Objective:

This document will establish Qwest's definition of a service bureau from a service and product perspective in relation to the sending and receiving of data with Qwest's IMA and FBDL EDI systems. In addition, this document will provide the criteria for the implementation and operating procedures for CLECs using IMA and FBDL EDI, and the Service Bureaus that support them.

Contents:

I. Definition of a Service Bureau
II. The Role of the CLEC
III. Service Level Agreements
IV. CMP Participation
V. Qwest Release Sunrise/Sunset Dates
VI. Requirements Review
VII. Physical Connectivity
VIII. EDI Progression Testing Process
  (a) New Product Implementation Testing Requirements
  (b) Release Migration Testing Requirements
IX. Production Support/Help Desk

TABLE A: Summary – Role of the Service Bureau in a CLEC Implementation

TABLE B: Progression Testing Requirements for Service Bureau Implementations

Definition of a Service Bureau:

Qwest considers a third party vendor to be a Service Bureau when the following criteria are met:

1. The third party vendor uses the same IMA and FBDL EDI mapping software, version, and configuration for all CLECs actively using its software in production.
2. The third party has a signed Letter of Agency (LOA) between themselves and each CLEC. Qwest must receive a copy of the LOA prior to conducting weekly IMA and FBDL EDI implementation meetings with a CLEC and its Service Bureau.
3. The third party vendor must have more than one CLEC implementing or in production with IMA and FBDL EDI on a single release of IMA and FBDL EDI.
4. The third party vendor must have a single, dedicated circuit in place between their central location and Qwest, which must be used by all CLECs with that Service Bureau.

   If the CLEC will be accessing another circuit not owned by the service bureau then a separate blanket LOA is required from the circuit owner authorizing the Service Bureau use of their circuit before placing a CLEC into production.
5. The third party vendor must obtain a unique, signed-authorized digital certificate for each CLEC using the Service Bureau. *[Please refer to the requirements of TCIF/ Authorizing Agency for further explanation regarding the use of digital certificates.]*
6. The third party vendor ensures that each CLEC working with the Service Bureau has either:
   - A unique port assignment on a common IP for each CLEC, or
   - A unique IP for each CLEC, with each CLEC utilizing ports identified by the standard designation (6998 and 6999).

Qwest does not have an agreement with the Service Bureau and therefore must treat the CLEC utilizing a Service Bureau as an individual entity. However, the Service Bureau is an Agent for the CLEC and acts on behalf of the CLEC for the CLEC's initial Qwest EDI implementation, as well as all subsequent release migrations or new product implementations, for as long as the LOA is in effect. Again, the CLEC and the Service Bureau must both sign the LOA and provide Qwest with a copy of this fully signed LOA.

The Role of the CLEC:

The CLEC must make initial contact with Qwest's IMA and FBDL EDI Implementation Team directly. Upon the CLEC's completion of the Initial Contact Questionnaire and Qwest's receipt of a signed LOA, the Service Bureau acts on behalf of the CLEC during their implementation effort. However, the CLEC must be present for all Kickoff and Readiness Assessment calls, must participate in the development and finalization of an agreed upon project implementation plan, and must be present for all subsequent discussions related to revision of the project plan. In addition, the CLEC conducts all Controlled Production activities from their facilities.

The following sections elaborate on the IMA and FBDL EDI specific implementation areas. Additionally, TABLE A summarizes the role of a Service Bureau during a CLEC's implementation.

Service Level Agreements:

Outside of the Qwest Interconnect Agreement, Qwest does not maintain separate service level agreements with CLECs, nor will Qwest have a service level agreement with any Service Bureau directly. However, a CLEC may have specific contractual date and time frames for service delivery stated in their Interconnection Agreement with Qwest. In this situation, those contractual date and time frames for service extend to the Service Bureau, who is acting as an Agent for the CLEC.

CMP Participation:

While Service Bureaus do not have voting rights in the CLEC Industry Change Management Process forum (CMP), Service Bureaus are welcome to attend CMP meetings and participate in this forum. Additionally, CLECs may solicit advice from their Service Bureau regarding their CMP votes at any time.

Qwest Release Sunrise/Sunset Dates:

In an effort to avoid impact to Qwest's release dates and to provide parity amongst CLECs, Qwest's IMA EDI Release sunrise and sunset dates will be the same for CLECs whether or not they utilize a Service Bureau arrangement. These release dates are published on the CMP web page located on Qwest's Wholesale web-site at http://www.qwest.com/wholesale/cmp/calendar.html.

Requirements Review:

Qwest expects that the CLEC will be aware of Qwest's business rules and processes associated with ordering various product types. Qwest also expects that the Service Bureau will define the processes and business rules that apply to their software, which will affect the CLEC, and will keep the CLEC informed of these impacts.

Physical Connectivity:

The Service Bureau's circuit will provide for a secure network to send and receive data between Qwest and the CLEC, as well as providing an efficient means to transport high volumes of data. This circuit must terminate in either Qwest's Denver (Zuni) or Omaha Data Centers. For redundancy purposes, a Service Bureau may install a circuit at both data center locations. Access to the Qwest network is granted from the external registered IP addresses on this circuit through to the Qwest firewall. Please refer to the "EDI Implementation Guidelines" for further technical information on connectivity.

EDI Testing Process:

The EDI testing process must address two considerations: (1) New Product Implementations and (2) Release Migrations. The testing requirements for these two efforts are addressed in this section. Additionally, TABLE B serves to provide a high-level summary of Service Bureau progression testing requirements for New Product Implementation and Release Migrations.

The Service Bureau may use a **Lead** CLEC to test the products and activity types that the Service Bureau plans to offer to all CLECs subsequent to the Lead CLEC (herein referred to as the ***subsequent*** CLEC). The **Lead** CLEC tests for the first time a unique set of products and activity types for a given release in the Qwest Interoperability environment and/or Stand Alone Test

Environment (SATE), as described below [see Progression Testing Phase (Interoperability and/or SATE)]. Following this testing, the **Lead** CLEC will perform Controlled Production for specific products/activities.

All ***subsequent*** CLECs wishing to implement the **Lead** CLEC's tested products/activity types have the option to progression test these products, as noted below [see Progression Testing Phase (Interoperability and/or SATE)]. If this testing is skipped, the ***subsequent*** CLECs must perform Trading Partner Configuration Verification (TCV), also noted below. After the Lead CLEC completes the exit criteria in the Controlled Production Readiness Assessment, any ***subsequent*** CLEC using the Service Bureau's same products/activity types may move directly into Controlled Production, as applicable for the given testing process.

A Service Bureau may use multiple **Lead** CLECs for testing different products or use one **Lead** CLEC for all product testing. Regardless of the number of **Lead** CLECs utilized, the testing phases required for CLEC implementations are the same as those used for a non-Service Bureau implementation. *[For further explanation of these phases, please refer to the Qwest "EDI Implementation Guidelines" document.]*

(1) New Product Implementations:

This section identifies the requirements for new product implementation testing that are unique to a Service Bureau arrangement, highlighting the differing roles of the **Lead** CLEC and ***subsequent*** CLECs.

Firewall/IA-to-IA Testing Phase:

- This testing is required for both the **Lead** and ***subsequent*** CLEC.
- This testing can be performed with Qwest from the Service Bureau site or the CLEC's location.
- This testing will be performed in the Interoperability and/or SATE environment, as well as in the Production environment.

Progression Testing Phase (Interoperability or SATE):

- The **Lead** CLEC's progression testing can be performed with Qwest from the Service Bureau site or the CLEC's location. If progression testing is performed from the Service Bureau site, the Service Bureau must use the CLEC's Trading Partner configuration that will be used in production.
- Any ***subsequent*** CLEC may choose to Progression test in the Interoperability and/or SATE environment; however, this is not a requirement.
- Any ***subsequent*** CLEC Progression Testing in either Interoperability and/or SATE environments may be performed from the Service Bureau or CLEC's site.

Trading Partner Configuration Verification (TCV):

- This configuration verification is not applicable to the **Lead** CLEC when their Trading Partner Relationships are verified, as part of the Progression Testing Phase in either Progression Test environment.

- This verification is applicable to ***subsequent*** CLECs who opt not to test in a Progression Test environment. This will validate Qwest's Trading Partner Relationship (TPR) set up prior to exporting the TPRs to Qwest's production environment.
- This verification is performed in either SATE or Interoperability Test environment and entails testing one successful transaction per line item on the CLEC's TPR Worksheet. One order transaction plus one supplemental Order transaction must pass Qwest's Business Process Layer (BPL) to verify the Order responses, which allows Qwest to confirm the TPR configuration.
- This verification can be performed from either the Service Bureau or CLEC's location, but must be progression tested using the CLEC's TPR data.
- No Scenario Summary or progression test scenario documents are required for this verification. The TPR Worksheet will outline the transactions required.

Controlled Production Phase:

- Every CLEC must perform Controlled Production from the CLEC's location. The Service Bureau cannot perform this effort.
- As stated previously, any ***subsequent*** CLEC may begin Controlled Production when the **Lead** CLEC testing the same product/activity has completed the Progression Testing exit criteria in the Controlled Production Readiness Assessment (that is, the **Lead** CLEC has exited the Progression Testing Phase).

(2) Release Migrations:

The determination of the necessity to re-certify a product will be made by Qwest and specified in Qwest's release-specific Recertification memo, which will be provided to all CLECs with the issuance of Disclosure. The complexity and number of tests necessary will be based upon the complexity of changes to the release. If there are no changes to a product for a release, recertification of that product is not required, but may be tested at the CLEC's discretion.

To re-certify a product, the Service Bureau must perform a suite of tests in either Interoperability or SATE with their **Lead** CLEC and Qwest; however, recertification does not require Controlled Production for any migration regardless of whether a CLEC uses a Service Bureau. This section identifies the process requirements for release migration testing that are unique to a Service Bureau arrangement, highlighting the differing roles of the **Lead** CLEC and ***subsequent*** CLECs.

Firewall/IA-to-IA Testing Phase:

- This testing is not required for either the **Lead** or ***subsequent*** CLEC, unless their Interactive Agent (IA), Trading Partner (TP) Name or Firewall Rules change.
- If required, this testing can be performed with Qwest from the Service Bureau site or the CLEC's location.
- If required, this testing will be performed in the SATE and/or Interoperability test environment and the Production environment.

Progression Testing Phase (Interoperability or SATE):

- The **Lead** CLEC will need to test those products that Qwest determines need recertification, as noted above, and will follow the **Lead** CLEC process described under "(a) New Product Implementation Testing Requirements – Progression Testing Phase (Interoperability and/or SATE)".
- Any ***subsequent*** CLEC may choose to test in SATE and/or the Interoperability environment, however, this is not a requirement.
- Any ***subsequent*** CLEC Progression Testing in either Interoperability and/or SATE may be performed from the Service Bureau or CLEC's site.

Trading Partner Configuration Verification (TCV):

- This configuration verification is applicable to the **Lead** CLEC for each product change on the TPR Worksheet when that product does not require recertification by Qwest. For products requiring recertification, this verification is not applicable to the **Lead** CLEC who tested in the SATE and/or Interoperability test environment, as their Trading Partner Relationships were verified as part of this testing phase.
- This verification is applicable to ***subsequent*** CLECs who opt not to re-certify products through testing in a test environment. This will validate Qwest's Trading Partner Relationship (TPR) set up prior to exporting the TPRs to Qwest's Production environment.
- If required, each ***subsequent*** CLEC must test one successful transaction per line item on the CLEC's TPR Worksheet. One order transaction plus one supplemental Order transaction must pass Qwest's Business Process Layer (BPL) to verify the Order responses, which allows Qwest to confirm the TPR configuration.
- This verification is performed in a test environment, whenever possible. Please be aware that if the TCV cannot be performed in a test environment, a five-day interval for TPR changes applies in Production.
- This verification can be performed from either the Service Bureau or CLEC's location, but must be tested using the CLECs TPR data.
- No Scenario Summary or test scenario documents are required for this verification. The TPR Worksheet will outline the transactions required.

Production Support/Help Desk:

It is strongly recommended that a Service Bureau have an established Help Desk process to support CLECs with production issues. Qwest is willing to assist Service Bureaus with establishing processes and guidelines that are consistent with Qwest's established Production and Help Desk support processes. Qwest's current help desk process allows a Service Bureau to work directly with its Wholesale Systems Help Desk (that is, represent the CLEC in lieu of the CLEC's participation in help desk calls). As a result, Qwest strongly encourages CLECs to complete the CLEC Trouble Reporting Guide with both CLEC and Service Bureau points of contact for emergency, weekend, holiday, and after-hour production support issues.

Summary – Role of the Service Bureau in a CLEC Implementation

IMPLEMENTATION AREAS	A SERVICE BUREAU'S ROLE...
Service Level Agreements	The Service Level Agreement is located within Qwest's Interconnect Agreement for CLECs. Neither a Service Level Agreement nor an Interconnect Agreement exists between a Service Bureau and Qwest; however, Qwest and the CLEC will have a signed Interconnect Agreement. Additionally, the Service Bureau must have a signed Letter of Agency (LOA) between themselves and each CLEC.
CMP Participation	Service Bureaus do not have voting, CR issuing or prioritization rights in CMP; however, are welcome to attend and participate in CMP meetings. Additionally, CLEC may solicit advice from their Service Bureau regarding their CMP votes at any time.
Release Sunset/Sunset dates	This process follows the Qwest documented process *(see "EDI Implementation Guidelines").*
Requirements Review	Service Bureaus should perform a review of Qwest's requirements, keeping CLECs informed of all impacting changes. Additionally, Qwest expects that the CLEC will review all business processes and business rules associated with ordering various product types.
Prework to IA (Connectivity)	Two options are available to Service Bureaus: • One IP address with unique port assignments for each CLEC, or • Unique IP addresses for each CLEC using the same standard ports (6998 and 6999) for all CLECs on the Service Bureau. Additionally, Service Bureaus are required to have a unique, signed-authorized digital certificate for each CLEC. Qwest relies on the Service Bureau to stop unauthorized transactions being submitted to CLECs since all CLEC transactions are transmitted across the same IP address. The Service Bureau must differentiate messages by Trading Partner ID to accomplish this goal.
EDI Progression Testing Process	Refer to TABLE B "Testing Requirements for Service Bureau Implementations" within this document.
Production Support/Help Desk	Service Bureaus may place calls to Qwest's Wholesale Systems Help Desk on behalf of CLECs *(see EDI Implementation Guidelines for further details on the overall process).*

New Product Implementations

Progression Testing Phase (Interoperability and/or SATE environment):

	Firewall/IA to IA	TCV	New Products/Activity Types
Lead CLEC	Testing required	Not Applicable	Testing required; see minimum testing requirements [1]
Test Partner	Qwest to Service Bureau	Not Applicable	Either Qwest to CLEC or Qwest to Service Bureau
Subsequent CLECs	Testing required	Testing is required unless the CLEC decides to test in either the Interoperability and/or SATE environments.	Testing is optional when implementing a product that has already been tested and in production by a lead CLEC.
Test Partner	Qwest to Service Bureau	Qwest to Service Bureau or Qwest to CLEC	Qwest to CLEC

Controlled Production Phase:

	Firewall/IA to IA	TCV	New Products/Activity Types
Lead CLEC	Testing required	Not Applicable	Testing required; see minimum testing requirements 1
Test Partner	Qwest to Service Bureau	Not Applicable	Qwest to CLEC
Subsequent CLECs	Testing required	Not Applicable	Testing required; see minimum testing requirements 1
Test Partner	Qwest to Service Bureau	Not Applicable	Qwest to CLEC

Footnote:
[1] Refer to the "EDI Implementation Guidelines" document for minimum test scenario requirements.

Release Migrations

Progression Testing Phase (Interoperability and/or SATE environment):

	Firewall/IA to IA	TCV	Existing Qwest EDI Certified Products
Lead CLEC	Testing not required, unless the Firewall, IA or the TP Name changed.	*Not Applicable*	Testing required; see Qwest's release specific Recertification memo [1]
Test Partner	Qwest to Service Bureau	*Not Applicable*	Qwest to Service Bureau
Subsequent CLECs	Testing not required, unless the Firewall, IA or the TP Name changed	Testing required, if CLEC opts not to test in the either Interoperability and/or SATE test environments.	Testing optional
Test Partner	Qwest to Service Bureau	Qwest to CLEC or Qwest to Service Bureau	*Not Applicable*

Footnote:
[1] Refer to the Qwest's release specific Recertification memo for a determination of the products

Appendix C

Qwest's EDI Implementation Staff Plan and Organizational Information

January 21, 2002

Version 1.00

Version Notice

Document History

All revisions made to this document are listed here in chronological order.

Version	Date	Description
1.00	01/21/02	Initial Distribution

Document Ownership

Qwest Communications, Inc. (Qwest)
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Abstract

The purpose of this document is to define the roles and responsibilities for the IMA EDI Implementation Team, in addition to a staff planning for the organization.

Document Information

This document has been through a formal review process. To the best of our knowledge, it is accurate. Qwest Communications, Inc. reserves the right to make further modifications, as necessary.

Trademarks

Qwest, Inc. is a registered trademark of *Qwest Communications International, Inc.* All other trademarks mentioned herein are the property of their respective holders.
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Introduction

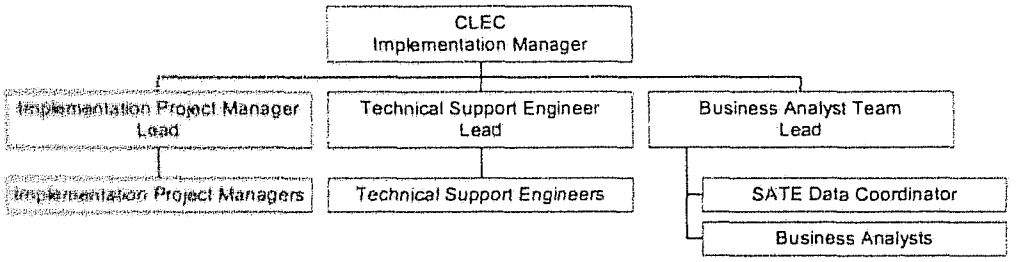
Purpose of Document

This document is designed to provide an overview of Qwest staffing plans and resource utilization for the IMA EDI Implementation Team. The scope of this document includes support for all Qwest EDI environments (SATE, Interoperability, and Production). As an example, SATE represents only one environment in which a CLEC, Service Bureau, or software vendor may regression test (Regression) with the Qwest IMA EDI system or a CLEC may certify for actual EDI Implementation of a given IMA release (Progression). However, SATE resources and staff planning are an integral part of the overall IMA EDI Implementation Team and should not be viewed as separate from that organization.

Organizational Overview

The following chart represents each organization directly involved in interfacing with CLECs for EDI Implementation. This chart illustrates the three groups that comprise the IMA EDI Implementation Team.

Chart 1 – IMA EDI Implementation Team



EDI Staffing Plan

Forecasting & Planning for Adequate Staff

Qwest management evaluates the current number of CLECs and other third parties implementing or using IMA EDI, and any others who express an interest, on a regular basis. This evaluation includes an assessment of the level of effort required for each CLEC based on factors such as number of products implemented, existing CLEC EDI experience, whether effort is a new implementation or a migration, etc. When a CLEC contacts Qwest with an interest in an IMA EDI implementation, each of the area leads along with the Qwest manager, addresses the current assignments, level of effort planned for each CLEC implementing or in production for IMA EDI, and does an assessment of assignments and work loads. Leads and their managers meet on a weekly basis to discuss resource assignments and to review work-load balancing.

If an increase in personnel in the EDI Implementation Team is deemed necessary, Qwest will bring on personnel, as appropriate. The normal training time for personnel is two to four weeks before they are able to work unsupervised with CLECs. Personnel are trained in all aspects of the roles on their team in order to back up other personnel within that role. Additionally, each person has a formal performance appraisal process

utilizing the job descriptions in the Roles and Responsibilities section below to develop their goals and objectives.

Using the existing evaluation processes, employees are evaluated quarterly based on these goals and objectives. If performance to a goal/objective is not satisfactory for a given employee, appropriate measures are taken, including coaching and additional training. Each employee's performance is fed into the current assignment and staffing plan to ensure CLEC needs are being met.

Forecast for 2002, Quarters 1 & 2

As of the initial publication of this Appendix, Qwest currently staffs 5 Implementation Project Managers, 9 Technical Support Engineers, 7 Business Analysts and 2 SATE Data Coordinators who work with CLECs and other third parties to implement IMA EDI. This staffing level currently supports 25 CLECs: 2 represent new implementations and 13 are in already production where 10 are currently undergoing migration to a new release. Each EDI Team member role identified within the IMA EDI Implementation Guide is further explained in the detailed job descriptions provided below. The job descriptions apply across any environment used to implement or test IMA EDI (i.e. SATE, Interoperability, or Production). Note that duties pertaining to the SATE environment do not include scenario template review and approval.

Qwest anticipates the staffing levels for the first two quarters of 2002 will remain the same, with an evaluation of the automatic processing for SATE completed during the first quarter, as described below in the TSE job description. As a result, Qwest believes that the level of staffing today on the IMA EDI Implementation team is sufficient to support all current and forecasted efforts through second quarter 2002.

6820 P95.

CONTINUATION # [2]

Roles and Responsibilities

The following table details the roles and responsibilities for the SATE organizations and resources depicted in the organizational structure in the previous section of this document. In addition, information concerning the organization's vision and mission statements are included, as well as goals, objectives and methods of accountability for each job title.

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

Mission Statement: The 271 BSD District will enable Qwest to provide robust customer care, billing, maintenance and repair services to our Wholesale customers, equip the Interconnect Service Center with effective mechanized solutions, and re-enter the long distance market.

Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
Implementation Project Manager (IPM)	The IPM is responsible for planning, tracking and guiding a CLEC EDI implementation throughout its lifecycle. The IPM will support the Business Analyst and Technical Support Engineer during a CLEC implementation, as necessary.	• Receives communication that a CLEC, Service Bureau or software vendor wishes to use the SATE for regression testing • Facilitates the weekly implementation team meetings • Develops the Project Plan, incorporates the CLECs suggestions, and updates the plan regularly • Takes meeting minutes during the weekly implementation team conference calls and publishes to the CLEC and Qwest team weekly meeting participants. • Coordinates and facilitates a SATE Regression testing kick-off meeting with the CLEC, Service Bureau or software vendor • Archives Usage Plan at end of regression test • Update Project Plan and ensure milestones are met	• Successfully plan, track and guide CLEC EDI Implementations and Migrations to new releases through their lifecycles. • Successfully complete the roles and responsibilities defined for all assigned CLECs. • Provide support to additionally assigned non-CLEC EDI users.	• Follow Qwest standard HR policies, including – quarterly objective setting – quarterly performance reviews – action plans, if required – iterative adjusted quarterly objective setting – annual performance reviews

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

Mission Statement: The 271 BSD District will enable Qwest to provide robust customer care, billing, maintenance and repair services to our Wholesale customers, equip the Interconnect Service Center with effective mechanized solutions, and re-enter the long distance market.

Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
		• Distribute current copy of the Test Status Log one day prior to the weekly implementation team meeting		
Business Analyst (BA)	The BA is responsible for supporting a CLEC implementation in many roles such as supporting the CLEC with their requirements review, answering business rule and order processing questions, as well as reviewing and approving the Test/Certification Scenario Summary, as appropriate.	• Supports the CLEC with the requirements review • Facilitates the discussions pertaining to Qwest IMA EDI requirements and processes • Forwards to the CLEC the Scenario Summary, Scenario Templates (interoperability environment), the Question Log template, the Frequently Asked Questions Document, the Error List, and if applicable, the FBDL Scenario Data Document, the SATE Data Document, the draft developer worksheets, and the draft candidate list. • Provides the CLEC with answers to the CLEC's business related questions during the weekly CLEC meetings • Forwards any technical questions from the Questions Log to the TSE and any account questions to the Service Manager as appropriate • Provides input to the Project Plan • Provides the SATE Data Document for SATE users, including updated	• Successfully support CLEC implementations and migrations related to all business related information. • Successfully complete the roles and responsibilities defined for all assigned CLECs. • Provide support to additionally assigned non-CLEC EDI users.	• Follow Qwest standard HR policies, including – quarterly objective setting – quarterly performance reviews – action plans, if required – iterative adjusted quarterly objective setting – annual performance reviews

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

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Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
		documents as revisions are released • Respond to questions regarding Qwest business rules – sending response both to the requester and the SDC for archival • Review the Test Scenario Summary and Scenarios (for interoperability environment users) • Provides the SATE Data Document for SATE users • Provide comments to the CLEC for the Test Scenario Summary and Scenarios (for interoperability environment users) • Provides support to the TSE during the testing phase		
Technical Support Engineer (TSE)	The TSE is responsible for supporting a CLEC implementation in many roles such as facilitating Test/ Certification testing calls, setting up of the Interactive Agent (IA) and security, and providing the technical support a CLEC might require during its implementation.	• Forwards the completed External IP Addressing Worksheet to the IT I&D Team. • Configures the EDI translator and transport applications in the interoperability or SATE environment • Completes the Firewall Rule Worksheet Template with the IP addresses provided on the External IP Addressing Worksheet and forwards the document to the Production SPOC who forwards to the Infrastructure / Security Team for both the interoperability or	• Successfully support CLEC implementations and migrations regarding all technical aspects of EDI. • Successfully complete the roles and responsibilities defined for all assigned CLECs. • Provide support to additionally assigned non-CLEC EDI users.	• Follow Qwest standard HR policies, including – quarterly objective setting – quarterly performance reviews – action plans, if required – iterative adjusted quarterly objective setting – annual performance reviews

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

Mission Statement: The 271 BSD District will enable Qwest to provide robust customer care, billing, maintenance and repair services to our Wholesale customers, equip the Interconnect Service Center with effective mechanized solutions, and re-enter the long distance market.

Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
		SATE and production environments • Once Interoperability/SATE testing validates the TPR configuration and other system configuration items, the TSE completes the Export / Import TPR Template and forwards it to the production SPOC and provides the production SYADS with the documentation required to configure the production environment • Review the work completed by the IT I&D, Infrastructure / Security, Firewall and production SYAD teams • Communicate the completion dates of his or her assigned activities to the IPM • Schedules and conducts IA to IA connectivity test • Supports any discussions pertaining to IMA EDI technical aspects (i.e., Mapping Examples and Data Dictionaries) • Answers any technical questions from the Questions Log and returns them to the BA or provides them to the CLEC during the weekly call • Provides input to the Project Plan • Initiates the preliminary		

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

Mission Statement: The 271 BSD District will enable Qwest to provide robust customer care, billing, maintenance and repair services to our Wholesale customers, equip the Interconnect Service Center with effective mechanized solutions, and re-enter the long distance market.

Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
		discussions regarding the connectivity requirements • Forwards to the CLEC the Trading Partner Identification Worksheet and the External IP Addressing Worksheet templates • Respond to technical questions for SATE environment – sending response both to the requester and the SDC for archival • Activate and inactivate the CLEC's TPR in the SATE environment • Reviews the Usage Plan for SATE regression users • Facilitate the user's regression test by providing required and requested responses to the users during regression testing • Coordinate the test calls • Provides technical support for the test calls • Update the Test Status Log with each day's testing results details • Notify the IPM when the Test Status Log is ready for distribution the day prior to the weekly implementation team meeting • Complete the Test Status Log with the test results and dates completed prior to the Controlled Production Readiness Assessment Call		

Organization: EDI Implementation Team

Vision Statement: The 271 BSD District will provide world class technology solutions, which enable local competition, provide excellent service to Wholesale customers, and position Qwest to compete globally by offering bundled services, including long distance.

Mission Statement: The 271 BSD District will enable Qwest to provide robust customer care, billing, maintenance and repair services to our Wholesale customers, equip the Interconnect Service Center with effective mechanized solutions, and re-enter the long distance market.

Job Title	Job Description	Roles & Responsibilities	Goals & Objectives	Methods for Accountability
SATE Data Coordinator (DC)		• Identify, write, open, track, verify resolution and close Change Requests (CRs) discovered by or impacting the Business • Draft and maintain SATE data document and processes • Check SATE mailbox daily, process CLEC requests, answer CLEC questions and/or forward messages on to appropriate SATE team • Process Data Requests for CLECs	• Successfully maintain the SATE mailbox. • Accurately maintain and enhance the SATE Data Document. • Process CLEC SATE data requests accurately and timely.	• Follow Qwest standard HR policies, including – quarterly objective setting – quarterly performance reviews – action plans, if required – iterative adjusted quarterly objective setting – annual performance reviews

Appendix D: IMA EDI Minimum Test Requirements

Testing Phase	Pre-Order Testing	Order Testing	Post-Order Testing	FBDL Testing
New Implementation (Progression)	• Every 850 and 860 transaction being implemented • Every associated query and selection type • Every associated 855 and 865 response type	• Every 850 transaction and associated activity type being implemented • All three 860 supplement types, but at least one per product being implemented • One 860 supplement submitted after the original 850 transaction passes the BPL, but before receiving any 855 response • One transaction correcting a System Reject and one correcting an ISC Reject	• One 855 or 865 FOC per product/ activity being implemented • One 865 Completion per product being implemented • Every 855 and 865 response type being implemented • One 865 Jeopardy after receiving an 855 FOC	• Every 850 transaction and associated activity type being implemented • One positive 855 DSRED per listing/activity being implemented ('Accepted' or 'Acknowledge' that is not the fault of the CLEC) • Every 855 response type being implemented
New Implementation (Controlled Production)	• Every 850 and 860 transaction being implemented • Every associated query and selection type • One associated positive 855 and 865 response type	• Every 850 transaction and associated activity type being implemented • One 860 supplement per product being implemented	• One 855 or 865 FOC per product/ activity type being implemented • One 865 Completion per product being implemented	• Every 850 transaction and associated activity type being implemented • One positive 855 DSRED per listing/activity combination being implemented
Additional Implementation after Initial Progression Testing (Progression and Controlled Production)	Additional products: • Every additional 850 and 860 transaction being implemented • Every associated query and selection type • Every associated 855 and 865 response type (Progression only) • One associated positive 855 and 865 response type (Controlled Production only)	Additional products: • Every additional 850 transaction and associated activity type being implemented • One 860 supplement per additional product being implemented Additional activity types for Progression tested products: • Every additional activity type being implemented	Additional products: • One 855 or 865 FOC per product/ activity being implemented • One 865 Completion per product being implemented Additional activity types for Progression tested products: • One 855 or 865 FOC per additional activity being implemented	Additional products: • Every 850 transaction and associated activity type being implemented • One positive 855 DSRED per listing/activity being implemented Additional activity types for Progression tested products: • One positive 855 DSRED per activity being implemented
Re-certification (Progression)	• Every 850 and 860 transaction being re-certified • One associated query and selection type • One associated positive 855 and 865 response type ('Good' or 'Exact Match')	• Every 850 and 860 transaction needing re-certification • Any associated activity types needing re-certification based on the 'Any', 'and', 'or' logic in the Re-certification Notice	• Every 855 and 865 response type needing re-certification (Fatal responses can either be System or ISC Rejects as both use the same map) • One successful transaction per product needing re-certification (meaning it passes the BPL)	• Every 850 transaction and 855 response needing re-certification • Any associated activity needing re-certification based on the 'any', 'and', 'or' logic in Re-cert Notice • One successful transaction per product needing re-certification (meaning it passes the BPL)

Testing Phase	Pre-Order Testing	Order Testing	Post-Order Testing	FBDL Testing
Migration (Progression)	• Every 850 and 860 transaction being migrated • Any associated query, selection, and response type	• Every 850 transaction and any associated activity type being migrated	• One of either the 855 or 865 response type being migrated (the Fatal response can either be a System Reject or ISC Reject or both use the same map) • One successful transaction per product being migrated (meaning passes BPL)	• Every 850 transaction and any associated activity type being migrated • Any 855 response being migrated • One successful transaction per product being migrated
TCV (Progression)	• Every 850 and 860 transaction needing TCV using any associated query and selection type • Any associated response type	• Every 850 transaction needing TCV using any associated activity previously Progression tested	• Every 855 response type needing TCV	• Every 850 transaction needing TCV using any associated activity type previously Progression tested • Every 855 response needing TCV

CONTINUATION

[3]

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SATE Users' Group Meeting Minutes

November 13, 2001

Minutes
SATE Users' Group Meeting
November 13, 2001

SATE Users' Group Mission Statement

1. Give Qwest the opportunity to communicate current plans for it's testing environments.
2. Give the CLECs the opportunity to communicate their current and future testing needs.
3. Jointly present a list of CRs to CMP to ensure that future enhancements of Qwest environments meet those stated CLECs' needs.

Attendees: Bob Carias, Ian Coleman, Wendy Green, Kelly Joines, Victor Leung, Donna Montarone, Jake Perlman, Rick Woodhouse

11/13 Meeting Agenda:

- Review Action Items
- Review Draft Mission Statement
- Interoperability and SATE
  - Things you like and dislike
  - What do you plan to use in the future
- Interface testing of Pre-order and Order
  - Data document
  - Data requests
  - Other
- Post-order in SATE
  - VICKI overview
    - Due dates, Service Orders, S&E section of completions
    - Time delays
    - Automating more functions
  - Questions and comments about VICKI
  - Documenting VICKI
  - A VICKI GUI?
  - Additional post-order processing for interface testing

Draft Mission Statement

The meeting participants reviewed the mission statement drafted by Qwest. The mission statement was accepted as is.

Interoperability and SATE

As there were no current Interoperability users on the call, we did not record any "likes or dislikes".

SATE "Likes":

- Ability to test independently without help from Qwest.
- Qwest provided data and test scenarios.

SATE "Dislikes"

- Current hours of availability – would like SATE available 8 a.m. – 6 p.m. for all continental US time zones. Qwest took an action item to look into extended hours.
- Would like TNs that are LERG certified and compatible with Qwest inventory. Qwest took an action item to find a solution.
- Would like Line Splitting and Loop Splitting. Qwest responded that this request should be made through CMP according to the process previously published.

Plans for Future Use

- Allegiance plans to always use SATE because of the availability of test data.

Interface testing of Pre-order and Order

Data Document

- Allegiance would like X12 EDI mapping examples of the test data. When asked by Qwest, Allegiance stated that examples would suffice; all test cases are not necessary. Qwest took an action item to look into this.
- Allegiance would like shorter CFA values. Qwest noted that this request could easily be accommodated through the data request process.

Data Request Process

- Nightfire would like all of the valid CFAs to be added to the UBL section of the data document. Qwest agreed to investigate this and advised Allegiance on some additional CFAs available for use in SATE.

Other

- Nightfire mentioned that Qwest's SATE team has been very supportive and have resolved escalations very quickly.

Post-order in SATE

- Jake provided an overview of VICKI.
- The CLECs asked when VICKI will be deployed. Qwest responded that it will be available in the first quarter of 2002 and took an action item to publicize the scheduled deployment date.
- The CLECs would like to review a draft of the CLEC VICKI Path Document. Qwest agreed to distribute the draft to CLECs for review.
- The CLECs are interested in a VICKI GUI. Qwest is looking into this.
- The CLECs asked about adding a path with an FOC of the original LSR after that LSR has been followed by a supplemental. Qwest agreed to look into whether this is a viable scenario, and if so, whether it could be added to the VICKI implementation.

Wrap-up

The attendees agreed that this meeting was helpful.

Additional SATE meetings have been scheduled as follows:
November 27, 2001, 9:00 – 11:00 MST, Real World Scenario Testing
December 4, 2001, 9:00 – 11:00 MST, Additional IMA Features and Functions in SATE and Additional SATE features

New Action Items – Note: Many of the new action items will be addressed by Qwest's drafted CMP CRs

- Qwest will check into the feasibility of extending SATE's hours of operations.
- Qwest will research the feasibility of adding TNs that are LERG certified.
- Qwest will develop some options for providing X12 EDI mapping examples of the test data.
- Qwest will check into adding the valid CFAs to the UBL section of the data document.
- Qwest will verify and publish the deployment date for VICKI.
- Qwest will check into adding a VICKI GUI.
- Qwest will research the possibility of providing the path of sending a FOC notice on the previous version of a supp'd LSR.
- Qwest will provide a definition of real world testing by COB Monday 11/26/01.

Old Action Items

- Jake will investigate producing flow diagrams including systems utilized.
  In Progress. Jake has drafted a flow diagram that is currently being reviewed by Qwest internal staff.

Closed Action Items

- Wendy will provide a draft mission statement by next Tuesday, November 13. The draft will be discussed in the next meeting.
  Completed 11/13/01

White Paper on SATE VICKI

(Dec. 7, 2001, Version 1.00)

A White Paper

on

The Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator

December 7, 2001
Version 1.00

DRAFT

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Introduction

Purpose of the Document
This document provides a high-level overview of the Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator (VICKI). The document is made of three key sections, each of which highlights a certain aspect of the project:

- Business Drivers and Purpose
- Definition
- CLEC Process and Documentation

Intended Audience
This document is intended for anyone with a desire to understand the scope, purpose, and status of VICKI

Business Drivers and Purpose

Business History and Need
In August of 2001, the Stand-Alone Test Environment was launched. It was designed to give Competitive Local Exchange Carriers (CLECs) an EDI test bed with which to test various order and pre-order scenarios for certification against Qwest's Interconnect Mediated Access (IMA). SATE was designed to specifically meet the following needs:

- Allow CLECs to test their software in an unsupervised test environment that does not rely on real production accounts and does not run the risk of interfering with production.
- Provide repeatable test cases that do not require a CLEC to provide data.
- Allow CLECs to run test Local Service Request (LSR) and pre-order scenarios in order to master and code to Qwest business rules.

SATE's launch represented an additional improvement to the CLEC Certification Process. With SATE, CLEC testing is simplified. Qwest publishes a Data Document with a set of test scenarios and data that can be used by CLECs to initiate a variety of LSR and pre-order requests. CLECs can use these scenarios to certify their software, regression test their software, or streamline their business processes. Qwest dramatically loosened usage limits with the launch of SATE enabling CLECs to run a large number of pre-order and order test scenarios without Qwest supervision.

Although Order and Pre-Order testing was simplified with SATE's launch, post order processing continues to require coordination with Qwest personnel. In SATE today, CLECs contact the EDI Implementation Team to request certain post-order transactions be sent. The EDI Implementation Team then manually initiates these transactions for EDI transmission, as they would be sent to a CLEC in production. For example, a CLEC tester may want to test to see that a POTS Resale LSR for an Activity of N can be properly processed to completion by that CLEC's software. In this case, a testing CLEC would contact Qwest and request that an FOC and Completion for that LSR be sent. Qwest would then manually trigger these responses.

This process can be enhanced through automation.

Note: Qwest has also recently made plans to move ahead with Real World Scenario Testing for post-order transactions. With real world scenario testing, when a CLEC sends an LSR request to Qwest they are asking "what" would happen to this specific LSR if the telephone numbers, circuits, and facilities in SATE existed in Qwest's Production Network and this specific LSR was sent to Production. Plans for Real World Scenario post-order testing will be addressed in the Flow-Through White Paper to be reviewed on January 8, 2002. These plans were also discussed in the SATE User Group Meeting on November 27, 2001. For post-order processing today, only the above interface testing scenario is supported. Real World Scenario Testing will allow CLECs to test the exact message they would receive in production for the LSR

they sent. VICKI allows them to test message formats, messages, and maps for specific pre-determined test scenarios.

Project Objective
VICKI was created to respond to requirements for further automation and decreased dependence on Qwest personnel for post-order processing. The objective of the VICKI project is to improve a CLECs ability to test post-order transaction processing in a stand-alone manner.

Definition

High-Level Requirements
Qwest processes LSRs in its production OSS through a variety of complex systems. Depending on the processing of the LSR and whether a CLEC has chosen to receive Status Updates from Qwest, a variety of post-order transactions could be sent by Qwest in various different sequences. Some examples of the statuses/sequences are:

- A Firm Order Confirmation (FOC), followed by a Physical Work Completed Status Update on a Service Order, followed by an LSR Completion, and a Posted to be Billed Status Update on that Service Order.
- An Error Status update, followed by a Firm Order Confirmation (FOC), followed by a Physical Work Completed Status Update on a Service Order, followed by an LSR Completion, and a Posted to be Billed Status Update on that Service Order.
- A manual reject.
- A non-fatal message followed by a manual reject.
- A Firm Order Confirmation (FOC), followed by a Jeopardy Status Update on a Service Order, and an LSR Jeopardy.

Upon inception, the High-Level Requirements for VICKI were essentially to automate the aforementioned process for requesting post-order transactions from Qwest such that:

- CLECs could test all valid production scenarios.
- CLECs could test with production time delays as well as with condensed time delays ideal for shortening test cycles.
- CLECs could receive post-order messages on demand and therefore easily test reception.

Design Options
In production, post-order transactions to CLECs are triggered in one of three ways:

- Some messages including FOCs, Manual Rejects, and Non-Fatal Errors are manually triggered by an ISC Representative entering information into IMA.
- Some FOC messages are triggered by the successful Flow Through of an LSR without manual intervention.
- Finally, some messages including status updates and Completions are triggered by a message being sent without manual intervention from Customer Request Manager (CRM) to IMA. CRM receives statuses from various Qwest systems and sends them to IMA.

After establishing the High-Level Requirements, Qwest evaluated several options for creating VICKI . To use production systems, including those behind CRM, would simply increase work for Qwest and the CLECs. If for example, some production systems were used, additional personnel and coordination would be required to trigger the interactions between systems. Such a process was not efficient and did not meet the end goals of the project.

However, the system could not simply send generic post-order transactions to a CLEC. The messages had to match what a CLEC would see in production.

It was therefore determined that the best option was to create a single system that serves as back-end systems do in production thus creating a variety of easy to trigger production-like scenarios.

User Design
VICKI was designed according to the following functional concepts.

At the time a CLEC enters an LSR, they determine the post-order transactions they want to see in response to that LSR and whether they want that LSR to receive those post-order transactions with production-like or testing-conducive time lapses between events. They specify this using the Remarks field of an LSR. For example, if they want an LSR to receive the post-order transactions that eventually result in a Completion with production-like time periods between events the CLEC writes "<Prod: Complete>" in the Remarks field of the LSR field of their LSR. If they want a manual reject with shortened time frames between events for testing purposes, they write "<Test: Jeopardy>."

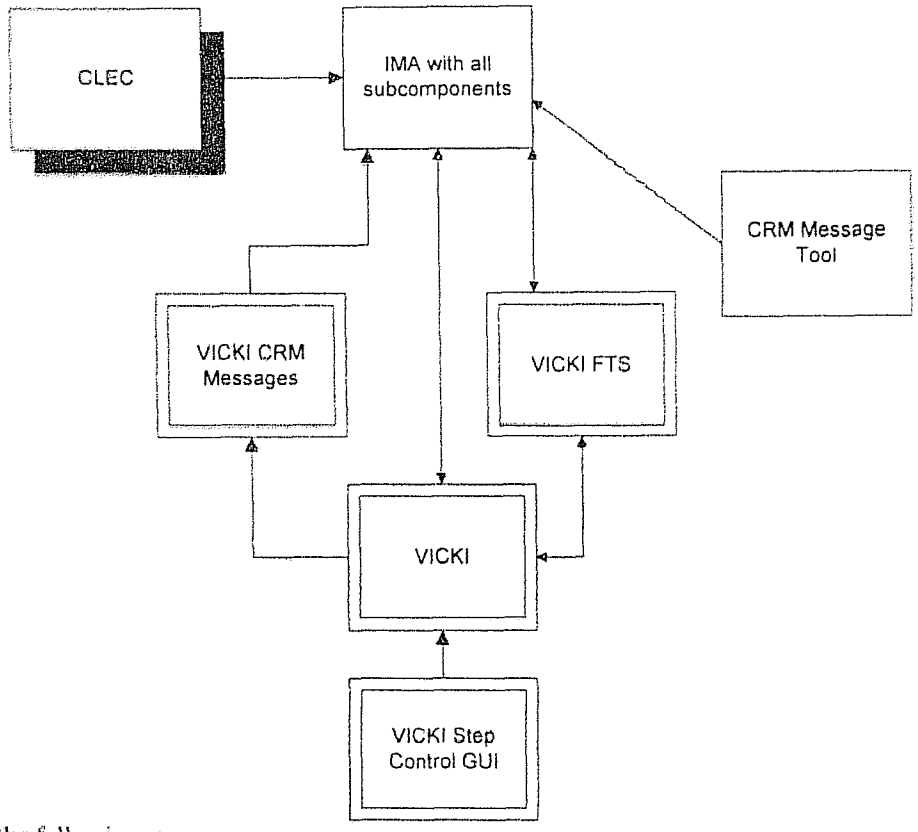
Once entered by a testing CLEC, if an LSR has Remarks that exactly match those of a defined path, a set of transactions is sent to the CLEC. These transactions are called a path. For example, for a POTS Resale New Order where the Remarks read <Test: Error Complete>, the following would be sent to a CLEC's EDI interface:

- An "Error" Status Update (if the CLEC has status updates on) will be sent 15 SATE Operational minutes after LSR entry.
- 15 SATE Operational minutes later an FOC with one N order due one day in the future will be sent to the CLEC.
- 5 SATE Operational Hours later a "Physical Work Completed" Status Update will be sent to the CLEC (if the CLEC has status updates on)
- 15 SATE Operational minutes later an LSR Completion will be sent to the CLEC.
- 15 SATE Operational minutes later a "Posted to be Billed" Status update on the aforementioned LSR will be sent to the CLEC (if they have status updates on).

Note: The Remarks that trigger post-order transactions and the actual post-order transactions they trigger are specific to a Product, Activity and Supplemental Type. Paths are defined for a Product, Activity, Supplemental Type and Remarks field combination. This is done to ensure that the FOC, Service Order Detail and Completion on any path match the general pattern of the transactions that would be received on that LSR in production. From a user standpoint, the remarks trigger paths for multiple products and activities. From a technical standpoint however, each Product, Activity Supp Type, Remarks combination creates a unique path.

Clearly, the paths that exist and the Remarks that trigger them must be published to CLECs. Qwest will publish the valid LSR Remarks for each Product, Activity and Supplemental Type Combination and the responses they trigger in the documentation referenced in the CLEC Process section of this document. Qwest has already defined a set of remarks and associated paths. CLECs also will be able to request additional paths via a process similar in structure to the data request process.

Technical Design
VICKI was designed to meet the User Design referenced above. From a logical standpoint, VICKI is depicted below:



VICKI works in the following manner.

1. When an LSR is entered into SATE it is evaluated to see if it matches the Product, Activity, Remarks and Supplemental Type criteria of a defined path. (If no match is found, no post-order transactions are sent unless the CLEC contacts the EDI Implementation Team and requests messages are sent manually.)
2. If a path is found a list of post-order transactions is created for that LSR according to the path it matched on. Time lapses according to the defined path, are also placed between each transaction.
3. One by one according to the time lapses, each step in the path is enacted and a transaction is sent to the CLEC.

With VICKI, Qwest will automate transactions that are automated in production, and leave manual processes that are currently manual in production. Events will be technically created in the following manner:

- FOCs: VICKI then uses a Flow Through Service emulator to create an FOC based on production FOC examples for that Product, Activity, and Supp Type Combination.
- All Status Updates and Completions: VICKI sends CRM like messages. In the case of Completions, these are based on production Completions examples for that Product, Activity, and Supp Type Combination.
- Second FOCs for a specific LSR, Manual Rejects, Non-Fatals, LSR Level Jeopardies: These are still manually created from the FOM in the exact same as in production.

Note: Path FOCs are provided with varying quantities and flavors of service orders found in production. CLECs are required to map their LSR test scenario to an existing path FOC that meets their needs. Also, with respect to the Service and Equipment detail of a Completion notice, VICKI is built to allow a CLEC to understand the EDI Map structure and content of a Completion. It does not return a Service and Equipment Section specific to the CLEC's test LSR. If a CLEC desires a specific Service and Equipment section be returned, they can request it be added to VICKI via the path request process.

To expedite or postpone transactions, a Path Step Control GUI allows the EDI Implementation Team to override the time delay between post-order transactions. It can be used to force the transaction to be sent earlier or later. A CLEC can contact Qwest to speed or to slow a path. A Qwest introduced CMP CR proposes to make this GUI available to the CLECs.

Note: Outside of VICKI, post-order transactions can still be produced, for those CLECs who desire it, by using the current SATE process. This process utilizes the FOM (an IMA component) and Qwest's CRM Message Tool in the diagram above.

Also available on the path step GUI is a worklist for the EDI Implementation Team. Although some transactions still require manual handling like those performed by an ISC Representative in production, VICKI allows a CLEC to specify what manual action needs to be done on an LSR. These specifications are stated by specifying a unique path.

Current Status
VICKI is due to launch with SATE 9.0, which is currently scheduled for January 28, 2002.

CLEC Process

Qwest plans to produce samples of VICKI path documentation to CLECs for review at the December 11, 2001 SATE User Group Meetings. This should help to explain in greater detail how a CLEC initiates a transaction.

Full processes including the Path Request Process, complete draft process documents, and a complete Path document will be reviewed at the January 8 SATE User Groups Meeting.

Note: A final draft of this white paper will be sent after the first CLEC review on December 11, 2001. It will include more detail on CLEC Documentation and Process as well as detail on how paths will be documented and how a CLEC can use documentation to trigger them.

White Paper on Flow through in SATE

(Jan. 3, 2001, Version 1.00)

A White Paper

on

Flow Through in The Stand Alone Test Environment (SATE)

January 3, 2001
Version 1.00

DRAFT

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CLEC Documentation 6

CLEC Process 6

Introduction

Purpose of the Document
This document provides a high-level overview of Flow Through in the Stand Alone Test Environment (SATE). The document is made of four key sections, each of which highlights a certain aspect of the project:

- Business Drivers and Purpose
- Post-Order Testing in SATE
- Technical Environment with Flow Through
- CLEC Process and Documentation

Intended Audience
This document is intended for anyone with a need to understand the scope, purpose, and status of Flow Through in the SATE.

Business Drivers and Purpose

Business History
From its inception, the Stand-Alone Test environment (SATE) has provided Competitive Local Exchange Carriers (CLECs) with the ability to test all flavors of post-order transactions during their EDI testing and certification.

Originally, when testing post-order transactions, CLECs could contact Qwest and request certain transactions be sent on a given Local Service Request (LSR). For example, if a CLEC wished to test that their software could receive a Firm Order Confirmation (FOC), followed by a Service Order Hold, followed by an LSR Hold, followed by an LSR level Jeopardy, they could contact Qwest and ask that those transactions be sent on a specific LSR. Qwest would then manually send those transactions to the CLEC.

In January of 2002, this manual process is being automated with the introduction of the Virtual Interconnect Center Knowledge Initiator (VICKI). VICKI allows a CLEC to use the Remarks field of an LSR's LSR Form to request specific post-order transactions be sent. For example, a CLEC could enter "Prod: Hold Jeopardy" to receive the transactions mentioned above with production like time delays between events.

VICKI allows CLECs to enter an LSR and receive the post-order transactions they want to test. It does not, however, answer what would happen to that LSR in production. Specifically, VICKI will cause IMA to send an FOC with Flow Through like response time when asked by a CLEC to do so, but it will not let a CLEC see whether that specific LSR would receive a Flow Through FOC in production.

Business Need
Production-like Flow Through systems are needed for a CLEC to test whether a given LSR would Flow Through if sent to production.

Project Objective
A CLEC should be able to send an LSR to SATE and see if that LSR receives a Flow Through generated FOC, is left for manual work, or errors in an attempt to Flow Through. Testing to see whether an LSR flows, errors or is left for manual work is referred to in this document as "Flow Through Testing." The overall objective of this project to allow a CLEC to perform Flow Through Testing.

This objective is being completed in two phases. On February 25, 2002, SATE will support Flow Through Testing for POTS Resale and UNE-P POTS IMA 9.0 LSRs in the Western Region. SATE will support Flow Through Testing for all SATE supported IMA 9.0 functions in all regions by the end of the second quarter of 2002. This document addresses SATE in both phases of this project.

Note: All LSRs for releases prior to IMA 9.0 will be set to "Submitted" status and not be eligible for Flow Through Testing. They will receive no automated post-order responses unless sent to VICKI. IMA 9.0 and all subsequent releases will be eligible for Flow Through Testing in SATE.

Note: Transactions not mentioned above, specifically those beyond service order creation such as Completions and Service Order Holds, will not be automated with this enhancement. Process and methodology for such transactions are stated later in this document.

Post-Order Testing in SATE

Testing Options

With the addition of Flow Through, CLECs will have two basic post-order testing options in SATE. A CLEC can choose one and only one of the options below for a given LSR that passes all IMA acceptance requirements in SATE.

1. They will be able to send an LSR to VICKI and receive the specific post-order response they desire. This response will be based on the specific transactions the CLEC requested using the Remarks field. As with previously defined VICKI functionality, the CLEC will use text in the LSR Remarks field bracketed by "[" and "]" to request specific transactions. The available sets of transactions, paths, will be published to the CLECs. Remarks containing brackets and no text that maps to an existing path will not receive post-order transactions.
2. They will be able to send an LSR for Flow Through Testing. In this case, the CLEC will receive either an FOC, indicating that an LSR flowed, an "Errored" Status Update if the LSR went to Flow Through, but failed(Status Updates are only sent to those CLECs who have requested them), or no response indicating that Flow Through was not attempted. (No response will be given for LSRs that error when trying to flow through if the CLEC does not have Status Updates on.) For Flow Through Testing, it will be assumed an LSR is intended for Flow Through Testing if LSR remarks do not contain brackets.

Note: All LSRs other than POTS or UNE-P POTS in the western region will be set to "Submitted" status and will not be tested for Flow Through Testing during the first phase of this implementation. They will receive no post-order responses. Only POTS and UNE-P POTS LSRs in the western region will be eligible for Flow Through Testing.

Flow Through Testing

As mentioned above, Flow Through Testing will allow a CLEC to enter an LSR and receive production-like responses on any given LSR through to the point where an LSR is automatically FOC'd or the LSR is left for manual handling. SATE Flow Through Testing will allow such testing given the following:

- The world of circuits, Central Offices, accounts and other facilities defined in SATE are the only ones in existence.
- All SATE CLECs can resell all USOCs on all Product Lines in all States where those USOCs are valid.
- No special contracts have been negotiated for delivering service on an expedited basis by any of the SATE CLECs.
- LSRs will not fail flow through because other work on a given address or account is planned.
- Supplemental to Cancel LSRs can only be successfully processed automatically in Flow Through Testing if the original LSR was FOC'd via a Flow Through test. (Note: Any LSR can be successfully canceled in an automated fashion by using VICKI.)
- SATE will not contain any telephone numbers with Local Exchanges Freezes.
- Other previously cited SATE exceptions.

Note that no other automated responses will be sent to CLECs beyond the automatic FOCs or "Errored" Status Updates mentioned above. Qwest, during its December 11 SATE User Group Meeting with CLECs, brought up the issue of additional feedback mechanisms to help explain why a given LSR did or did not Flow Through. It was agreed that information would be passed to CLECs on demand via their EDI

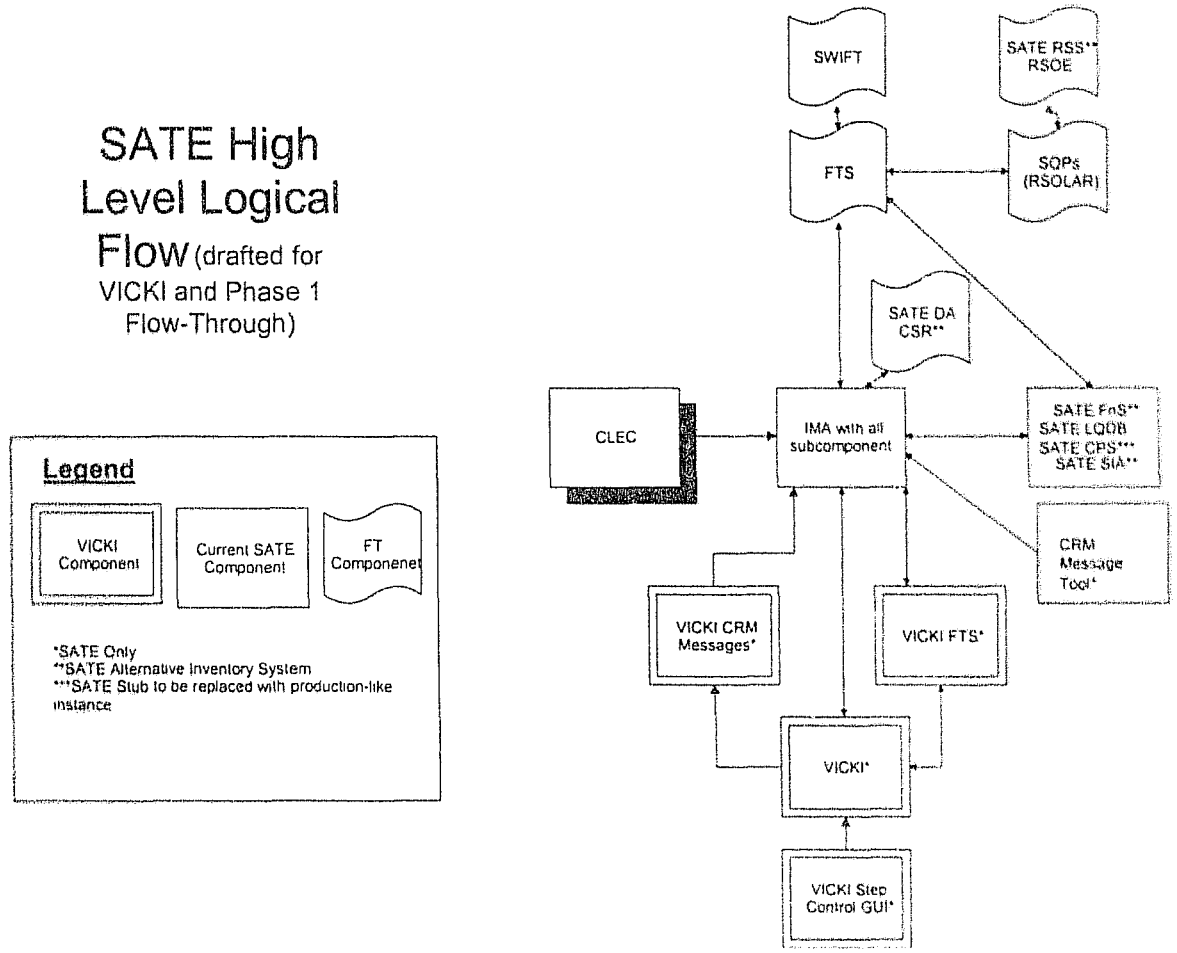
Implementation Team Contacts with a more formal process being developed once both Qwest and the CLECs have some experience with Flow Through Testing.

Technical Environment

SATE Technical Environment with Flow Through
In order to allow for Flow Through Testing of POTS and UNE-P POTS LSRs, SATE is adding production-like instance of the following to the existing SATE environment:

- Flow Through Solutions (FTS)
- Standard Interval Business Service (SIBS)
- SWIFT
- Co- Provider Product Services (CPS)
- Regional Service Order Editor (RSOE)
- Service Order Processors (RSOLAR Only)

A logical representation of SATE with POTS and UNE-P POTS Flow Through in the western region is below. Please note that additional systems will be added to this environment to complete Phase 2 of this project, Flow Through Testing of all SATE supported Products.



Changes Resulting from Flow Through
In order to support Flow Through Testing, two significant additional enhancements will be made to the SATE environment. These were required to allow for Flow Through Testing.

First, SATE will be enhanced to include a production-like instance of CPS (used to validate CLEC contracts) configured for SATE CLECs. This will cause all SATE CLEC requests to receive responses as if those CLECs have the ability to resell all USOCs on all product lines in all states where those USOCs are valid.

Second, SATE data will be reworked such that the following are true:

- All SATE Central Office and LSO names will be changed such that they are shared with production Central Office and LSO names.
- All SATE NPA NXXes will be changed such that they will be actual NPA NXXes served in production by the altered LSO mentioned above.

These data changes will cause significant change to all releases of the EDI SATE Data Document for all pre-order and order scenarios. These data changes will be done only for Western region data during Phase 1 of this project. Eastern and Central region data will be reworked in this manner during Phase 2 of this project. See the CLEC Documentation and Process Section of this document for detail on when and how these changes will be communicated.

Note: The changes above represent the only changes to data in SATE that will make that data production-like. All other data, including the attributes of the Central Offices and NPA NXXes above, will remain derived so as to allow for complete testing in SATE without concern for end-user privacy considerations.

CLEC Documentation and Process

CLEC Documentation
A new version of the EDI SATE Data Document and, if necessary, the EDI Implementation Guide will be published ten business days prior to the planned February 25 launch of Flow Through in SATE. Qwest would like to review these documents with the CLECs during the February Users' Group Meeting. Details on Flow Through and the data rework mentioned above will be included in the document to be reviewed.

CLEC Process
During a December 11, 2001 SATE User Group meeting, Qwest and CLECs agreed that an informal process for communicating why a given LSR did or did not Flow Through will be used in the short term. CLECs will simply contact the EDI Implementation Team to work out the specifics of how they would like to be informed about what happened to a given LSR. Through their EDI Implementation Team contacts, a CLEC can also request additional post-order transactions such as the Completion of a Flow Through Tested LSR.

SATE Data Document

(version 9.11)

Qwest Communications, Inc.

IMA EDI Data Document – for the Stand Alone Test Environment (SATE) version 9.11

Date

Friday, May 17, 2002

Prepared by:
Qwest Communications, Inc. (Qwest)
IMA EDI Implementation Team

For questions regarding this document, please contact:

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Abstract:

This document will assist CLECs, Third-Party Software Vendors and Service Bureaus in providing the necessary data needed to test software or implement the IMA EDI trading capabilities between their organization and Qwest. The information in this document is specific to the use of the IMA EDI interface to the Interconnect Mediated Access ordering systems and should not be construed as being applicable to other IMA EDI interfaces available from Qwest.

Document Information

Document Owner

Qwest IMA EDI SATE Implementation Team

Document History

All revisions made to this document are listed here in chronological order.

Version	Date	Description
9.01	01/21/02	Initial Distribution
9.02	01/28/02	Second Distribution
9.03	01/29/02	Third Distribution
9.04	02/04/02	Fourth Distribution
9.05	02/15/02	Fifth Distribution
9.06	02/22/02	Sixth Distribution
9.07	02/25/02	Seventh Distribution
9.08	03/04/02	Eighth Distribution
9.09	03/22/02	Ninth Distribution
9.10	04/15/02	Tenth Distribution
9.11	05/17/02	Eleventh Distribution

Important This document has been through a formal review process. To the best of our knowledge it is accurate. Qwest Communications, Inc. reserves the right to make further modifications, as necessary.

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Overview

The Qwest-provided test data contained in this document is for those CLECs approved to utilize the Stand Alone Test Environment (SATE) for testing. This Data Document is tabular and will include the scenario description/intent, data rules, query type, example valid values and expected results from use of the provided data. This document should be used in conjunction with the Qwest IMA EDI Disclosure Document. Unless explicitly stated, all rules of the actual IMA EDI environment hold true. All account data and transaction requests are subjected to the same IMA EDI edits used in the production environment. This affords the users the opportunity to run transactions and get realistic errors and consistent responses as a result.

Data Document Release Management Process

An updated version of the Data Document for each currently supported SATE release will be posted to the Wholesale web site on the 15th of each month that does not have a scheduled release. A draft of the Data Document for a new release will be distributed to SATE Users five weeks before a major IMA release. An official release publication will occur four weeks prior to each major IMA release and the day of an IMA and SATE point release. If the 15th of the month is a weekend or holiday, the Data Document posting will occur on the previous business day. The Data Document will not be published 'out of cycle'. All CLEC impacting changes will be communicated in detail through a release notification. All CLEC impacting changes and fix dates will be included in the Change Summary of the Data Document for the next monthly publication.

Data Document Quality Assurance Process

Before each monthly posting, the Data Document will go through a Quality Assurance process to ensure the accuracy and appropriate function of the data. The System Test Team will test all SATE systemic changes that will impact the Document. All data-only updates to the Document will be reviewed by representatives of the individual SATE teams to ensure accuracy before it is published. In addition, a Performance Indicator Determination (PID) test is performed once a month to ensure that the Data Document and SATE systems are in sync.

Data Document Version Control

SATE supports all IMA releases simultaneously. The Data Document version numbers begin with the corresponding release being supported (8.XX), and the additional numbers indicate the new version of the Document (X.03) being released. A majority of the SATE changes that impact the Data Document are made for the current IMA release, and are changed retroactively in all other Data Document releases.

How to use this Document

The scenarios provided in this document are intended to allow a CLEC to test Qwest's minimum testing requirements. The data in the scenarios can be used to test a variety of scenarios not explicitly listed in this document. If a CLEC needs assistance applying the data provided to other scenarios, progression test users should contact their Implementation Team Business Analyst and regression test users should send a message to SATEEDI@QWEST.COM. Additional data and scenarios will be added to this document only when multiple CLECs have requested the same data or scenarios. For each scenario in this document, Qwest has provided the data needed to populate a valid EDI transaction.

The document contains all data that is validated by IMA against the content of a legacy system database or is needed to elicit a specific expected result. To create successful EDI test transaction, the CLEC should populate the scenario with all data provided in the document. If the data for information regarding a field is not included in this document, it can be assumed that any value that conforms to the negotiated business rules and valid values as specified in the Disclosure Document can be populated in the transaction. For example, on the Centrex Resale form, LST and LSO can be populated with any value that conforms to the rules as specified in the Disclosure Document.

Throughout the document, < > are used to represent when the CLEC needs to supply the appropriate data. CC will equal the last two characters of the CLEC's assigned CCNA. DD is used to indicate the use of any two numbers except the last two characters of the CLEC's assigned CCNA. For example, CCNA R01, 509-532-<CC>00-1<CC> would be populated as 509-532-0100-101 and 509-532-<DD>00-1<DD> would be populated as 509-532-0200-102.

In cases where multiple options for populating SANO and NXX are provided with a single scenario listing, the SANO and NXX must match. For example, in scenario DL1, both the NXX and SANO have 532 or 533 as options. When inserting this data into the EDI transaction, either 532 or 533 should be populated into both fields.

CLECs must conform to all Qwest business rules and follow the SATE Data Rules as indicated when creating valid SATE transactions. The Qwest-provided test data, when populated correctly and successfully transmitted to SATE, will create specific scenario results. The expected responses include any data critical to the intent of the scenario. For example, CSR3 is intended to test an incomplete CSR response. Thus, it is important that the response contain RESPONSE=M and MIXTYPE=I. In addition to the data specific to the intent of the scenario, additional data may be returned by the system.

BAN Field

The BAN field is optional, however, if the BAN field is populated, the following format must be executed: **NPA-Z<CC>-1111-111** where <CC> equal the last two characters of the CLEC's assigned CCNA.

NC/NCI/SEC NCI Codes

All NC/NCI/SEC NCI code combinations that are valid in the production IMA system are valid in SATE.

USOCs

All valid IMA USOCs will be valid in the IMA EDI Stand Alone Test Environment. As a result, CLECs can use USOCs in the test environment that may not be valid in their actual interconnect agreement. SATE will validate the USOCs used on an order against the list of USOCs valid in SATE for the state on the LSR, not the CLEC's contract.

For multiple line accounts, the same sets of USOCs apply to all lines on the account. Only the USOCs for the first line are shown. For scenarios in this document where USOCs are provided, these USOCs indicate the USOCs on the account that upon which the scenario's activity is applied, for example, the USOCs on the account to be converted or changed.

Class of Service

A valid and product appropriate class of service (COS) must be used on all requests requiring the input of a class of service. The requirement of a COS can be found in the IMA EDI Disclosure Document. For multiple line accounts, the same sets of USOCs apply to all lines on the account. Only the USOCs for the first line are shown.

PIC/LPIC Basics

Where PICs and LPICs exist, all CSRs returned from Qwest will have an LPIC of 5123 and the PIC value of 0288. When a CLEC is submitting an order, any valid PIC or LPIC will be accepted where applicable per the IMA Disclosure documentation.

User Identity (CCNA/ACNA/CC)

Qwest will assign each user a CCNA and ACNA that is unique to SATE. For the actual CC field (25 on the LSR form), any 4-character alphanumeric value is valid for SATE. Each SATE CCNA can own accounts in any state.

Test Account CSRs

LSRs entered on the system will not effect the CSRs returned by the system. Users may request to have specific account data added to SATE through the Data Request process.

TNs and Appointments

All TNs and appointments contained within SATE can be reserved multiple times by multiple CLECs.

TN/Appointment Cancellation

Appointments and TNs reserved in SATE may be canceled and returned using SATE. If an appointment or TN is reserved, but it is later determined that it will not be used on a request for service, the CLEC may cancel the appointment or TN through the SATE Cancel transaction.

Address Validation and CSR Match Information

The 'smart' capability of the Qwest Legacy Systems in IMA production allow the systems to search for and locate an address or CSR that will most closely match the input of an Address Validation or CSR query. The SATE stub systems do not have the same capabilities to conduct a 'smart' search for almost identical addresses or CSRs. For example, for an AVQ, the Qwest Legacy Systems would have the ability to search for an address on Pine ST when Piner ST was submitted. Similarly, for a CSRQ, the Qwest Legacy Systems may be able to find a CSR for James Smith when James Smiths was submitted. Conversely, the SATE systems would not find these matches.

Service Availability Query

As all valid IMA USOCs are valid for every CLEC in SATE, a Service Availability Query (SAQ) for all USOCs may return a larger volume of data than the CLEC will see in production.

Flowthrough Eligible Products

Flowthrough testing is available in SATE for all SATE-supported products in all regions, subject to the same flowthrough eligibility rules found in production.

To test flowthrough of cancellation supplementals (SUP=1), the original request must have achieved successful flowthrough and produced an FOC. The CLEC must wait one hour from the receipt of the FOC for the original LSR to submit the cancellation supplemental. CLECs can also test cancellation supplemental functionality using VICKI.

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CONTINUATION # [4]

Table 1: Appointment Availability Query (AAQ) / Appointment Selection Query (ASQ)

Scenario #	Scenario Description	NPA-NXX	AAR Expected Results	ASR Input	ASR Expected Results
AQ3	Query for unbundled appointment availability with an available appointment response. (Bad Response)	515-288, 515-358, 515-698	No Available Appointment		
AQ4	Query for unbundled appointment availability with the intention to use returned confirmed appointment response. No specific date requested. (Good Response)	303-744	NONPREM: 015 PREM: 0 Available Appointments Returned: 1. Date = <Seven Days from Date of Request> Time = 0900 2. Date = <Seven Days from Date of Request> Time = 1200 3. Date = <Eight Days from Date of Request> Time = 0900 4. Date = <Eight Days from Date of Request> Time = 1200 Confirmed Appointment: INQRES# = <System Generated> Date = <Seven Days from Date of Request> Completion Time = 0815		
AQ5	Query for unbundled appointment availability with the intention to use returned confirmed appointment response. Specific date (APPRD) requested. (Good Response)	303-744	NONPREM: 015 PREM: 0 Available Appointments Returned: 1. Date = <APPRD + 1 Day> Time = 0900 2. Date = <APPRD + 1 Day> Time = 1200 3. Date = <APPRD + 2 Days> Time = 0900 4. Date = <APPRD + 2 Days> Time = 1200 Confirmed Appointment: INQRES# = <System Generated> Date = <APPRD> Completion Time = 0815		

Table 1: Appointment Availability Query (AAQ) / Appointment Selection Query (ASQ)

Scenario #	Scenario Description	NPA-NXX	AAR Expected Results	ASR Input	ASR Expected Results
ASQ1	Query for appointment availability for "Other Products" with a pre-reserved appointment response (Good Response). CLEC submits an appointment selection query to select from the list of alternative appointment times with a reserved appointment response. No Specific Date Requested. (Good Response)	303-782	INQTYPE: 150 PREM: 90 Available Appointments Returned: 1. Date = <Four Days from Date of Request> Time = 0900-1300 2. Date = <Four Days from Date of Request> Time = 1200-1600 3. Date = <Five Days from Date of Request> Time = 0900-1300 4. Date = <Five Days from Date of Request> Time = 1200-1600 Confirmed Appointment: INQRES# = <System Generated> Date = <Six Days from Date of Request> Completion Time = 1600 ABTIME = 1200-1600	Select an appointment returned.	INQRES# = <System Generated> COMPDATE = <Date used in ASQ> COMPTIME = <COMPTIME used in ASQ> ABTIME = <ABTIME used in ASQ>
ASQ2	Query for appointment availability for "Other Products" with a pre-reserved appointment response (Good Response). However, CLEC submits an appointment selection query to select from the list of alternative appointment times with a time slot no longer available response. (Bad Response)			Submit ASQ with DATE = <Any future Date> COMPTIME = 1500	OSS Gateway: Error caught by data source Message[0] No time available

Table 3: Appointment Availability Query (AAQ) / Appointment Selection Query (ASQ)					
Scenario #	Scenario Description	WTN	AAR Expected Results	ASR Input	ASR Expected Results
AAQ1	Query for successful appointment availability with a pre-reserved appointment request (Good Response). However, CLEC submits an appointment selection query to select from the list of available appointment times with a reserved appointment request. (No Specific Date Requested (Good Response)	[illegible]	Number of AAs = 4 PREQ# = 0 Available Appointments Returned: 1. Date = <Seven Days from Date of Request> Time = 0900 2. Date = <Seven Days from Date of Request> Time = 1200 3. Date = <Eight Days from Date of Request> Time = 0900 4. Date = <Eight Days from Date of Request> Time = 1200 Confirmed Appointment: INQRES# = <System Generated> Date = <Seven Days from Date of Request> Completion Time = 0815	Select an appointment returned	PREQ# = <System Generated> CONFIRM# = <Date used in ASQ> COMPTIME = <COMPTIME used in ASQ> APPTIME = <APPTIME used in ASQ>

Table 2: Address Validation Query (AVQ)

		WTN		Address		
Scenario #	**Scenario Description**	**Data Rules**	**Examples**	**Data Rules**	**Examples**	**Expected Results**
AVQ1	By TN - Exact Match	Any TN with an NPA equal to 509 and an NXX equal to 467 or 468	509-467-xxxx	CALA = SPOK or ZIP is 99218		The Exact Match should return X Riverside RD APT 4 Spokane, WA 99218 where X= the NXX used to query.
AVQ2	By TN - Exact Match	Any TN with an NPA equal to 509 and an NXX equal to 532, 533, or 534	509-532-xxxx	CALA = SPOK or ZIP is 99212		The Exact Match should return X Storefront DR, BLDG A, Spokane, WA 99212 where X= the NXX used to query.
AVQ3	By TN - Exact Match	Any TN with an NPA equal to 515 and an NXX equal to 274 or 277	515-274-xxxx	CALA = IA or ZIP is 50310		The Exact Match should return X Smith RD, Des Moines, IA 50310 where X= the NXX used to query.
AVQ4	By TN - Exact Match	Any TN with an NPA equal to 515 and an NXX equal to 251, 270, 331, or 727	515-251-xxxx	CALA = IA or ZIP is 50310		The Exact Match should return X Van Cleve RD, Des Moines, IA 50310 where X= the NXX used to query.
AVQ5	By TN - Exact Match	Any TN with an NPA equal to 303 and an NXX equal to 282, 698, or 715	303-282-xxxx	CALA = DNV or ZIP is 80209		The Exact Match should return X Harrison RD, Denver, CO 80209 where X= the NXX used to query.

Table 2 - Street Validation Query (ASVQ)

Scenario #	Scenario Description	TN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
Q6	By TN - Multiple Match	Any TN with an NPA equal to 303 and an NXX equal to 260, 352, 389, 436 or 446	303-260-xxxx	CALA = DNV or ZIP is 80209		The Multiple Match should return X Fedorowych DR, Denver, CO 80209 where X= the NXX used to query and X Pearl DR, Denver, CO 80209 where X= the NXX used to query.
Q7	By TN - Multiple Match	Any TN with an NPA equal to 509 and an NXX equal to 838, 835, or 747	509-838-xxxx	CALA = SPOK or ZIP is 99201		The Multiple Match should return X SW Lakefront DR, Spokane, WA 99201 where X= the NXX used to query and X Fireside DR FLR 2, Spokane, WA 99201 where X= the NXX used to query.
Q8	By TN - Multiple Match	Any TN with an NPA equal to 515 and an NXX equal to 288, 558, or 698	515-698-xxxx	CALA = IA or ZIP is 50310		The Multiple Match should return X Fawcett DR, Des Moines, IA 50310 where X= the NXX used to query and X Mehling DR, Des Moines, IA 50310 where X= the NXX used to query.
Q9	By TN - No match	Any TN with an NPA equal to 199 and an NXX equal to 699	199-699-xxxx	Any valid SATE CALAs or Zip Codes can be used		• Unable to validate address • OSS Gateway: Routing Table Update Required. Call OSS/UHD.
Q10	By Address - Exact Match			X Fedorowych DR, Denver, CO Zip Code= 80209 or CALA = DNV where X= any number equal to 260, 352, 389, 405, 436, or 446	260 Fedorowych DR, Denver, CO 80209	The Exact Match should return X Fedorowych DR, Denver, CO 80209 where X= SANO used to query.
Q11	By Address - Exact Match			X Pearl DR, Denver, CO Zip Code = 80209 or CALA = DNV where X = any number equal to 260, 352, 389, 405, 436, or 446	260 Pearl DR, Denver, CO 80209	The Exact Match should return X Pearl DR, Denver, CO 80209 where X= SANO used to query.
Q12	By Address - Exact Match			X Harrison RD, Denver, CO Zip Code = 80209 or CALA = DNV where X = any number equal to 282, 698, or 715	282 Harrison RD, Denver, CO 80209	The Exact Match should return X Harrison RD, Denver, CO 80209 where X= SANO used to query.
Q13	By Address - Exact Match			X Van Cleve RD, Des Moines, IA Zip Code = 50310 or CALA = IA where X = any number equal to 251, 270, 331, or 727	251 Van Cleve RD, Des Moines, IA 50310	The Exact Match should return X Van Cleve RD, Des Moines, IA 50310 where X= SANO used to query.
Q14	By Address - Exact Match			X Mehling DR, Des Moines, IA Zip Code= 50310 or CALA = IA where X = any number equal to 288, 558, or 698	288 Mehling DR, Des Moines, IA 50310	The Exact Match should return X Mehling DR, Des Moines, IA 50310 where X= SANO used to query.

Table 7 – Address Validation Query (AVQ)

		ZIP		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
VQ15	By Address - Exact Match			X Fremont DR, Des Moines, IA Zip Code = 50310 or CALA = IA where X = any number equal to 268, 558, or 598	268 Fremont DR, Des Moines, IA 50310	The Exact Match should return X Fremont DR, Des Moines, IA 50310 where X= SANO used to query.
VQ16	By Address - Exact Match			X Smith RD, Des Moines, IA Zip Code= 50310 or CALA =IA where X= any number equal to 274 or 277	274 Smith RD, Des Moines, IA 50310	The Exact Match should return X Smith RD, Des Moines, IA 50310 where X= SANO used to query
VQ17	By Address - Exact Match with Supplemental information			X Storefront DR, Spokane, WA Zip Code= 99212 or CALA = SPOK where X= any number equal to 532, 533 or 534	532 Storefront DR, Spokane, WA 99212	The Exact Match should return X Storefront DR, Spokane, WA 99212 where X= SANO used to query. *Supplemental Option: BLDG A*
VQ18	By Address - Exact Match			X SW Lakefront DR, Spokane, WA Zip Code= 99201 or CALA = SPOK where X= any number equal to 838, 835 or 747	838 SW Lakefront DR, Spokane, WA 99201	The Exact Match should return X SW Lakefront DR, Spokane, WA 99201 where X= SANO used to query.
VQ19	By Address - Exact Match			X Fireside DR, FLR 2, Spokane, WA Zip Code= 99201 or CALA = SPOK where X= any number equal to 838, 835 or 747	838 Fireside DR, FLR 2, Spokane, WA 99201	The Exact Match should return X Fireside DR, FLR 2, Spokane, WA 99201 where X= SANO used to query.
VQ20	By Address - Exact Match			X Riverside RD, APT 4, Spokane, WA Zip Code= 99218 or CALA = SPOK where X= any number equal to 467 or 468	467 Riverside RD, APT 4, Spokane, WA 99218	The Exact Match should return X Riverside RD, APT 4, Spokane, WA 99218 where X= SANO used to query.
VQ21	By Address – Multiple CALAs for ZIP			Any address with a Zip code of 80401		The Multiple CALAs should return DNV, NCO and SCO
VQ22	By Address – Near Match			X Cross ST, Denver, CO Zip Code= 80209 or CALA= DNV where X = any number other than 744 or 745	740 Cross ST, Denver, CO 80209	The Near Matches should return SANO used to query and a house number of 744 or 745 Cross ST, Denver, CO 80209
VQ23	By Address - No Match			X E Bayaud AV, Denver, CO Zip Code= 80209 or CALA= DNV where X= 3329	3329 E Bayaud AV, Denver, CO 80209	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. *No partial match found.*

Table 2: Address Validation Query (AVQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
AVQ24	By Address - SAG Only			324 Old Trafford WY Spokane, WA Zip Code= 99212 or CALA= SPOK	324 Old Trafford WY, Spokane, WA 99212	The Exact Match - SAG Only should return 324 Old Trafford WY, Spokane, WA 99212.

Table 3: Connecting Facility Assignment (CFA)

Scenario #	Scenario Description	LOCA	LOCZ	CABNM	First Unit	Last Unit	[1]Expected Results
CFA1	Query to obtain list of CFAs by cable group with valid ACNA, LOCA and LOCZ; selecting from a list of valid cable name, cable type and unit range. (Good Response)	DNVRCOSO	DNVRCOSO<ACNA>				Four groups returned, the groups are as follows: CABNM = ALT01 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 64 PCTAVAIL = 64 CABNM = ALU02 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 50 PCTAVAIL = 50 CABNM = ALT03 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 0 PCTAVAIL = 0

[1] BLANK values will not be returned on X12 responses

Table A - Inventing Facility Assignment (CFA)

Scenario #	Scenario Description	LOCA	LOCZ	CABNM	First Unit	Last Unit	Expected Results
							CABNM = ALT02 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00050 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IU QTYSPARE = 0 PCTAVAIL = 0
CFA2	Query to obtain list of CFAs by cable group supplying ACNA, LOCA and LOCZ (however, one value is invalid); no positive response. (Bad Response)	DNVRCOHA	DNVRCOHA<ACNA>				Invalid user data
CFA3	Query to obtain list of CFAs by cable unit with valid ACNA, LOCA, LOCZ, CABNM, FIRST and LAST UNIT. (Good Response)	DNVRCOSO	DNVRCOSO<ACNA>	ALT03	00049	00051	The units returned are as follows: CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00049 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00050 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank

Scenario #	Scenario Description	LOCA	LOCZ	CABNM	First Unit	Last Unit	Expected Results
							DUEDT = Blank CABNM = ALT01 CABTYP = VF-2WIRE UNIT = 0001 LOCA = DNVRCOHA LOCZ = DNVRCOHA<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank **REPEATS UNTIL UNITNUM=100
CFA4	Query to obtain list of CFAs by cable unit with an invalid value in ACNA, LOCA, LOCZ, CABNM, FIRST or LAST UNIT. (Bad Response)	DNVRCOHA	DNVRCOHA<ACNA>	ALT01	0023	0037	Invalid user data

Table 4: Customer Service Record (CSR)

Scenario #	Scenario Description	WTN or ECCKT	Name and Address	Expected Results
CSR1	Search by Address & WTN for Full CSRQ No CSR Returned Bad Response – (B)	303-322-9761	Elizabeth Tyler 3329 E Bayaud AV, Denver, CO	OSS Gateway: Error caught by data source Message[0] Received Error From FnsGateway (6.4.1.3) on message ResDupAccountList: E101 Account not in BOSS/CARS
CSR2	Search by Address & WTN Full CSR Returned Good Response – (G)	303-436-<CC>51	Roy Keane 436 Fedorowych DR, Denver, CO	AN = 303-436-<CC>51 CUSTCODE = 1<CC> CS = 1FB; STATIND = LIVE; LN = KEANE, ROY; LA = 436 FEDOROWYCH DR, DENVER; USOC = 1FB, /LCC, /RSID <CCNA>, /PIC 0288, /LPIC 5123; USOC = ESX, /RSID <CCNA>;
CSR3	Search by Address & WTN Mixed Response - (I) CSR incomplete	515-331-<CC>00	<CCNA> Corporation 620 Morel RD, Des Moines, IA	855 Received. RESPONSE = M MIXTYPE = I

Scenario #	Search by Address or WTN	WTN or BTN #	Name and Address	Expected Results
CSR5	Search by Address & WTN Mixed Response - (E) over base size - return via e-mail	303-389-<CC>00	<CCNA> Corporation 745 Cross ST Denver, CO	855 Received RESPONSE = M MIXTYPE = E Message Returned: Request has been submitted (Note: The CSR will not be transmitted via e-mail.)
CSR6	Search by Address & WTN Mixed Response - (F) over base size - return via FTP	303-389-<CC>00	<CCNA> Corporation 745 Cross ST Denver, CO	855 Received RESPONSE = M MIXTYPE = F Message Returned: Request has been submitted (Note: The CSR will not be transmitted via FTP.)
CSR7	Search by Address & WTN Mixed Response - (M) Multiple Match	515-255-5000	Alex Ferguson 515 Morel RD, Des Moines, IA	Multiple Match Response: • 515-255-5000-REFNUM 1121 • 515-255-5000-REFNUM 2123
CSR8	Search by Address & WTN for Partial CSRQ No CSR Returned Bad Response – (B)	303-788-9019	George Bisgard 528 Williams ST, Denver, CO	OSS Gateway: Error caught by data source Message[0] ExcSupportCsrLegacyFatalError : File [SupFnsInterface.cpp], Line# [748] Received Error From FnsGateway (6.4.1.3) on message ResDupAccountList: E101 Account not in BOSS/CARS while resolving account o...

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Search for Service Address & Account # (ECCKT) Full CSR Returned Good Response – (G)	[illegible]	[illegible]	[illegible]
CSR10	Search by Address & ECCKT for Full CSRQ No CSR Returned Bad Response – (B)	28.LXFU.30<CC>01..MS	Jeff Bigger 1998 Broadway ST, Denver, CO	OSS Gateway: Error caught by data source Message[0] Received Error From FnsGateway (6.4.1.3) on message ResDupAccountList: E106 Account not found
CSR11	Search by Address & ECCKT Full CSR Returned Good Response - (G)	4.LXFY.12<CC>03..PN	Paul Scholes 3429 Green RD, Spokane, WA	AN = 509-T34-<CC>03 CUSTCODE =1<CC> BILLNM = <CCNA> STREET = 3429 Green RD CITY = Spokane STATE = WA ZIP = 99212 CS = XBMXN; STATIND = LIVE USOC = XBMXN, /ZCID <CCNA>; USOC = TYLCQ, /NCI 02QC3.OOD, /NC LX--, /ZCID <CCNA>; USOC = U21, /NCI 02LS2, /NC LX--, /ZCID <CCNA>, /RTZ 2;

FAQ2	POTS Facility Availability by Address: Good Response	LSO: 509558		532 SouthEast 228, BLDG A, Spokane, WA 99212 or CALA = SPOK in place of Zip Code			WLINUM = 99 LINESTAT = A DSIND = Y REMARK = APPOINTMENT SCHEDULER REQUIRED. PRDNOTNUM = 000 PRDNOTSUPP = Blank PENDNUM = 0 PDORDERTYP = Blank ORDNUM = Blank PDORDERDD = Blank
FAQ3	POTS Facility Availability by TN: Good Response	Any Number where the NPA equals 515 and the NXX equals 251. LSO: 515270	515-251-5000	CALA = IA or Zip Code= 50310			WLINUM = 99 LINESTAT = A DSIND = Y REMARK = APPOINTMENT SCHEDULER REQUIRED. PRDNOTNUM = 000 PRDNOTSUPP = Blank PENDNUM = 0 PDORDERTYP = Blank ORDNUM = Blank PDORDERDD = Blank
FAQ4	POTS Facility Availability by TN: Good Response	Any Number where the NPA equals 509 and the NXX equals 532.	509-532-0000	CALA = SPOK or Zip Code= 99212			WLINUM = 99 LINESTAT = A DSIND = Y REMARK = APPOINTMENT SCHEDULER REQUIRED.

[2] BLANK values will not be returned on X12 responses

AQ5	POTS Facility Availability by Address: Bad Response	LSO 332950		3329 E Bayaud AV, Denver, CO 80209 or CALA= DNV in place of Zip Code			• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address Validation is not an EXACTMATCH
AQ6	POTS Facility Availability by TN: Bad Response	303-322-9999		CALA = DNV or Zip Code = 80209			• Unable to validate address • OSS Gateway: SIA_ADR_Router caught the following exception: \n Error Code 11900:\n SIA_Router::sqlerr - Oracle error\nSIA_ADR_Router::getAreaByNPANXX - Data not found\nORA-01403: no data found • Address Validation is not an EXACTMATCH
AQ7	Convert POTS to Unbundled Loop FAQ by Telephone Number: Good Response	509-568-5000		Zip Code= 99212 or CALA = SPOK			LINENUM = 1 ECCKT = 509 568-5000 SERVON = COPPER LOAD = NONE MOVE = IF LOOPCHAR = L, THIS EQUALS "NO MOVE LOADING REQUIRED." IF LOOPCHAR = N OR D,

Scenario #	Scenario Description	WTN Data Entry	Address Data Entry	Expected Results
LQQ1	Unbundled ADSL By TN: Good Response	303 260-0001	7 ELA = HWY = 2 = Code = BLANK	ECCKTQ = 1 ECCKT = BLANK NPANXX = BLANK WTN = BLANK ECCKTNUM = 1 LOOPQUALMESG = Circuit ID, 303 260-0001; Loop Length, 6.4; BT Length, 0; Insert Loss, 25.61; Metal, COPPER; # Wires, TWO; Load Type, NONE; LOOPSTAT = A LPAC = UADSL
LQQ2	Unbundled ADSL By Address: Good Response		260 Fedorowych DR, Denver, CO 80209	ECCKTQ = 1 ECCKT = BLANK NPANXX = BLANK WTN = BLANK ECCKTNUM = 1 LOOPQUALMESG = Circuit ID, 303 260-0001; Loop Length, 6.4; BT Length, 0; Insert Loss, 25.61; Metal, COPPER; # Wires, TWO; Load Type, NONE; LOOPSTAT = A LPAC = UADSL

LQQ4	Loop Level Data by Address: Bad Response		3329 E Bayaud AV, Denver, CO 80209	The Street Address Number should be left justified in the field to query. LOOP> 3329 E Bayaud AV, Denver, CO ECCKTQ = 24 **Up to 24 lines are returned for this address** ECCKT = BLANK NPANXX = BLANK WTN = 303-260-0000 ECCKTNUM = 1 LOOPQUALMESG = BLANK LOOPSTAT = BLANK LPAC = BLANK LST = DNVRCOSA F1LPCP = BLANK F2LPCP = BLANK LL = 6.6000kft LLT = A LLGQ = 5 LLG = 26G6.6000kft LLG = 24G0.0000kft LLG = 22G0.0000kft LLG = 19G0.0000kft LLG = 17G0.0000kft ELL = 6.6000kft PGPRES = A RSUIND = BLANK LCQ = 0 BTQ = 0
LQQ5	Unbundled ADSL By TN: Bad Response	303-322-0000	CALA = DNV or Zip Code = 80209	OSS Gateway: Error caught by data source Message[0] ERROR: No information was found for this address.
LQQ6	Loop Level Data by Address: Bad Response		3329 E Bayaud AV, Denver, CO 80209	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match

				Splitter or Cable Connection		
MPQ1	POTS Splitter Query - Outside Co-location Cage - Range Requested Good Response	509534	POTSSPLITQTY: 9 POTSSPLIT: VDA.0010044.<CC>.01-001 VDA.0010044.<CC>.01-009	VDA.0010044.<CC>.01-001	Invalid	"Specified device X not available" where X is the Splitter used to query
				VDA.0010044.<CC>.01-002	Valid	
				VDA.0010044.<CC>.01-003	Valid	
				VDA.0010044.<CC>.01-004	Valid	
				VDA.0010044.<CC>.01-005	Valid	
				VDA.0010044.<CC>.01-006	Valid	
				VDA.0010044.<CC>.01-007	Valid	
				VDA.0010044.<CC>.01-008	Valid	
				VDA.0010044.<CC>.01-009	Valid	
MPQ2	POTS Splitter Query - Outside Co-location Cage - List Requested Good Response	509534	POTSSPLITQTY: 3 POTSSPLIT: VDA.0010044.<CC>.01-001 VDA.0010044.<CC>.01-003 VDA.0010044.<CC>.01-006	VDA.0010044.<CC>.01-001	Invalid	"Specified device X not available" where X is the Splitter used to query
				VDA.0010044.<CC>.01-003	Valid	
				VDA.0010044.<CC>.01-006	Valid	
MPQ3	POTS Splitter Query - Outside Co-location Cage - Bad Response	703830				OSS Gateway: Error caught by Fns Message[0] LSO not valid
MPQ4	Cable Connection Query - Inside Co-location Cage - Range Requested Good Response	509534	LOCACBCONN through HICABCONN: R<CC>.ALT01.001 through R<CC>.ALT01.009	R<CC>.ALT01.001	Invalid	"Specified device X not available" where X is the Cable Connection used to query
				R<CC>.ALT01.002	Invalid	"Specified device X not available" where X is the Cable Connection used to query
				R<CC>.ALT01.003	Valid	
				R<CC>.ALT01.004	Valid	
				R<CC>.ALT01.005	Valid	
				R<CC>.ALT01.006	Valid	
				R<CC>.ALT01.007	Valid	
				R<CC>.ALT01.008	Valid	

Scenario #	Scenario Description	LSO	Query Data	Expected Results		
				Splitter or Cable Connection	FAA/EAI	FAA/EAI
				R<CC> AL TOLL [illegible]	Valid	
MPQ5	Cable Connection Query - Inside Co-location Cage - Loc Requested Good Response	[illegible]	CABLECONTY = 3 CABLECONS R<CC> AL TOLL [illegible] R<CC> AL TOLL [illegible] R<CC> AL TOLL [illegible]	R<CC> AL TOLL [illegible]	Invalid	Specified cable 1 not available as "Y" when X is the Cable Connector and to query out Y as the querying LEC's [illegible]
				R<CC> AL TOLL [illegible]	Valid	
				R<CC> AL TOLL [illegible]	Valid	
MPQ6	Cable Connection Query - Inside Co-location Cage - Bad Response	703E30				OSS Gateway Error caught by Free Message[0] LSO not valid

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[1]Expected Results
RLDQ1	Raw Loop Data Query by TN	Any Number where the NPA equals 303 and the NXX equals 260, 352, 389, 405, 436, or 446.	303-260-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 303-<NXX-XXXX used to query> Street Address Number should match the NXX of the TN used to query. <NXX> Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOHA MLTDIST = 8300 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 750

[1] BLANK values will not be returned on X12 responses

Table 3: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						LOADPT_AMOUNT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = 1T Y Parkmeyer DR [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ2	Raw Loop Data Query by TN	Any Number where the NPA equals 303 and the NXX equals 282, 698 or 715.	303-282-0000			ECCKTQ = 1 ECCKTNUM = 0 WTN = 303-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Harrison RD, Denver, CO 80209 WCCLLI = DNVRCOSO MLTDIST = 7300 LOOPSTAT = WKG SEGMENTQTY = 3 SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2

Table 4 – Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						TERMINAL_ID = IT Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 3 TERMINAL_ID = IT Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 282 LOADPTAMT = 0 LCT = BLANK
DQ3	Raw Loop Data Query by TN	Any Number where the NPA equals 515 and the NXX equals 288, 558, or 698.	515-558-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 515-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Mehling DR, Des Moines, IA 50310 WCCLLI = DESMIADT MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 5.800kf

Table 4: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		*Expected Results
		Data Rules	Examples	Data Rules	Examples	
						CABLE_NAME = 26 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 250 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ4	Raw Loop Data Query by TN	Any Number where the NPA equals 515 and the NXX equals 251, 270, 331, or 727.	515-251-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 515-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN. <NXX> Van Cleve RD, Des Moines, IA 50310 WCCLLI = DESMIANW MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX = 331 then Y = 899. When NXX = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 8.800kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 252 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2

Table 2: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						TERMINAL_ID = IT Y Van Cleve Rd [When NXX = 799 then Y = 270. When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX = 331 then Y = 899. When NXX = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX = 331 then Y = 899. When NXX = 727 then Y = 999.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ5	Raw Loop Data Query by TN	Any Number where the NPA equals 515 and the NXX equals 274 or 277.	515-277-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 515-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN. <NXX> Smith RD, Des Moines, IA 50310 WCCLLI = DESMIAWS MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 3.200kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 251 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM= 2 TERMINAL_ID = IT Y Smith Rd [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK

Table 5. Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
DQ6	Raw Loop Data Query by TN	Any Number where the NPA equals 509 and the NXX equals to 532, 533 or 534	509-532-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 509-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN. <NXX> Storefront DR, BLDG A, Spokane, WA 99212 WCCLLI = SPKNWAKY MLTDIST = 8200 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr [When NXX = 532 then Y= 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 8.800kf CABLE_NAME = 32 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 252 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
RLDQ7	Raw Loop Data Query by TN	Any Number where the NPA equals 509 and the NXX equals 838, 835, or 747	509-838-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 509-<NXX-XXX used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Fireside DR, FLR 2, Spokane, WA 99201 WCCLLI = SPKNWA01 MLTDIST = 4900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 5.300kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 210 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 304 LOADPTAMT = 0 LCT = BLANK
RLDQ8	Raw Loop Data Query by TN	Any Number where the NPA equals 509 and the NXX equals 467 or 468.	509-467-0000			ECCKTQ = 1 ECCKTNUM = 0 ECCKT = BLANK WTN = 509-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN. <NXX> Riverside RD, APT 4, Spokane, WA 99218

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
						WCCLLI = SPKNWAWH MLTDIST = 8100 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 8.800kf CABLE_NAME = 12 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 152 LOADPTAMT = 0 LCT= BLANK SEGMENTNUM = 2 TERMINAL_ID = !T Y Riverside Rd [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ9	Raw Loop Data Query by Address (unassigned)			405 Fedorowych DR, Denver, CO 80209	405 Fedorowych DR, Denver, CO 80209	ECCKTQ = 24 Up to 24 spares are returned on such a query. The 24 spares that are returned will have Circuit IDs in the following format: ECCKTNUM = 0 29.LXFU.9234XX..MS where XX= any value 00 through 99 WTN = BLANK 405 Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOMA MLTDIST = 7300 LOOPSTAT = BLANK SEGMENTQTY = 2 SEGMENTNUM = 1

Table 2: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
						TERMINAL_ID = X 799 Fedorowych Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT 799 Fedorowych Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = 799SP PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK
RLDQ10	Raw Loop Data Query by Address (assigned)			446 Fedorowych DR, Denver, CO 80209. The CALA for this address is DNV and the Zip Code is 80209.	446 Fedorowych DR, Denver, CO 80209	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 303-446-0000 through 303-446-0023 446 Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOMA MLTDIST = 8300 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X 999 Fedorowych DR BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 750 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT 999 Fedorowych DR BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
						CABLE_NAME = 999SP PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ11	Raw Loop Data Query by Address (assigned)			X Fedorowych DR, Denver, CO 80209 where X= 260, 352, 389 or 436. The CALA for this address is DNV and the Zip Code is 80209.	260 Fedorowych DR, Denver, CO 80209	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 303-<SANO from Query>-0000 through 303-<SANO from Query>-0023 <SANO from Query> Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOMA MLTDIST = 8300 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When SANO = 436 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 750 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When SANO = 436 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When

Table 3: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						SAMO = 436 then Y = 899] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 255 LOADPTAMT = 0 LCT = BLANK
RLDQ12	Raw Loop Data Query by Address(unassigned)			715 Harrison RD, Denver, CO 80209. The CALA for this address is DNV and the Zip Code is 80209	715 Harrison RD, Denver, CO 80209	ECCKTQ = 24 Up to 24 spares are returned on such a query. The 24 spares that are returned will have Circuit IDs in the following format: ECCKTNUM = 0 29.LXFU.9984XX..MS where XX= any value 00 through 99 WTN = BLANK 715 Harrison RD, Denver, CO 80209 WCCLLI = DNVRCOSO MLTDIST = 7300 LOOPSTAT = BLANK SEGMENTQTY = 3 SEGMENTNUM = 1 TERMINAL_ID = X 399 Harrison Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT= 0 LCT= BLANK SEGMENTNUM = 2 TERMINAL_ID = IT 399 Harrison Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL .800kf CABLE_NAME = 399SP PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 3 TERMINAL_ID = IT 399 Harrison Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = 399SP

Table X: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	With Data Rules	Examples	Address Data Rules	Examples	Expected Results
						PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK
RLDQ11	Raw Loop Data Query by Address (assigned)			X Harrison RD, Denver, CO 80209 where X= 282 or 698. The CALA for this address is DNV and the Zip Code is 80209.	282 Harrison RD, Denver, CO 80209	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 303-<SANO from Query>-0000 through 303-<SANO from Query>-0023 <SANO from Query> Harrison Rd, Denver, CO 80209 WCCLLI = DNVRCOSO MLTDIST = 7300 LOOPSTAT = WKG SEGMENTQTY = 3 SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison DR [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 3

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[3]Expected Results
						TERMINAL_ID = IT Y Harrison DR [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 282 LOADPTAMT = 0 LCT = BLANK
RLDQ14	Raw Loop Data Query by Address (unassigned)			288 Mehling DR, Des Moines, IA 50310 The CALA for this address is IA and the Zip Code is 50310.	288 Mehling DR, Des Moines, IA 50310	ECCKTQ = 24 Up to 24 spares are returned on such a query. The 24 spares that are returned will have Circuit IDs in the following format: ECCKTNUM = 0 1.LXFU.1234XX..NW where XX= any value 00 through 99 WTN = BLANK 288 Mehling DR, Des Moines, IA 50310 WCCLLI = DESMIADT MLTDIST = 7300 LOOPSTAT = BLANK SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X 399 Mehling Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE= NO_PG PAIR_NUMBER= 751 LOADPTAMT= 0 LCT= BLANK SEGMENTNUM= 2 TERMINAL_ID = IT 399 Mehling Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL .800kf CABLE_NAME = 399SP PAIR_GAIN_TYPE= NO_PG PAIR_NUMBER= 287

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
narlo #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[3]Expected Results
						LOADPTAMT= 0 LCT= BLANK
QQ15	Raw Loop Data Query by Address (assigned)			X Mehling DR, Des Moines, IA 80209 where X = 558 or 698. The CALA for this address is IA and the Zip Code is 50310.	558 Mehling DR, Des Moines, IA 50310	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Mehling DR, Des Moines, IA 80209 WCCLLI = DESMIADT MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 5.800kf CABLE_NAME = 26 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 250 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 238 LOADPTAMT = 0 LCT = BLANK

Table 8: Raw Loop Data Query (RLDQ)						
		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[3]Expected Results
RLDQ16	Raw Loop Data Query by Address (unassigned)			270 Van Cleve RD, Des Moines, IA 50310. The CALA for these numbers is IA and the Zip Code is 50310.	270 Van Cleve RD, Des Moines, IA 50310	ECCKTQ = 24 Up to 24 spares are returned on such a query. The 24 spares that are returned will have Circuit IDs in the following format: ECCKTNUM = 0 1.LXFU.9978YY..NW where YY = any value 00 through 99 WTN = BLANK 270 Van Cleve RD, Des Moines, IA 50310 WCCLLI = DESMIANW MLTDIST = 7300 LOOPSTAT = BLANK SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X 799 Van Cleve Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT 799 Van Cleve Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = 799SP PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[3]Expected Results
RLDQ17	Raw Loop Data Query by Address (assigned)			X Van Cleve RD, Des Moines, IA 50310 where X = 251, 331 or 727. The CALA for these numbers is IA and the Zip Code is 50310.	251 Van Cleve RD, Des Moines, IA 50310	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Van Cleve RD, Des Moines, IA 50310 WCCLLI = DESMIANW MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 8.800kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 252 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 900kf CABLE_NAME = YSP [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ18	Raw Loop Data Query by Address (assigned)			X Smith RD, Des Moines, IA 50310	377 Smith RD, Des Moines, IA	ECCKTQ = 24

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
				where X = 274 or 277. The CALA for these numbers is IA and the Zip Code is 50310.	50310	Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT= BLANK WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Smith RD, Des Moines, IA 50310 WCCLLI = DESMIAWS MLTDIST = 8900 LOOPSTAT = WKG SEGMENTQTY =2 SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 3.200kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 251 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Smith Rd [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ19	Raw Loop Data Query by Address (unassigned)			X Storefront DR, BLDG A, Spokane, WA 99212 where X= 533. The CALA for these numbers is SPOK and the Zip Code is 99212.	533 Storefront DR, BLDG A, Spokane, WA 99212	ECCKTQ = 24 Up to 24 spares are returned on such a query. The 24 spares that are returned will have Circuit IDs in the following format: ECCKTNUM = 0 4 LXFU 994SYY_PN where YY = any value 00 through 99

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
						WTN = BLANK <SANO from Query> Storefront Dr, BLDG A, Spokane, WA 99212 WCCLLI =SPKNWAKY MLTDIST = 7300 LOOPSTAT = BLANK SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr [When SANO = 533 then Y = 799.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 5.800kf CABLE_NAME = 46 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 751 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When SANO = 533 then Y = 799.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When SANO = 533 then Y = 799.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 287 LOADPTAMT = 0 LCT = BLANK
RLDQ20	Raw Loop Data Query by Address (assigned)			X Storefront DR, BLDG A, Spokane, WA 99212 where X= 532 or 534. The CALA for these numbers is SPOK and the Zip Code is 99212.	532 Storefront DR, BLDG A, Spokane, WA 99212	ECCKTQ =24 Up to 24 lines are returned for this address. ECCKTNUM =0 ECCKT = BLANK WTN: 509-<SANO from Query>-0000 through 509-<SANO from Query>-0023 <SANO from Query> Storefront DR, BLDG A, Spokane, WA 99212 WCCLLI = SPKNWAKY MLTDIST = 8200 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1

Table 8: Raw Loop Data Query (RLDQ)

		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	Expected Results
						TERMINAL_ID = X Y Storefront Dr [When SANO = 532 or 534 then Y = 699 or 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 8.800kf CABLE_NAME = 32 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 252 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When SANO = 532 or 534 then Y = 699 or 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When SANO = 532 or 534 then Y = 699 or 899.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
RLDQ21	Raw Loop Data Query by Address (unassigned)			X Fireside DR, FLR 2, Spokane, WA 99201 where X= 838, 835, or 747. The CALA for these numbers is SPOK and the Zip Code is 99201.	838 Fireside DR, FLR 2, Spokane, WA 99201	No Spare loops were found at address.
RLDQ22	Raw Loop Data Query by Address (assigned)			X Fireside DR, FLR 2, Spokane, WA 99201 where X= 838, 835, or 747. The CALA for these numbers is SPOK and the Zip Code is 99201.	838 Fireside DR, FLR 2, Spokane, WA 99201	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 509-<SANO from Query>-0000 through 509-<SANO from Query>-0023 <SANO from Query> Fireside Dr, FLR 2, Spokane, WA 99201 WCCLLI = SPKNWA01 MLTDIST = 4900 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR [When

Table 8: Raw Loop Data Query (RLDQ)						
		WTN		Address		
Scenario #	Scenario Description	Data Rules	Examples	Data Rules	Examples	[3]Expected Results
						SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL 5.300kf CABLE_NAME = 22 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 210 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR [When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP [When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 304 LOADPTAMT = 0 LCT = BLANK
RLDQ23	Raw Loop Data Query by Address (assigned)			X Riverside RD, APT 4, Spokane, WA 99218 where X = 467 or 468. The CALA for these numbers is SPOK and the Zip Code is 99218.	467 Riverside RD, APT 4, Spokane, WA 99218	ECCKTQ = 24 Up to 24 lines are returned for this address. ECCKTNUM = 0 ECCKT = BLANK WTN: 509-<SANO from Query>-0000 through 509-<SANO from Query>-0023 <SANO from Query> Riverside RD, APT 4, Spokane, WA 99218 WCCLLI = SPKNWAWH MLTDIST = 8100 LOOPSTAT = WKG SEGMENTQTY = 2 SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK

Table #: Raw Loop Data Query (RLDQ)

Scenario #	Scenario Description	WTN		Address		Expected Results
		Data Rules	Examples	Data Rules	Examples	
						MAKE_UP_DESC = 24NL .8.500kf CABLE_NAME = 12 PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 152 LOADPTAMT = 0 LCT = BLANK SEGMENTNUM = 2 TERMINAL_ID = IT Y Riverside Rd [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.] PAIR_GAIN_TYPE = NO_PG PAIR_NUMBER = 288 LOADPTAMT = 0 LCT = BLANK
LDQ24	Raw Loop Data Query by Address (unassigned) Bad Response			X E Bayaud AV, Denver, CO 80209 where X = 3029. The CALA for these numbers is DNV and the Zip Code is 80209.	3029 E Bayaud AV, Denver, CO 80209	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match
LDQ25	Raw Loop Data Query by Address (assigned) Bad Response			X E Bayaud AV, Denver, CO 80209 where X = 3029. The CALA for these numbers is DNV and the Zip Code is 80209.	3029 E Bayaud AV, Denver, CO 80209	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match
LDQ26	Raw Loop Data Query By TN Bad Response	Any number where the NPA equal 303 and the NXX equals 322.	303-322-0000			LQDB: Query failed(TN not found.).

Table 9: Service Availability Query (SAQ)

Scenario #	Scenario Description	LSO/NPA-NXX	USOC	State		Expected Results
SAQ1	InfoType = Single Good Response	303744		Colorado		List of USOCs and PIC/LPICs
SAQ2	InfoType = Single Good Response	515255		Iowa		List of USOCs and PIC/LPICs
SAQ3	InfoType = Single Good Response	509568		Washington		List of USOCs and PIC/LPICs
SAQ4	InfoType = Single Search for a Specific USOC	303744	IFR	Colorado	TOS=2	Data for IFR and a list of PIC/LPICs are returned.
SAQ5	InfoType = Multiple Good Response	509466				Switch Type: DMS00ON NPANXXs: 509468, 509467
SAQ6	InfoType = Multiple Good Response	303534				Switch Type: DMS00ON NPANXXs: 303260, 303352, 303389, 303405, 303436, 303446
SAQ7	InfoType = Single Bad Response	303322		Any valid State		OSS Gateway: Error caught by Fns Message[0] Invalid request. No Usoc info for requested NpaNxx
SAQ8	InfoType = Multiple Bad Response	303322				OSS Gateway: Error caught by Fns Message[0] Invalid request. No Usoc info for requested NpaNxx

Table 10: Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)

Scenario #	Scenario Description	Address	Site ID	TTA	TNAR Expected Results	TNSR Input	TNSR Expected Results
NAQ1	TN Availability Query: Less than five TNs requested Good Response	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	SPKNWAKY	534	TNs will be returned with an NPA of 509 and NXX of 536		
NAQ2	TN Availability Query: More than five TNs requested Mixed Response	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	SPKNWAKY	534	Five available TNs will be returned with an NPA of 509 and NXX of 536 and Informational Response Returned		
NAQ3	TN Availability Query: No TNs Available Response	X Fedorowych DR, Denver, CO 80209 where X = any number equal to 260, 352, 389, 405, 436, or 446	DNVRCOMA	534	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. Message [0] NO AVAILABLE NUMBERS SATISFY ALL THE VALID INPUT PARAMETERS. • No Telephone Numbers available for this query		
NAQ4	TN Availability Query: Bad Response	3329 E Bayaud AV, Denver, CO 80209	MINNSOSA	900	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. Message [0] NO AVAILABLE NUMBERS SATISFY ALL THE VALID INPUT PARAMETERS. • No Telephone Numbers available for this query		
NSQ1	TN Availability Query: Less than five TNs requested Good Response	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	SPKNWAKY	534	TNs will be returned with an NPA of 509 and NXX of 536	Select a telephone number returned	TXACT = C TXTYP = B DTSENT = <Date used in TNSQ> RESPONSE = G
NSQ2	TN Availability Query: More than five TNs requested Bad Response	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	SPKNWAKY	534	Five available TNs will be returned with an NPA of 509 and NXX of 536 and Informational Response Returned	Submit TNSQ with TN not found on the TNAR response	Telephone Number not found (<TN used to query>)

Table 11: Centrex Plus (CEX)

		Common Block		End User			End User or Common Block	
enario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
X1	Conversion As Is of entire Qwest Common Block ACT = W	R00 Corporation 745 Cross ST, Denver, CO 80209	303-389-0000-100					R00:0
X2	Conversion As Is of entire Qwest Common Block ACT = W	R00 Corporation 620 Morel RD, Des Moines, IA 50311	515-270-0000-100					R00:0
X3	Conversion As Is of entire Qwest Common Block ACT = W	R00 Corporation 3429 Green RD, Spokane, WA 99212	509-747-0000-100					R00:0
X4	Convert Retail POTS Account to Centrex Common Block ACT = V	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-389-<CC>00-1<CC>	Alex Ferguson 745 Cross ST, Denver, CO 80209	303-744-5000-121	303-744-5000	1FR, /RIE, /TN 303 744-5000, /PIC 0288, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; LAWPA, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 303 722-9876, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;	<CCNA>:0

Table 11: Centrex Plus (CEX)

Scenario #	Scenario Description	Common Block		End User			End User or Common Block	
		Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
X5	Convert Retail POTS Account to Centrex Common Block ACT = V	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50311	515-270-<CC>00-1<CC>	Alex Ferguson 515 Morel RD, Des Moines, IA 50311	515-255-5000-121	515-255-5000	1FR, /RIE, /TN 515 255-5000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, /EDT CS\ 09-23-2001, /LSTP; PORXX, /TN 515 255-5000; 9ZR, /RAX 1R; AYK, /TN 515 255-5000; 9PZLX, /TN 515 255-5000; VMJXA, /TN 515 255-5000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 515 255-5000 NKM, /TN 515 255-5000; 999AL, /TN 515 255-5000;	<CCNA>:0
X6	Convert Retail POTS Account to Centrex Common Block ACT = V	<CCNA> Corporation 509 Green RD, Spokane, WA 99212	509-747-<CC>00-1<CC>	Alex Ferguson 509 Green RD, Spokane, WA 99212	509-568-5000-121	509-568-5000	BSXUP; 1FR, /TN 509 568-5000, /PIC 0288, /LPIC 5123, PORXX, /TN 509 568-5000; 9ZR, /TN 509 568-5000 AYK, /TN 509 568-5000; VMJXA, /TN 509 568-5000, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 568-5000; NKM, /TN 509 568-5000;	<CCNA>:0
X7	Add a new end user line to Common Block	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-389-<CC>00-1<CC>	Paul Scholes 744 Cross ST, Denver, CO 80209				<CCNA>:0
X8	Add a new end user line to Common Block	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311	515-270-<CC>00-1<CC>	Alex Ferguson 515 Morel RD, Des Moines, IA 50311				<CCNA>:0
X9	Add a new end user line to Common Block	<CCNA> Corporation 3429 Green RD, Spokane, WA 99212	509-747-<CC>00-1<CC>	Alex Ferguson 509 Green RD, Spokane, WA 99212				<CCNA>:0

Table 11: Centrex Plus (CEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
CEX10	Change a line in a Common Block	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-389-<CC>00-1<CC>	Andy Cole 389 Fedorowych DR, Denver, CO 80209		303-389-<CC>00	NP3, /RSID <CCNA>; EQA, /RSID <CCNA>, /SFG 204, /CTX <CCNA>, /GSZ 20;PGSA7, /RSID <CCNA>, /SFG 204, /CTX <CCNA>, /GSZ 20; HYE, /RSID <CCNA>, /CTX <CCNA>; MUMHT, /RSID <CCNA>; PORXX, /RSID <CCNA>, /TN 303 389-<CC>00, /MIL 1; 9PZLC, /RSID <CCNA>, /TN 303 389-<CC>00; 9LM, /RSID <CCNA>, /TN 303 389-<CC>00; RHN, /RSID <CCNA>, /TN 303 389-<CC>00, /MIL 1, /PIC 0288, /LPIC 5123, /ZCN A40040, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS *TGUUA, /IDP ID0137, /BFG CTX0137, /CTX <CCNA>:0; RTVXN, /RSID <CCNA>, /TN 303 389-<CC>00; 6APPK, /RSID <CCNA>, /TN 303 389-<CC>00, /CTX <CCNA>:0; N13, /RSID <CCNA>, /TN 303 389-<CC>00, /CTX <CCNA>:0; CV9, /RSID <CCNA>, /TN 303 389-<CC>00, /CTX <CCNA>:0; 69J, /TN 303 389-<CC>00, /CFN 303 534-9876, /CTX <CCNA>:0; GVJ, /TN 303 389-<CC>00, /CTX <CCNA>:0; 69H, /TN 303 389-<CC>00, /CFND 303 534-9876, /RCYC 3, /CTX <CCNA>:0; 303 389-<CC>00;	<CCNA>:0
CEX11	Change a line in a Common Block	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311	515-270-<CC>00-1<CC>	Phil Neville 270 Van Cleve RD, Des Moines, IA 50310		515-270-<CC>00	WIN, /RSID <CCNA>; OLGFX, /RSID <CCNA>, /OCP UW; CV9, /RSID <CCNA>, /CTX <CCNA>:0; RGE, /RSID <CCNA>, /CTX <CCNA>:0; 6MD, /RSID <CCNA>, /CTX	<CCNA>:0

Table 11: Centrex Plus (CEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
							<CCNA>:0; 69A, /RSID <CCNA>, /CTX <CCNA>:0; 69BIX, /RSID <CCNA>, /CTX <CCNA>:0; 69H, /RSID <CCNA>, /CTX <CCNA>:0; AH8, /RSID <CCNA>, /CTX <CCNA>:0 FSW, /RSID <CCNA>, /CTX <CCNA>:0, /MP 03-02-95; CXV, /RSID <CCNA>, /RTE 1161.50(AUT)B017, /CTX <CCNA>:0, /RRF (1) , /CS (1), /NRT EXPIRED, /SP 12-11-97; UXTDH, /RSID <CCNA>, /CTX <CCNA>:0; NP3, /RSID <CCNA>:0; HYE, /RSID <CCNA>, /CTX <CCNA>:0, /MP 04-08-96; NSD, /RSID <CCNA>, /TN 515 270-<CC>01, /TER 10, /CTX <CCNA>:0, /TLI 515 270-<CC>00, /MP 08-03-00; M15, /RSID <CCNA>, /TN 515 270-<CC>00, /TER 9, /CTX <CCNA>:0, /TLI 515 270-<CC>00; RKY, /TN 515 270-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /TGID 0101, /TLI 515 270-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-03-2000, /RTZ 2; PORXX, /TN 515 270-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /TGID 0101, /TLI 515 270-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-03-2000, /RTZ 2; 9PZLC, /TN 515 270-<CC>00, /TER 10,	

Table 11: Centrex Plus (CEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
							/CAT 1, /CTX <CCNA>; 1, /LCC GNN, /TGID 0101, /TLI 515 270-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-03-2000, /RTZ 2;	

Table 11: Centrex Plus (CEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
CEX12	Change a line in a Common Block	<CCNA> Corporation 3429 Green RD, Spokane, WA 99212	509-747-<CC>00-1<CC>	Dennis Irwin 747 Fireside DR, FLR 2, Spokane, WA 99201		509-747-<CC>00	FFNUX, /RSID <CCNA>; RHN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA, /TGID 0052; CV9, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90; N13, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0 PORXX, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX<CCNA>:0; 69H, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 69J, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 9PZLC, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; 9ZR, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>; RKY, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA,/TGID 0052, /RTZ 2; GVT, /RSID <CCNA>, /TN 509 747-<CC>00 /CTX <CCNA>:0; MGN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /MSS *MSSAD MSSGRP.0167; RTVXN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90	<CCNA>0

Table 12: Centron (CEN)

		Common Block		End User			End User or Common Block	
nario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
1	Conversion As Is of entire Qwest Common Block ACT = W			R00 Corporation 799 Haxmeier BLVD, MPLS, MN 55403	612-331-0000-100			R00:0
2	Convert Retail POTS Account to Centrex Common Block ACT = V	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403	612-331-<CC>00-100	Wilson Carter 6666 Carter BLVD, MPLS, MN 55407	612-379-0000-100	612-379-0000 through 612-379-0009	BSXUP; 1FR, /RIE, /TN 612 379-0000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, /EDT CS\ 10-21-2001, /LSTP; PORXX, /TN 612 379-0000; 9ZR, /RAX 1R; AYK, /TN 612 379-0000; 9PZLX, /TN 612 379-0000; VMJXA, /TN 612 379-0000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 612 379-0000; NKM, /TN 612 379-0000; 999AL, /TN 612 379-0000;	<CCNA>:0
3	Add a new end user line to Common Block	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403	612-331-<CC>00-100	George Allen 11111 Allen ST, MPLS, MN 55413				<CCNA>:0
4	Change a line in a Common Block	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403	612-331-<CC>00-100	EU#1: George Allen 11111 Allen ST, MPLS MN 55413 EU#2: Matt Taylor 22222 Taylor RD, MPLS, MN 55406 EU#3: Jake Johnson 33333 Johnson AV, MPLS, MN 55408		EU#1: 612-617-<CC>01 through 612-617-<CC>03 EU#2: 612-617-<CC>04 through 612-617-<CC>06 EU#3: 612-617-<CC>07 through 612-617-<CC>09	E6GUR, /TN 612 331-<CC>01, /RSID <CCNA>, /CFND *110 285-0045, /CTX MCDAD9, /RRF 1, /MSS *MSAAD MSSORP 0033, /RSID <CCNA>, /RIE, BGMAL, /RSID <CCNA>, /TN 612 331-<CC>01, /RSID <CCNA>; BGMFL, /RSID <CCNA>, /TN 612 331-<CC>01, /LCC RCF, /CSZ 5, /RRF (1), /RSID <CCNA>, MP 02-24-97; EXM, /TN 612 331-<CC>01, /RSID <CCNA>, /TA 60 02-01-99, /PD 01-30-98, /ARS MCLARS2, /CAT 2, /CTX IDFMCLBDL, /TGID 1500,	<CCNA>:0

Table 12: Centron (CEN)								
		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
							/CLT 3.CLNA.612.331-<CC>01, /RRF 1, /HTG A, /TGS *TGUUA, /RSID <CCNA>, /RAX A, /MP 02-24-97, /PIC 0288, /PCA BO,01-22-97, /LPIC 5123, /EDT BO, 01-22-1997; HBQ, /TN 612 331-<CC>01, /RSID <CCNA>, /CTX MCLDAD9, /RSID <CCNA>; HBS, /TN 612 331-<CC>01, /RSID <CCNA>, /TER 1, /CTX MCLDAD9, /HML 214, /TLI 612 331-<CC>01, /RSID <CCNA> C2U, /TN 612 331-<CC>01, /RSID <CCNA>, /TER 14, /HML 214, /TLI 612 331-<CC>01, /ZCN (B)MN11946, /RRF 1, /RSID <CCNA>; ESX, /TN 612 331-<CC>01, /RSID <CCNA>, /RSID <CCNA>, /MP 07-04-99; VGT, /TN 612 331-<CC>01, /RSID <CCNA>, /CTX MCLDAD9, /RSID <CCNA>, /MP 03-13-97; ESM, /TN 612 331-<CC>01, /RSID <CCNA>, /TA 60,02-04-99, /RD 01-30-98, /CTX IDPMCLE0D, /RSID <CCNA>, /MP 04-19-01;	

Table 13: Listings Only (LO)

			AN		Address		TN		
cenario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Examples	Data Rules	Examples	Existing Listings
D1	Listings Only ACT = R LACT = N Straight Line Add LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SL, LML
D2	Listings Only ACT = R LACT = D Straight Line Delete LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SL, LML
D3	Listings Only ACT = R LACT = I and O Straight Line Change LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SL, LML
D4	Listings Only ACT = R LACT = N Straight Line Indent (SLI) Add LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SH, LML
D5	Listings Only ACT = R LACT = D Straight Line Indent (SLI) Delete LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SH, LML
D6	Listings Only ACT = R LACT = I and O Straight Line Indent (SLI) Change LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	SH, LML
D7	Listings Only ACT = R LACT = M Custom Listing Add LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	CL, LML

Table 13: Listings Only (LO)

			AN		Address		TN		
Scenario #	**Scenario Description**	**Name**	**Data Rules**	**Examples**	**Data Rules**	**Examples**	**Data Rules**	**Examples**	**Existing Listings**
LO8	Listings Only ACT = R LACT = D Caption Listing Delete LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	CI, LML
LO9	Listings Only ACT = R LACT = I and O Caption Listing Change LAL	David Beckham	AN: 509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	532 Storefront DR, BLDG A, Spokane, WA 99212	509-<532 or 533>-<CC>00	For RSID R01: 509-532-0100	CI, LML

Table 14: Local Number Portability (LNP)

				TN		
Scenario #	**Scenario Description**	**Name**	**AN**	**Data Rules**	**Examples**	**Address**
LNP1	Local Number Portability Conversion as Specified Multi-Line Account ACT = Z	Roy Keane	303-436-0000-100	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009	303-436-0009	436 Fedorowych DR, Denver, CO 80209
LNP2	Local Number Portability Conversion as Specified Single Line Account ACT = Z	Roy Keane	303-436-0051-100	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051	303-436-0051	436 Fedorowych DR, Denver, CO 80209
LNP3	Local Number Portability Conversion Multiple Line Account ACT = V	Roy Keane	303-436-0000-100	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009	303-436-0009	436 Fedorowych DR, Denver, CO 80209
LNP4	Local Number Portability Conversion Single Line Account ACT = V	Roy Keane	303-436-0051-100	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051	303-436-0051	436 Fedorowych DR, Denver, CO 80209

Table 15: POTS Resale (POTS)

			AN		Address	TN		
enario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCS & FIDS on the account
TS1	New POTS Resale Orders				36 Sarah RD, Spokane, WA 99212			
TS2	POTS Resale, Change (ACT = C) Multiple Line Account	David Beckham	509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-<CC>00 through <CC>09	For RSID R01: 509-532-0100 through 509-532-0109	1FB, /TN 509 532-0100, /PIC 0288, /LPIC 5123, /LPS, /RSID <CCNA>; EVO, /TN 509 532-<CC>00, /CFN 509 568-5252, /RSID <CCNA>; PORXX, /TN 509 532-<CC>00, /RSID <CCNA>; TTB, /TN 509 532-<CC>00, /RSID <CCNA>; 9ZR, /TN 509 532-<CC>00, /RSID <CCNA>;
TS3	POTS Resale, Change (ACT = C) Single Line Account	David Beckham	509-<532 or 533>-<CC>51-1<CC>	For RSID, R01: 509-532-0151-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-<CC>51	For RSID R01: 509-532-0151	1FB, /TN 509 532-<CC>51, /RSID <CCNA>, /PIC 0288, /LPIC 5123, PORXX, /TN 509 532-<CC>51, /RSID <CCNA>; ESX, /TN 509 532-<CC>51, /RSID <CCNA>; NNK, /TN 509 532-<CC>51, /RSID <CCNA>;
TS4	POTS Resale, Conversion, (ACT = V) Single Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0051-100	509-532-0051-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-0051		BSXUP; 1FR, /RIE, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; 9PZLX, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;

Table 15: POTS Resale (POTS)

			AN		Address	TN		
:nario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCS & FIDS on the account
TS5	POTS Resale, Conversion, (ACT = V) Multiple Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0000-100	509-532-0000-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 50 for the AN 509-<532 or 533>-0000 through 0009	509-532-0000 through 509-532-0009	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 509 532-0000, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9PZLX, /TN 509 532-0000; 9ZR, /TN 509 532-0000;
TS6	POTS Resale, Conversion, (ACT = W) Single Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0051-100	509-532-0051-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-0051		
TS7	POTS Resale, Conversion, (ACT = W) Multiple Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0000-100	509-532-0000-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-0000 through 0009	509-532-0000 through 509-532-0009	
TS8	POTS Resale, Conversion (ACT = Z) Single Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0051-100	509-532-0051-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-0051		1FR
TS9	POTS Resale, Conversion (ACT = Z) Multiple Line Account, owned by Qwest	David Beckham	509-<532 or 533>-0000-100	509-532-0000-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-0000 through 0009	509-532-0000 through 509-532-0009	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 509 532-0000, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9PZLX, /TN 509 532-0000; 9ZR, /TN 509 532-0000;

SECRETARY OF STATE
STATE CAPITOL
500 E. CAPITOL AVE.
PIERRE, S.D. 57501
605-773-4845

STATEMENT OF CHANGE OF REGISTERED OFFICE, OR REGISTERED AGENT, OR BOTH

FILING FEE: $10

Pursuant to the provisions of the South Dakota Corporation Acts, the undersigned corporation submits the following statement for the purpose of changing its registered office and/or its registered agent in the state of South Dakota.

1. The name of the corporation is Lundie Enterprises, Inc.

2. The previous street address or a statement that there is no street address, of its registered office 1010 4th Street, Brookings, South Dakota, 57006 ZIP _____

3. The street address, or a statement that there is no street address, to which the registered office is to be changed is 116 N. Josephine Avenue, Madison, South Dakota 57042 ZIP _____

4. The name of its previous registered agent is _____

5. The name of its successor registered agent is * _____

*** The Consent of Registered Agent below must be completed by the new agent.**

6. The address of its registered office and the address of the business office of its registered agent, as changed, will be identical.

7. This change has been authorized by resolution duly adopted by the board of directors.

The statement may be signed by the chairman of the board of directors, by its president or by another of its officers in the presence of a notary public.

Date _____

_____
(Signature)

_____
(Title)

STATE OF _____

COUNTY OF _____

I, _____, a notary public, do hereby certify that on this _____ day of _____, 20____, personally appeared before me _____ who, being by me first duly sworn, declared that he/she is the _____ of _____, that he/she signed the foregoing document as officer of the corporation, and the statements therein contained are true.

_____
My Commission Expires

_____
(Notary Public)

Notarial Seal

CONSENT OF APPOINTMENT BY THE REGISTERED AGENT

I, _____, hereby give my consent to serve as the
(name of registered agent)

registered agent for _____
(corporate name)

Dated _____

_____
(signature of registered agent)

STCHNGE.DOC

Table 15: POTS Resale (POTS)

			AN		Address	TN		
nario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCS & FIDS on the account
S10	POTS Resale, Disconnect (ACT = D)	David Beckham	509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-<CC>00 through <CC>09	For RSID R01: 509-532-0100 through 509-532-0109	1FB, /TN 509 532-0100, /PIC 0288, /LPIC 5123, /LPS, /RSID <CCNA>; EVO, /TN 509 532-<CC>00, /CFN 509 568-5252, /RSID <CCNA>; PORXX, /TN 509 532-<CC>00, /RSID <CCNA>; TTB, /TN 509 532-<CC>00, /RSID <CCNA>; 9ZR, /TN 509 532-<CC>00, /RSID <CCNA>;
TS11	POTS Resale, Seasonal Suspend (ACT = L)	Mary Glade	602-328-<CC>47-9<CC>	For RSID R01: 602-328-0147-901	1000 Red Twist LN, Phoenix, AZ 85020	602-328-<CC>47	For RSID R01: 602-328-0147	
TS12	POTS Resale, Restore (ACT = B)	Mary Glade	602-328-<CC>47-9<CC>	For RSID R01: 602-328-0147-901	1000 Red Twist LN, Phoenix, AZ 85020	602-328-<CC>47	For RSID R01: 602-328-0147	
TS13	POTS Resale, Deny (ACT = Y)	Mary Glade	602-328-<CC>47-9<CC>	For RSID R01: 602-328-0147-901	1000 Red Twist LN, Phoenix, AZ 85020	602-328-<CC>47	For RSID R01: 602-328-0147	
TS14	POTS Resale, Move (ACT = T)	David Beckham	509-<532 or 533>-<CC>00-1<CC>	For RSID, R01: 509-532-0100-101	FROM Address: <532 or 533> Storefront DR, BLDG A, Spokane, WA 99212 TO Address: 36 Sarah RD, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-<CC>00 through <CC>09	For RSID R01: 509-532-0100 through 509-532-0109	1FB, /TN 509 532-0100, /PIC 0288, /LPIC 5123, /LPS, /RSID <CCNA>; EVO, /TN 509 532-<CC>00, /CFN 509 568-5252, /RSID <CCNA>; PORXX, /TN 509 532-<CC>00, /RSID <CCNA>; TTB, /TN 509 532-<CC>00, /RSID <CCNA>; 9ZR, /TN 509 532-<CC>00, /RSID <CCNA>;

Table 16: Shared Loop (SL)

Scenario #	Scenario Description	POTS AN	TNs with Shared Loop	TNs without Shared Loop	Name and Address	Meet Point
L1	Shared Loop Service New (ACT = C)	509-<532 or 533>-<CC>00-1<CC>		All numbers ending in the numbers 00 to 09 for the AN 509-<532 or 533>-<CC>00 through <CC>09	David Beckham <532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	Not required POTSSPLITLOC = R
L2	Shared Loop Service Disconnect Multiple Line Account (ACT = C)	509-534-<CC>00-1<CC>	• 509-534-<CC>00 • 509-534-<CC>01	509-534-<CC>02	Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	Not required POTSSPLITLOC = R
L3	Shared Loop Service Disconnect Single Line Account (ACT = C)	509-534-<CC>03-1<CC>	509-534-<CC>03		Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	Not required POTSSPLITLOC = R
L4	Conversion from CLEC to CLEC Multiple Line Account (ACT = C)	509-534-<DD>00-1<DD>	• 509-534-<DD>00 • 509-534-<DD>01	509-534-<DD>02	Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	Not required POTSSPLITLOC = R
L5	Conversion from CLEC to CLEC Single Line Account (ACT = C)	509-534-<DD>03-1<DD>	509-534-<DD>03		Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	Not required POTSSPLITLOC = R
L6	Shared Loop Service Inside Move Multiple Line Account (ACT = C)	509-534-<CC>00-1<CC>	• 509-534-<CC>00 • 509-534-<CC>01	509-534-<CC>02	Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	• R<CC>.ALT01.004 • R<CC>.ALT01.003 POTSSPLITLOC = I
L7	Shared Loop Service Inside Move Single Line Account (ACT = C)	509-534-<CC>03-1<CC>	509-534-<CC>03		Fabien Barthez 534 Storefront DR, BLDG A, Spokane, WA 99212	R<CC>.ALT01.003 POTSSPLITLOC = I

Table 17: UNE-P Centrex (UCEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
UCEX1	Conversion As Is of entire Qwest Common Block ACT = W	R<DD> Corporation 745 Cross ST, Denver, CO 80209	303-260-<DD>00-100					

Table 15: CNE-P Centrex (UCES)

Scenario #	Scenario Description	Common Block		End User			End User or Common Block	
		Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
EX2	Conversion As Is of entire Qwest Centrex Common Block ACT = W	R<DD> Corporation 680 Morel RD, Des Moines, IA 50311	515-331-<DD>00-769					
EX3	Conversion As Is of entire Qwest Common Block ACT = W	R<DD> Corporation 3429 Green RD, Spokane, WA 99212	509-535-<DD>00-300					
EX4	Convert Retail POTS Account to Une-P Centrex Common Block ACT = V	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-260-<CC>00-1<CC>	Alex Ferguson 745 Cross ST, Denver, CO 80209	303-744-5000-121	303-744-5000	BSXUP; 1FR, /RIE, /TN 303 744-5000, /PIC 0288, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; LAWPA, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 303 722-9876, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;	<CCNA>:0
EX5	Convert Retail POTS Account to Une-P Centrex Common Block ACT = V	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50311	515-331-<CC>00-1<CC>	Alex Ferguson 515 Morel RD, Des Moines, IA 50311	515-255-5000-121	515-255-5000	BSXUP; 1FR, /RIE, /TN 515 255-5000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, \EDT CS\ 09-23-2001, /LSTP; PORXX, /TN 515 255-5000; 9ZR, /RAX 1R; AYK, /TN 515 255-5000; 9PZLX, /TN 515 255-5000; VMJXA, /TN 515 255-5000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 515 255-5000; NKM, /TN 515 255-5000; 999AL, /TN 515 255-5000;	<CCNA>:0

Table 17: EXF Centrex (UCEX)

Scenario #	Scenario Description	Common Block		End User			Ref Loc at Common Block	Common Block ID
		Name and Address	AN	Name and Address	AN	TN	LNPA	
UCEX6	Centrex Retail POTS Account to Use* Centrex Common Block ACT = V	<CCNA> Corporation 509 Green RD, Spokane, WA 99212	509-835-<CC>00-1<CC>	Alex Ferguson 509 Green RD, Spokane, WA 99212	509-565-6000-121	509-565-1000	NXX, /TN 509 565-1000, /FIC 6558, LPIC 5135, POTXX, /TN 509 565-5000, 92R, /TN 509 565-5000, ATK, /TN 509 565-5000, VMUXA, /TN 509 565 5000, /CIN 509 565-5252, /RCVC 3, NNK, /TN 509 565-5000, NKM, /TN 509 565-5000,	<CCNA>:0
UCEX7	Add a new end user line to Common Block	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-260-<CC>00-1<CC>	Paul Scholes 744 Cross ST, Denver, CO 80209				<CCNA>:0
UCEX8	Add a new end user line to Common Block	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311	515-331-<CC>00-1<CC>	Alex Ferguson 515 Morel RD, Des Moines, IA 50311				<CCNA>:0
UCEX9	Add a new end user line to Common Block	<CCNA> Corporation 3429 Green RD, Spokane, WA 99212	509-835-<CC>00-1<CC>	Alex Ferguson 509 Green RD, Spokane, WA 99212				<CCNA>:0

Table 17: UNE-P Centrex (UCEX)

		Common Block		End User			End User or Common Block	
Scenario #	Scenario Description	Name and Address	AN	Name and Address	AN	TN	USOCs	Common Block ID
UCEX10	Change a line in a Common Block	<CCNA> Corporation 745 Cross ST, Denver, CO 80209	303-260-<CC>00-1<CC>	Andy Cole 260 Fedorowych DR, Denver, CO 80209		303-260-<CC>00	NP3, /ZCID <CCNA>; EQA, /ZCID <CCNA>, /SFG 204, /CTX <CCNA>:1, /CTX <CCNA>:1, /GSZ 20; HYE, /ZCID <CCNA>, /CTX <CCNA>:1; MUMHT, /ZCID <CCNA>:1; 9PZLC, /ZCID <CCNA>, /TN 303 260-<CC>00; PORXX, /ZCID <CCNA>, /TN 303 260-<CC>00; RKY, /ZCID<CCNA>, /TN 303 260-<CC>00, /PIC 0288, /LPIC 5123, /ZCN A40040, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS*TGUUA, /IDP ID0137, /BFG CTX0137, /CTX <CCNA>:1; UGUST, /ZCID <CCNA>, /TN 303 260-<CC>00; UGUFM, /ZCID <CCNA>, /TN 303 260-<CC>00; 6APPK, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; N13, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; CV9, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; PORXX, /ZCID <CCNA>, /TN 303 260-<CC>00, /MIL 1; RTVXN, /ZCID <CCNA>, /TN 303 260-<CC>00; 69L, /TN 303 260-<CC>00, /CFN 303 514-9876, /CTX <CCNA>:1; GV1, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /TN 303 260-<CC>00, /CFND 303 514-9876, /RCTC 1, /CTX <CCNA>:1;	<CCNA>:1
UCEX11	Change a line in a Common Block	<CCNA> Corporation 620 Mowri RD, Des	515-281-<CC>00-1<CC>	Phil Neville 531 Van Cleve RD, Des Moines, IA		515-331-<CC>00	CV9, /ZCID <CCNA>, /CTX <CCNA>:1; RGE, /ZCID <CCNA>, /CTX	<CCNA>:1

Table 17: UNE-P Centrex (UCEX)

ario #	Scenario Description	Common Block		End User			End User or Common Block	Common Block ID
		Name and Address	AN	Name and Address	AN	TN	USOCs	
		Moines, IA 50311		50310			<CCNA>:1; 6MD, /ZCID <CCNA>, /CTX <CCNA>:1; 69A, /ZCID <CCNA>, /CTX <CCNA>:1; 69B1X, /ZCID <CCNA>, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /CTX <CCNA>:1; FSW, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 03-02-95; NP3, /ZCID <CCNA>; HYE, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 04-08-96; NSD, /ZCID <CCNA>, /TN 515 331-<CC>00, /TER 10, /CTX <CCNA>:1, /HML 197, /TLI 515 331-<CC>00, /MP 08-03-00; RKY, /TN 515 331-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /HML 197, /TGID 0101, /TLI 515 331-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO 08-03-00, /LPIC 5123, /EDT BO 80-03-2000, /RTZ 2; 83PPK, /TN 515 331-<CC>00, /CTX <CCNA>:1, /RRF 1, /CPG 359; UGUST, /ZCID <CCNA>, /TN 515 331-<CC>00; UGUFM, /ZCID <CCNA>, /TN 515 331-<CC>00; MGN, /ZCID <CCNA>, /TN 515 331-<CC>00, /TER 9, /CTX <CCNA>:1, /HML 197, /TLI 515 331-<CC>00;	
ES12	Change a line in a Common Block	<CCSA> Corporation 3439 Green Rd. Spokane, WA 99212	509-835-<CC>00 1<CC>	Dennis Irwin 835 Fireside DR. FLR 2, Spokane, WA 99201		509-835-<CC>00	RHCXX, /ZCID <CCNA>; RKY, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /PIC 0288, /LCC SC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /IFG CTX0052, /TGS *TGUUA, /TGID 0052, /RTZ 2; UGUST, /ZCID <CCNA>, /TN 509	<CCNA>:1

Table 17: UNE-P Centrex (UCEX)

narlo #	Scenario Description	Common Block		End User			End User or Common Block	Common Block ID
		Name and Address	AN	Name and Address	AN	TN	USOCs	
							835-<CC>00; UGUFM, /ZCID <CCNA>, /TN 509 835-<CC>00; CV9, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1; E3PPK, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /CPG 90; N13, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1; PORXX, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP .0020; 69J, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; GVT, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1; MGN, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /MSS *MSSAD MSSGRP 0167; RTVXN, /TN 509 835-<CC>00, /CTX <CCNA>:1; E3PPK, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /CPG 90;	

Table 18: UNE-P POTS (UNE-P POTS)

enario #	Scenario Description	AN			Address	TN		Existing USOCs & FIDs on the account
		Name	Data Rules	Examples	Data Rules	Data Rules	Examples	
E-P IS 1	New UNE-P POTS Order				36 Sarah RD, Spokane, WA 99212			A full and accurate list of valid USOCs and FIDs will be validated as if every CLEC can order every product.

Table 18: UNE-P POTS (UNE-P POTS)

		AN		Address	TN		
rio #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCs & FIDs on the account
P 2	UNE-P POTS Change Multiple Line Accounts ACT = C	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-<CC>00-125	326 Oldham RD, Port Angeles, WA 98362	All numbers ending in the numbers 00 to 07 for the TN 360-457-<CC>00 through 360-457-<CC>07	For RSID R01: 360-457-0100 through 360-457-0107	First Line: UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 467-<CC>01, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>01, /ZCID <CCNA>;
E-P S3	UNE-P POTS Resale, Change Single Line Account ACT = C	Ryan Giggs	303-698-<CC>99-1<CC>	For RSID, R01: 303-698-0199-101	698 Harrison RD, Denver, CO 80209	303-698-<CC>99	For RSID R01: 303-698-0199	NPU, /ZCID <CCNA>; UHR, /ZCID <CCNA>; U5R, /ZCID <CCNA>, /PIC 0288, /LPIC 5123, /LCC LMB; PORXX, /ZCID <CCNA>; AYK, /ZCID <CCNA>; ESC, /ZCID <CCNA>; NSD, /ZCID <CCNA>;

Table 1E: UNE-P POTS (UNE-P POTS)

			AN		Address	TN		
arde #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCs & FIDs on the account
-P 4	UNE-P POTS Resale, Conversion Single Line Account, owned by Qwest ACT = V	David Beckham	509-<532 or 533>-0051-100	509-532-0051-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-0051		1FB, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; 9PZLX, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;
-P S5	UNE-P POTS Resale, Conversion Multiple Line Account, owned by Qwest ACT = V	David Beckham	509-<532 or 533>-0000-100	509-532-0000-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 299-<532 or 533>-0000 through 0009	509-532-0000 through 509-532-0009	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 568-5252, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9PZLX, /TN 509 532-0000; 9ZR, /TN 509 532-0000;
-P S6	UNE-P POTS Resale, Conversion Single Line ACT = W	Ryan Giggs	303-698-<CC>99-1<CC>	For RSID, R01 303-698-0199-101	698 Harrison RD, Denver, CO 80209	303-698-<CC>99		
-P S7	UNE-P POTS Resale, Conversion Multiple Line ACT = W	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-0100-125	326 Oldham Rd, Port Angeles, WA 98362	All numbers ending in the numbers 00 to 07 for the TN 360-457-<CC>00 through 360-457-<CC>07	For RSID R01: 360-457-0100 through 360-457-0107	

Table 18: UNE-P POTS (UNE-P POTS)

			AN		Address	TN		
Scenario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCs & FIDs on the account
UNE-P POTS8	UNE-P POTS Resale, Conversion Single Line, owned by Qwest ACT = Z	David Beckham	509-<532 or 533>-0051-100	509-532-0051-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	509-532-0051		BSXUP, 1FR, /RIE, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; 9PZLX, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;
UNE-P POTS9	UNE-P POTS Resale, Conversion Multiple Line owned by Qwest ACT = Z	David Beckham	509-<532 or 533>-0000-100	509-532-0000-100	<532 or 533> Storefront DR, BLDG A, Spokane, WA 99212	All numbers ending in the numbers 00 to 09 for the AN 299-<532 or 533>-0000 through 0009	509-532-0000 through 509-532-0009	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 568-5252, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9PZLX, /TN 509 532-0000; 9ZR, /TN 509 532-0000;

Table 1B: UNE-P POTS (UNE-P POTS)

			AS		Address	TN		
Scenario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCs & FIDs on the account
NE-P OTS10	UNE-P POTS Resale, Disconnect ACT = D	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-<CC>00	326 Oldham RD, Port Angeles, WA 98362	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07	For RSID R01: 360-457-0100 through 360-457-0107	First Line: U1R, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;
UNE-P POTS11	UNE-P POTS Resale, Seasonal Suspend ACT = L	Ryan Giggs	303-698-<CC>00-1<CC>	For RSID, R01: 303-698-0100-101	698 Harrison RD, Denver, CO 80209	All numbers ending in the numbers 00 to 09 for the AN 303-698-<CC>00 through <CC>09	For RSID R01: 303-698-0100 through 303-698-0109	

Table 18: UNE-P POTS (UNE-P POTS)

			AN		Address	TN		
Scenario #	Scenario Description	Name	Data Rules	Examples	Data Rules	Data Rules	Examples	Existing USOCs & FIDs on the account
UNE-P POTS12	UNE-P POTS Resale, Restore ACT = B	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-<CC>00-125	326 Oldham RD, Port Angeles, WA 98362	All numbers ending in the numbers 00 to 07 for the TN 360-457-<CC>00 through 360-457-<CC>07	For RSID R01: 360-457-0100 through 360-457-0107	**First Line:** UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;
UNE-P POTS13	UNE-P POTS Resale, Deny ACT = Y	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-0100	326 Oldham RD, Port Angeles, WA 98362	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07	For RSID R01: 360-457-0100 through 360-457-0107	

Table 18: UNE-P POTS (UNE-P POTS)

narlo #	Scenario Description		AN		Address	TN		Existing USOCs & FIDs on the account
		Name	Data Rules	Examples	Data Rules	Data Rules	Examples	
-P S14	UNE-P POTS Resale, Outside Move ACT = T	Juan Veron	360-457-<CC>00-125	For RSID, R01: 360-457-0100-125	FROM Address: 326 Oldham RD, Port Angeles, WA 98362 TO Address: 36 Sarah RD, Spokane, WA 99212	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through <CC>07	For RSID R01: 360-457-0100 through 360-457-0107	**First Line:** UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;

Table 19: Unbundled Loop (LS)

cenario #	Scenario Summary	Name	Address	Circuit ID	CFA	AN	TNs
1	New loop installation ACT = N	Paul Scholes	744 Cross ST, Denver, CO 80209		ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>		

Table 19: Unbundled Loop (LS)

Scenario #	Scenario Summary	Name	Address	Circuit ID	CFA	AN	TNs
S2	Conversion as Specified ACT =V	Paul Scholes	744 Cross ST, Denver, CO 80209		ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>	303-744-0000-100	303-744-0000 through 303-744-0009
S3	Disconnect loop account ACT = D	Paul Scholes	744 Cross ST, Denver, CO 80209	29.LXFY.12<CC>01..MS	ALT03/VF-2WIRE/01/ DNVRCOSO/ DNVRCOSO<ACNA>	303-A36-<CC>01-1<CC>	
S4	Change on loop ACT = C	Paul Scholes	620 Morel RD, Des Moines, IA 50311	1.LXFY.12<CC>02..NW	ALT03/VF-2WIRE/02/ DESMIAWS/ DESMIAWS<ACNA>	515-A35-<CC>02-1<CC>	
S5	Outside move of a loop ACT = T	Paul Scholes	FROM Address: 3429 Green RD, Spokane, WA 99212 TO Address: 509 Green RD, Spokane, WA 99212	4.LXFY.12<CC>03..PN	ALT03/VF-2WIRE/03/ SPKNWAKY/ SPKNWAKY<ACNA>	509-T34-<CC>03-1<CC>	
S6	Inside move of a loop ACT = M	Paul Scholes	3429 Green RD, Spokane, WA 99212	4.LXFY.12<CC>03..PN	ALT03/VF-2WIRE/03/ SPKNWAKY/ SPKNWAKY<ACNA>	509-T34-<CC>03-1<CC>	

Table 20: Unbundled Loop With Number Portability (LSNP)

Scenario #	Scenario Description	Name	Address	AN	TNs	Example TNs	CFA
LSNP1	Conversion as Specified Multiple Line Account ACT = V	Roy Keane	436 Fedorowych DR, Denver, CO 80209	303-436-0000-100	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009	303-436-0009	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>

Table 20: Unbundled Loop With Number Portability (LSNP)

Scenario #	Scenario Description	Name	Address	AN	TNs	Example TNs	CFA
NP2	Conversion as Specified Single Line Account ACT = V	Roy Keane	436 Fedorowych DR, Denver, CO 80209	303-436-0051-100	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051	303-436-0051	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
SNP3	Conversion as Specified Multiple Line Account ACT = Z	Roy Keane	436 Fedorowych DR, Denver, CO 80209	303-436-0000-100	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009	303-436-0009	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
SNP4	Account with multiple numbers, Single Line Account ACT = Z	Roy Keane	436 Fedorowych DR, Denver, CO 80209	303-436-0051-100	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051	303-436-0051	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>

Table 21: Unbundled Distribution Loop (UDL)

Scenario #	Scenario Description	End-User		Field Connection Point		Circuit ID	AN	Meet Point
		Name	Address	Name	Address			
UDL1	New loop installation ACT = N	Any valid value	25 E Florida AV, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205			CABCONNQTY = 1 CABCONN = TYP:UL, LOC:FLD, MTPT CA:FCP47ET, PR:7<CC>

Table 11: Unbundled Distribution Loop (UDL)

Scenario #	Scenario Description	End User		Field Connection Point		Circuit ID	AN	Meet Point
		Name	Address	Name	Address			
L3	Conversion as Specified ACT = V	Bill Smith	25 E Baada AV, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205		480-324-0046-134	CABCONNQTY = 1 CABCONN = TYP.UL, LOC.FLD, MTPT CA.FCP47ET, PR.626
L3	Disconnect loop account ACT = D	Donna Glenn Baked Goods	32 Brenda ST, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205	19.LXFU.0680<CC>..MS	480-K34-29<CC>-252	
L4	Change on loop ACT = C	Donna Glenn Baked Goods	32 Brenda ST, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205	19.LXFU.0680<CC>..MS	480-K34-29<CC>-252	CABCONNQTY = 1 CABCONN = TYP.UL, LOC.FLD, MTPT CA.FCP47ET, PR.7<CC>
L5	Outside move of a loop ACT = T	Donna Glenn Baked Goods	FROM: 44 Brenda ST, Mesa, AZ 85205 TO: 32 Brenda ST, Mesa, AZ 85205	X 46 Embretsen BLVD	FROM: 46 Embretsen BLVD, Mesa, AZ 85205 TO: 46 Embretsen BLVD, Mesa, AZ 85205	19.LXFU.0680<CC>..MS	480-K34-29<CC> 252	CABCONNQTY = 1 CABCONN = TYP.UL, LOC.FLD, MTPT CA.FCP47ET, PR.7<CC>
L6	Inside move of a loop ACT = M	Donna Glenn Baked Goods	32 Brenda ST, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205	19.LXFU.0680<CC>..MS	480-K34-29<CC>-252	CABCONNQTY = 1 CABCONN = TYP.UL, LOC.FLD, MTPT CA.FCP47ET, PR.7<CC>

Table 22: Unbundled Distribution Loop With Number Portability (UDLNP)

Scenario #	Scenario Description	End-User		Field Connection Point		Circuit ID	TNs	AN	Meet Point
		Name	Address	Name	Address				
UDLNP1	Conversion as Specified Resale Account ACT = V	Louise Smith	662 N Kings ST, Mesa, AZ 85215	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205		480-396-<DD>71	480-396-<DD>71-342	CABCONNQTY = 1 CABCON = TYP. UL, LOC.FLD, MTPT CA.FCP47ET, PR.627
UDLNP2	Conversion as Specified Retail Account ACT = V	Bill Smith	25 E Florida AV, Mesa, AZ 85205	X 46 Embretsen BLVD	46 Embretsen BLVD, Mesa, AZ 85205		480-324-0046	480-324-0046-134	CABCONNQTY = 1 CABCON = TYP. UL, LOC.FLD, MTPT CA.FCP47ET, PR.627

*ENDIX A: CHANGE SUMMARY

ffective Date	Scenario #	Field	Column	Action	Description	Description II
ification					Cosmetic changes have been made to this document.	
0/02			BAN Field	Change	The BAN field is optional, however, if the BAN field is populated, the following format must be executed: NPA-Z11-1111-111.	The BAN field is optional, however, if the BAN field is populated, the following format must be executed: NPA-Z<CC>-1111-111 where <CC> equal the last two characters of the CLEC's assigned CCNA.
20/02			PIC/LPIC Basics	Change	Where PICs and LPICs exist, all CSRs returning from Qwest will have an LPIC of 5123 and the following PIC values: PIC of 0718 for Central and Eastern accounts and PIC of 0288 for Western accounts. When a CLEC is submitting an order, any valid PIC or LPIC will be accepted where applicable per the IMA disclosure documentation.	Where PICs and LPICs exist, all CSRs returning from Qwest will have an LPIC of 5123 and the PIC value of 0288. When a CLEC is submitting an order, any valid PIC or LPIC will be accepted where applicable per the IMA Disclosure documentation.
arification			User Identity (CCNA/ACNA/CC)	Change	Qwest will assign each user a CCNA and ACNA that is unique to SATE. For the actual CC field (25 on the LSR form), any 4-character alphanumeric value is valid for SATE. A CLEC can own accounts in any state.	Qwest will assign each user a CCNA and ACNA that is unique to SATE. For the actual CC field (25 on the LSR form), any 4-character alphanumeric value is valid for SATE. Each SATE CCNA can own accounts in any state.
larification			Test Account CSRs	Change	No real or test service orders will be created. No Flow-Through Systems will be used. LSRs entered on the system will not effect the CSRs returned by the system. Users may request to have specific account data added to SATE and if approved, the data will be added within two (2) weeks of the approval.	LSRs entered on the system will not effect the CSRs returned by the system. Users may request to have specific account data added to SATE through the Data Request process.
Clarification			Address Validation and CSR Match Information	Change	In address validation and CSR matches, there is logic in the systems called by IMA which essentially use a variety of algorithms to see if the request can be narrowed down to one. SATE's address and CSR inventory system called by IMA does not perform this function. An example of this is Qwest Legacy Systems might be able to find an address on Pine St	The 'smart' capability of the Qwest Legacy Systems in IMA production allow the systems to search for and locate an address or CSR that will most closely match the input of an Address Validation or CSR query. The SATE stub systems do not have the same capabilities to conduct a 'smart' search for almost identical addresses or CSRs.

Effective Date	Scenario #	Field	Column	Action	Description	Description #
					when Pine St is entered by the CLEC on an AVQ. A second example is Qwest legacy systems may be able to find a CSR for James Smith when James Smithe was entered on the CSR. In either case, SATE never would find such a match. However, in some cases, the Legacy System also might not find a match.	For example, for an AVQ, the Qwest Legacy Systems would have the ability to search for an address on Pine ST when Pine ST was submitted. Similarly, for a CSRQ, the Qwest Legacy Systems may be able to find a CSR for James Smith when James Smiths was submitted. Conversely, the SATE systems would not find these matches.
5/20/02			Flowthrough Eligible Products	Change	Flowthrough is to have the ability to submit an LSR into the SATE systems and have the CSR(s) flow to the Service Order Processor (SOP) without manual handling.	Flowthrough testing is available in SATE for all SATE-supported products in all regions, subject to the same flowthrough eligibility rules found in production.
05/20/02			Flowthrough Eligible Products	Remove	Currently, the products supported as flowthrough eligible in SATE are POTS and UNE-P POTS for all activities only in the Western Region.	
05/20/02	AAQ3	Appointment Availability Query (AAQ) / Appointment Selection Query (ASQ)	NPA-NXX	Change	399-399, 399-499, 399-599	515-288, 515-558, 515-698
Clarification		Address Validation Query (AVQ)	Column Heading	Change	**Response / Scenario Summary**	**Scenario Description**
05/20/02	AVQ3	Address Validation Query (AVQ)	WTN: Data Rules	Change	Any TN with an NPA equal to 399 and an NXX equal to 199 or 299	Any TN with an NPA equal to 515 and an NXX equal to 274 or 277
05/20/02	AVQ3	Address Validation Query (AVQ)	WTN: Examples	Change	399-199-xxxx	515-274-xxxx
05/20/02	AVQ3	Address Validation Query (AVQ)	Address: Data Rules	Change	CALA = IA or ZIP is 22222	CALA = IA or ZIP is 50310
05/20/02	AVQ3	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Smith RD, Des Moines, IA 22222 where X= the NXX used to query.	The Exact Match should return X Smith RD, Des Moines, IA 50310 where X= the NXX used to query.
05/20/02	AVQ4	Address Validation Query (AVQ)	WTN: Data Rules	Change	Any TN with an NPA equal to 399 and an NXX equal to 699, 799, 899, or 999	Any TN with an NPA equal to 515 and an NXX equal to 251, 270, 331, or 727
05/20/02	AVQ4	Address Validation Query (AVQ)	WTN: Examples	Change	399-699-xxxx	515-251-xxxx
05/20/02	AVQ4	Address Validation Query (AVQ)	Address: Data Rules	Change	CALA = IA or ZIP is 22222	CALA = IA or ZIP is 50310
05/20/02	AVQ4	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Van Cleve RD, Des Moines, IA 22222 where	The Exact Match should return X Van Cleve RD, Des Moines, IA 50310

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					X= the NXX used to query.	where X= the NXX used to query.
20/02	AVQ5	Address Validation Query (AVQ)	WTN: Data Rules	Change	Any TN with an NPA equal to 899 and an NXX equal to 199, 299, or 399	Any TN with an NPA equal to 303 and an NXX equal to 282, 698, or 715
20/02	AVQ5	Address Validation Query (AVQ)	WTN: Examples	Change	899-199-xxxx	303-282-xxxx
20/02	AVQ5	Address Validation Query (AVQ)	Address: Data Rules	Change	CALA = DNV or ZIP is 33333	CALA = DNV or ZIP is 80209
/20/02	AVQ5	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Harrison RD, Denver, CO 33333 where X= the NXX used to query.	The Exact Match should return X Harrison RD, Denver, CO 80209 where X= the NXX used to query.
/20/02	AVQ6	Address Validation Query (AVQ)	WTN: Data Rules	Change	Any TN with an NPA equal to 899 and an NXX equal to 499, 599, 699, 799, 899	Any TN with an NPA equal to 303 and an NXX equal to 260, 352, 389, 436 or 446
5/20/02	AVQ6	Address Validation Query (AVQ)	WTN: Examples	Change	899-499-xxxx	303-260-xxxx
5/20/02	AVQ6	Address Validation Query (AVQ)	Address: Data Rules	Change	CALA = DNV or ZIP is 33333	CALA = DNV or ZIP is 80209
5/20/02	AVQ6	Address Validation Query (AVQ)	Expected Results	Change	The Multiple Match should return X Fedorowych DR, Denver, CO 33333 where X= the NXX used to query and X Pearl DR, Denver, CO 33333 where X= the NXX used to query.	The Multiple Match should return X Fedorowych DR, Denver, CO 80209 where X= the NXX used to query and X Pearl DR, Denver, CO 80209 where X= the NXX used to query.
5/20/02	AVQ8	Address Validation Query (AVQ)	WTN: Data Rules	Change	Any TN with an NPA equal to 399 and an NXX equal to 399, 499, or 599	Any TN with an NPA equal to 515 and an NXX equal to 288, 558, or 698
5/20/02	AVQ8	Address Validation Query (AVQ)	WTN: Examples	Change	399-599-xxxx	515-698-xxxx
5/20/02	AVQ8	Address Validation Query (AVQ)	Address: Data Rules	Change	CALA = IA or ZIP is 22222	CALA = IA or ZIP is 50310
5/20/02	AVQ8	Address Validation Query (AVQ)	Expected Results	Change	The Multiple Match should return X Fawcett DR, Des Moines, IA 22222 where X= the NXX used to query and X Mehling DR, Des Moines, IA 22222 where X= the NXX used to query.	The Multiple Match should return X Fawcett DR, Des Moines, IA 50310 where X= the NXX used to query and X Mehling DR, Des Moines, IA 50310 where X= the NXX used to query.
05/20/02	AVQ10	Address Validation Query (AVQ)	Address: Data Rules	Change	X Fedorowych DR, Denver, CO Zip Code= 33333 or CALA = DNV where X= any number equal to 499, 599, 699, 799, 899, or 999	X Fedorowych DR, Denver, CO Zip Code= 80209 or CALA = DNV where X= any number equal to 260, 352, 389, 405, 436, or 446
05/20/02	AVQ10	Address Validation Query (AVQ)	Address: Examples	Change	499 Fedorowych DR, Denver, CO 33333	260 Fedorowych DR, Denver, CO 80209
05/20/02	AVQ10	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Fedorowych DR, Denver, CO 33333 where X= SANO used to query.	The Exact Match should return X Fedorowych DR, Denver, CO 80209 where X= SANO used to query.
05/20/02	AVQ11	Address Validation Query (AVQ)	Address: Data Rules	Change	X Pearl DR, Denver, CO Zip Code= 33333 or	X Pearl DR, Denver, CO Zip Code = 80209 or

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					CALA = DNV where X= any number equal to 499, 599, 699, 799, 899, or 999	CALA = DNV where X = any number equal to 260, 352, 389, 405, 436, or 446
5/20/02	AVQ11	Address Validation Query (AVQ)	Address: Examples	Change	499 Pearl DR, Denver, CO 33333	260 Pearl DR, Denver, CO 80209
5/20/02	AVQ11	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Pearl DR, Denver, CO 33333 where X= SANO used to query.	The Exact Match should return X Pearl DR, Denver, CO 80209 where X= SANO used to query.
5/20/02	AVQ12	Address Validation Query (AVQ)	Address: Data Rules	Change	X Harrison RD, Denver, CO Zip Code =33333 or CALA=DNV where X= any number equal to 199, 299, or 399	X Harrison RD, Denver, CO Zip Code = 80209 or CALA = DNV where X = any number equal to 282, 698, or 715
5/20/02	AVQ12	Address Validation Query (AVQ)	Address: Examples	Change	199 Harrison RD, Denver, CO 33333	282 Harrison RD, Denver, CO 80209
5/20/02	AVQ12	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Harrison RD, Denver, CO 33333 where X= SANO used to query.	The Exact Match should return X Harrison RD, Denver, CO 80209 where X= SANO used to query.
5/20/02	AVQ13	Address Validation Query (AVQ)	Address: Data Rules	Change	X Van Cleve RD, Des Moines, IA Zip Code= 22222 or CALA= IA where X= any number equal to 699, 799, 899, or 999	X Van Cleve RD, Des Moines, IA Zip Code = 50310 or CALA = IA where X = any number equal to 251, 270, 331, or 727
5/20/02	AVQ13	Address Validation Query (AVQ)	Address: Examples	Change	699 Van Cleve RD, Des Moines, IA 22222	251 Van Cleve RD, Des Moines, IA 50310
05/20/02	AVQ13	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match- should return X Van Cleve RD, Des Moines, IA 22222 where X= SANO used to query.	The Exact Match- should return X Van Cleve RD, Des Moines, IA 50310 where X= SANO used to query.
05/20/02	AVQ14	Address Validation Query (AVQ)	Address: Data Rules	Change	X Mehling DR, Des Moines, IA Zip Code= 22222 or CALA=IA where X= any number equal to 399, 499, or 599	X Mehling DR, Des Moines, IA Zip Code= 50310 or CALA = IA where X = any number equal to 288, 558, or 698
05/20/02	AVQ14	Address Validation Query (AVQ)	Address: Examples	Change	399 Mehling DR, Des Moines, IA 22222	288 Mehling DR, Des Moines, IA 50310
05/20/02	AVQ14	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Mehling DR, Des Moines, IA 22222 where X= SANO used to query.	The Exact Match should return X Mehling DR, Des Moines, IA 50310 where X= SANO used to query.
05/20/02	AVQ15	Address Validation Query (AVQ)	Address: Data Rules	Change	X Fawcett DR, Des Moines, IA Zip Code=22222 or CALA= IA where X= any number equal to 399, 499, or 599	X Fawcett DR, Des Moines, IA Zip Code = 50310 or CALA = IA where X = any number equal to 288, 558, or 698
05/20/02	AVQ15	Address Validation Query (AVQ)	Address: Examples	Change	399 Fawcett DR, Des Moines, IA 22222	288 Fawcett DR, Des Moines, IA 50310
05/20/02	AVQ15	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Fawcett DR, Des Moines, IA 22222 where X= SANO used to query.	The Exact Match should return X Fawcett DR, Des Moines, IA 50310 where X= SANO used to query.
05/20/02	AVQ16	Address Validation Query (AVQ)	Address: Data Rules	Change	X Smith RD, Des Moines, IA Zip Code= 22222 or	X Smith RD, Des Moines, IA Zip Code= 50310 or

ctive ate	Scenario #	Field	Column	Action	Description	Description II
					CALA = IA where X= any number equal to 199 or 299	CALA = IA where X= any number equal to 274 or 277
02	AVQ16	Address Validation Query (AVQ)	Address: Examples	Change	199 Smith RD, Des Moines, IA 22222	274 Smith RD, Des Moines, IA 50310
02	AVQ16	Address Validation Query (AVQ)	Expected Results	Change	The Exact Match should return X Smith RD, Des Moines, IA 22222 where X= SANO used to query.	The Exact Match should return X Smith RD, Des Moines, IA 50310 where X= SANO used to query.
02	AVQ23	Address Validation Query (AVQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.
02	CFA1	Connecting Facility Assignment (CFA)	LOCA	Change	DNVRCOSC	DNVRCOSO
02	CFA1	Connecting Facility Assignment (CFA)	LOCZ	Change	DNVRCOSC<ACNA>	DNVRCOSO<ACNA>
02	CFA1	Connecting Facility Assignment (CFA)	Expected Results	Change	Three groups returned, the groups are as follows: CABNM = ALT01 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> INVSTAT = IE QTYSPARE = 64 PCTAVAIL = 64 CABNM = ALU02 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> INVSTAT = IE QTYSPARE = 50 PCTAVAIL = 50 CABNM = ALT03 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100	Three groups returned, the groups are as follows: CABNM = ALT01 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 64 PCTAVAIL = 64 CABNM = ALU02 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 50 PCTAVAIL = 50 CABNM = ALT03 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100

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					LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> INVSTAT = IE QTYSPARE = 0 PCTAVAIL = 0	LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 0 PCTAVAIL = 0 CABNM = ALT02 CABTYP = VF-2WIRE FIRST UNIT = 00001 LAST UNIT = 00100 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> INVSTAT = IE QTYSPARE = 0 PCTAVAIL = 0
5/20/02	CFA3	Connecting Facility Assignment (CFA)	LOCA	Change	DNVRCOSC	DNVRCOSO
5/20/02	CFA3	Connecting Facility Assignment (CFA)	LOCZ	Change	DNVRCOSC<ACNA>	DNVRCOSO<ACNA>
5/20/02	CFA3	Connecting Facility Assignment (CFA)	Expected Results	Change	The units returned are as follows: CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00049 LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00050 LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W	The units returned are as follows: CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00049 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00050 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					D = Blank CKTID/CLO = Blank DUEDT = Blank CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00051 LOCA = DNVRCOSC LOCZ = DNVRCOSC<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank **REPEATS UNTIL UNITNUM=100	D = Blank CKTID/CLO = Blank DUEDT = Blank CABNM = ALT03 CABTYP = VF-2WIRE UNIT = 00051 LOCA = DNVRCOSO LOCZ = DNVRCOSO<ACNA> SUBDF = 0 SUBDT = 0 ASGTRSTN = Blank CURACT = W PNDACT = W D = Blank CKTID/CLO = Blank DUEDT = Blank **REPEATS UNTIL UNITNUM=100
)5/20/02	CSR2	Customer Service Record (CSR)	WTN or ECCKT	Change	899-899-<CC>51	303-436-<CC>51
)5/20/02	CSR2	Customer Service Record (CSR)	Name and Address	Change	Roy Keane 899 Fedorowych DR, Denver, CO	Roy Keane 436 Fedorowych DR, Denver, CO
)5/20/02	CSR2	Customer Service Record (CSR)	Expected Results	Change	AN = 899-899-<CC>51 CUSTCODE = 1<CC> CS = 1FB; STATIND = LIVE; LN = KEANE, ROY; LA = 899 FEDOROWYCH DR, DENVER; USOC = 1FB, /LCC, /RSID <CCNA>, /PIC 0718, /PCA, /LPIC 5123, /EDT; USOC = ESX, /RSID <CCNA>;	AN = 303-436-<CC>51 CUSTCODE = 1<CC> CS = 1FB; STATIND = LIVE; LN = KEANE, ROY; LA = 436 FEDOROWYCH DR, DENVER; USOC = 1FB, /LCC, /RSID <CCNA>, /PIC 0288, /LPIC 5123; USOC = ESX, /RSID <CCNA>;
05/20/02	CSR3	Customer Service Record (CSR)	WTN or ECCKT	Change	399-899-<CC>00	515-331-<CC>00
05/20/02	CSR5	Customer Service Record (CSR)	WTN or ECCKT	Change	899-699-<CC>00	303-389-<CC>00
05/20/02	CSR6	Customer Service Record (CSR)	WTN or ECCKT	Change	899-699-<CC>00	303-389-<CC>00
05/20/02	CSR7	Customer Service Record (CSR)	WTN or ECCKT	Change	515-241-5000	515-255-5000
05/20/02	CSR7	Customer Service Record (CSR)	Expected Results	Change	Multiple Match Response: • 515-241-5000-REFNUM 1121	Multiple Match Response: • 515-255-5000-REFNUM 1121

Effective Date	Scenario #	Field	Column	Action	Description	Description II
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CSR	Customer Service Record (CSR)	WTN or BLOCK	Change	899-499-<CC>00	
[illegible]	CSR	Customer Service Record (CSR)	Name and Address	Change	Andy Cole 999 Foxborough DR. Denver, CO	Andy Cole 300 Foxborough DR. Denver, CO
[illegible]	CSR	Customer Service Record (CSR)	Expected Results	Change	AN = 899-499-<CC>00 CUSTCODE = I<CC> CS = RHCXX STATIND = LIVE USOC = PORXX, /RSID <CCNA>, /TN 899 499-<CC>00, /MIL 1; USOC = RHN, /RSID <CCNA>, /TN 899 499-<CC>00, /MIL 1, /PIC 0718, /LPIC 5123, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS *TGUUA, /IDP ID0137, /BFG <CCNA>:1, /CTX <CCNA>:1; USOC = 6APPK, /RSID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; USOC = N13, /RSID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; USOC = CV9, /RSID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; USOC = 9ZR, /RSID <CCNA>, /RAX 1B, /TN 899 499-<CC>00; USOC = 9PZLC, /RSID <CCNA>, /TN 899 499-<CC>00; USOC = RTVXN, /RSID <CCNA>, /TN 899 499-<CC>00;	AN = 303-260-<CC>00 CUSTCODE = I<CC> CS = RHCXX STATIND = LIVE USOC = 9PZLC, /ZCID <CCNA>, /TN 303 260-<CC>00; USOC = PORXX, /ZCID <CCNA>, /TN 303 260-<CC>00; USOC = RKY, /ZCID <CCNA>, /TN 303 260-<CC>00, /PIC 0288, /LPIC 5123, /ZCN A40040, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS *TGUUA, /IDPID0137, /BFG CTX0137, /CTX <CCNA>:1; USOC = UGUST, /ZCID <CCNA>, /TN 303 260-<CC>00; USOC = UGUFM, /ZCID <CCNA>, /TN 303 260-<CC>00; USOC = 6APPK, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; USOC = N13, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; USOC = CV9, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1;
05/20/02	CSR11	Customer Service Record (CSR)	Expected Results	Change	AN = 509-A34-<CC>03	AN = 509-T34-<CC>03
05/20/02	CSR11	Customer Service Record (CSR)	Expected Results	Change	USOC=U21, /NCI 02LS2, /NC LX--, /ZCID <CCNA>;	USOC=U21, /NCI 02LS2, /NC LX--, /ZCID <CCNA>, /RTZ 2;
05/20/02	FAQ1	Facility Availability Query (FAQ)	WTN: Data Rules	Change	LSO: 399750	LSO: 515270
05/20/02	FAQ1	Facility Availability Query (FAQ)	Address: Data Rules	Change	699 Van Cleve RD, Des Moines, IA 22222 or CALA= IA	251 Van Cleve RD, Des Moines, IA 50310 or CALA= IA
05/20/02	FAQ3	Facility Availability Query (FAQ)	WTN: Data Rules	Change	Any Number where the NPA equals 399 and the NXX equals 699. LSO: 399750	Any Number where the NPA equals 515 and the NXX equals 251. LSO: 515270

Effective Date	Scenario #	Field	Column	Action	Description	Description #
[illegible]/02	FAQ4	Facility Availability Query (FAQ)	WTN: Example	Change	319-491-3000	515-331-5000
[illegible]/02	FAQ5	Facility Availability Query (FAQ)	Address: Data Rules	Change	CALA = IA or Zip Code= 52322	CALA = IA or Zip Code= 50370
[illegible]/02	FAQ5	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address Validation is not an EXACTMATCH
20/02	FAQ6	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to validate address • OSS Gateway: Routing Table Update Required. Call OSS/UHD. • Address Validation is not an EXACTMATCH	• Unable to validate address • OSS Gateway: SIA_ADR_Router caught the following exception: \n Error Code 11900:\n SIA_Router::sqlerr - Oracle error\nSIA_ADR_Router::getArea ByNPANXX - Data not found\nORA-01403: no data found • Address Validation is not an EXACTMATCH
/20/02	FAQ8	Facility Availability Query (FAQ)	Address: Data Rules	Change	515 Morel RD, Des Moines, IA 50309 or CALA= IA in place of Zip Code	515 Morel RD, Des Moines, IA 50311 or CALA= IA in place of Zip Code
/20/02	FAQ8	Facility Availability Query (FAQ)	Expected Results	Change	LINENUM = 2 ECCKT = 515 241-5000	LINENUM = 2 ECCKT = 515 255-5000
/20/02	FAQ9	Facility Availability Query (FAQ)	WTN: Data Rules	Change	LSO: 899250	LSO: 303722
/20/02	FAQ10	Facility Availability Query (FAQ)	WTN: Data Rules	Change	LSO: 899750	LSO: 303534
/20/02	FAQ10	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. •	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address Validation is not an EXACTMATCH
arification		Loop Qualification	Heading	Change	**Response / Scenario Summary**	**Scenario Description**

Effective Date	Scenario #	Field	Column	Action	Description	Description #
05/20/02	FAQ3	Facility Availability Query (FAQ)	WTN: Examples	Change	319-255-5000	515-255-5000
05/20/02	FAQ3	Facility Availability Query (FAQ)	Address: Data Rules	Change	CALA = IA or Zip Code= 52722	CALA = IA or Zip Code= 50370
05/20/02	FAQ5	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address Validation is not an EXACTMATCH
05/20/02	FAQ6	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to validate address • OSS Gateway: Routing Table Update Required. Call OSS/UHD. • Address Validation is not an EXACTMATCH	• Unable to validate address • OSS Gateway: SIA_ADR_Router caught the following exception: \n Error Code 11900:\n SIA_Router::sqlerr - Oracle error\nSIA_ADR_Router::getArea ByNPANXX - Data not found\nORA-01403: no data found • Address Validation is not an EXACTMATCH
05/20/02	FAQ8	Facility Availability Query (FAQ)	Address: Data Rules	Change	515 Morel RD, Des Moines, IA 50309 or CALA= IA in place of Zip Code	515 Morel RD, Des Moines, IA 50311 or CALA= IA in place of Zip Code
05/20/02	FAQ8	Facility Availability Query (FAQ)	Expected Results	Change	LINENUM = 2 ECCKT = 515 241-5000	LINENUM = 2 ECCKT = 515 255-5000
05/20/02	FAQ9	Facility Availability Query (FAQ)	WTN: Data Rules	Change	LSO: 899250	LSO: 303722
05/20/02	FAQ10	Facility Availability Query (FAQ)	WTN: Data Rules	Change	LSO: 899750	LSO: 303534
05/20/02	FAQ10	Facility Availability Query (FAQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. •	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address Validation is not an EXACTMATCH
Clarification		Loop Qualification	Heading	Change	**Response / Scenario Summary**	**Scenario Description**

Effective Date	Scenario #	Field	Column	Action	Description	Description II
		Query (LQQ)				
05/20/02	LQQ1	Loop Qualification Query (LQQ)	WTN: Data Rules	Change	899-499-0000	303-260-0000
05/20/02	LQQ1	Loop Qualification Query (LQQ)	Address: Data Rules	Change	CALA = DNV or Zip Code = 33333	CALA = DNV or Zip Code = 80209
05/20/02	LQQ1	Loop Qualification Query (LQQ)	Expected Results	Change	LOOPQUALMESG = Circuit ID, 899 499-0001;	LOOPQUALMESG = Circuit ID, 303 260-0001;
05/20/02	LQQ2	Loop Qualification Query (LQQ)	Address: Data Rules	Change	499 Fedorowych DR, Denver, CO 33333	260 Fedorowych DR, Denver, CO 80209
05/20/02	LQQ2	Loop Qualification Query (LQQ)	Expected Results	Change	LOOPQUALMESG = Circuit ID, 899 499-0001;	LOOPQUALMESG = Circuit ID, 303 260-0001;
05/20/02	LQQ3	Loop Qualification Query (LQQ)	WTN: Data Rules	Change	899-499-0000	303-260-0000
05/20/02	LQQ3	Loop Qualification Query (LQQ)	Address: Data Rules	Change	CALA = DNV or Zip Code = 33333	CALA = DNV or Zip Code = 80209
05/20/02	LQQ3	Loop Qualification Query (LQQ)	Expected Results	Change	WTN = 899-499-0000	WTN = 303-260-0000
05/20/02	LQQ4	Loop Qualification Query (LQQ)	Address: Data Rules	Change	499 Fedorowych DR, Denver, CO 33333	260 Fedorowych DR, Denver, CO 80209
05/20/02	LQQ4	Loop Qualification Query (LQQ)	Expected Results	Change	WTN = 899-499-0000	WTN = 303-260-0000
05/20/02	LQQ5	Loop Qualification Query (LQQ)	Address: Data Rules	Change	CALA = DNV or Zip Code = 33333	CALA = DNV or Zip Code = 80209
04/24/02	LQQ5	Loop Qualification Query (LQQ)	Expected Results	Change	TN not found.	OSS Gateway: Error caught by data source Message[0] ERROR: No information was found for this address.
05/20/02	LQQ6	Loop Qualification Query (LQQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match
Clarification		Raw Loop Data Query (RLDQ)	Column Heading	Change	**Response/Scenario Summary**	**Scenario Description**
05/20/02	RLDQ1	Raw Loop Data Query (RLDQ)	WTN: Data Rules	Change	Any Number where the NPA equals 899 and the NXX equals 499, 599, 699, 799, 899, or 999.	Any Number where the NPA equals 303 and the NXX equals 260, 352, 389, 405, 436, or 446.
05/20/02	RLDQ1	Raw Loop Data Query (RLDQ)	WTN: Examples	Change	899-499-0000	303-260-0000
05/20/02	RLDQ1	Raw Loop Data	Expected Results	Change	WTN = 899-<NXX-XXXX> used to	WTN = 303-<NXX-XXXX used to

Effective Date	Scenario #	Field	Column	Action	Description	Description II
		Query (RLDQ)			query> Street Address Number should match the NXX of the TN used to query. <NXX> Fedorowych DR, Denver, CO 33333 WCCLLI = DNVRCOSA	query> Street Address Number should match the NXX of the TN used to query. <NXX> Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOHA
05/20/02	RLDQ1	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR where Y = the NXX used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.]
05/20/02	RLDQ1	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR where Y = the NXX used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the NXX used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When NXX = 260 then Y = 499. When NXX = 352 then Y = 599. When NXX = 389 then Y = 699. When NXX = 405 then Y = 799. When NXX = 436 then Y = 899. When NXX = 446 then Y = 999.]
05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	WTN: Data Rules	Change	Any Number where the NPA equals 899 and the NXX equals 199, 299 or 399.	Any Number where the NPA equals 303 and the NXX equals 282, 698 or 715.
05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	WTN: Examples	Change	899-199-0000	303-282-0000

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05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN = 859-<NXX-XXXX> used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Harrison RD, Denver, CO 33333 WCCLLI = DNVRCOSC	WTN = 303-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Harrison RD, Denver, CO 80209 WCCLLI = DNVRCOSO
05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR where Y = the NXX used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.]
05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison DR where Y = the NXX used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the NXX used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.]
05/20/02	RLDQ2	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 3 TERMINAL_ID = IT Y Harrison DR where Y = the NXX used to query	SEGMENTNUM = 3 TERMINAL_ID = IT Y Harrison DR [When NXX = 282 then Y = 199. When NXX = 698 then Y = 299. When NXX = 715 then Y = 399.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP [When NXX = 282 then Y = 199. When NXX = 698 then Y

Effective Date	Scenario #	Fields	Category	Action	Description	Description II
						= 299. When NXX = 515 then Y = 399.]
05/20/02	RLDQ3	Raw Loop Data Query (RLDQ)	WTN: Data Rules	Change	Any Number where the NPA equals 399 and the NXX equals 399, 499, or 599.	Any Number where the NPA equals 515 and the NXX equals 288, 558, or 698.
05/20/02	RLDQ3	Raw Loop Data Query (RLDQ)	WTN: Examples	Change	399-499-0000	515-558-0000
05/20/02	RLDQ3	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN = 399-<NXX-XXXX> used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Mehling DR, Des Moines, IA 22222 WCCLLI = DESMIASD	WTN = 515-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN used to query. <NXX> Mehling DR, Des Moines, IA 50310 WCCLLI = DESMIADT
05/20/02	RLDQ3	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR where Y = the NXX used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.]
05/20/02	RLDQ3	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR where Y = the NXX used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When NXX = 288 then Y = 399. When NXX = 558 then Y = 499. When NXX = 698 then Y = 599.]
05/20/02	RLDQ4	Raw Loop Data Query (RLDQ)	WTN: Data Rules	Change	Any Number where the NPA equals 399 and the NXX equals 699, 799, 899, or 999	Any Number where the NPA equals 515 and the NXX equals 251, 270, 331, or 727.
05/20/02	RLDQ4	Raw Loop Data Query (RLDQ)	WTN: Examples	Change	399-699-0000	515-251-0000
05/20/02	RLDQ4	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN = 399-<NXX-XXXX> used to query>	WTN = 515-<NXX-XXXX used to query>

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					The Street Address Number should match the NXX of the TN. <NXX> Van Cleve RD, Des Moines IA 22222 WCCLLI = DESMIASC	The Street Address Number should match the NXX of the TN. <NXX> Van Cleve RD, Des Moines IA, 50310 WCCLLI = DESMIAVW
05/20/02	RLDQ4	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD where Y = the NXX	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX = 331 then Y = 899. When NXX = 727 then Y = 999.]
05/20/02	RLDQ4	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd where Y = the NXX BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL ,900kf CABLE_NAME = YSP where Y equals the NXX	SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd [When NXX = 799 then Y = 270. When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX 331 then Y = 899 When NXX = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL 900kf CABLE_NAME = YSP [When NXX = 251 then Y = 699. When NXX = 270 then Y = 799. When NXX = 331 then Y = 899. When NXX = 727 then Y = 999.]
05/20/02	RLDQ5	Raw Loop Data Query (RLDQ)	WTN: Data Rules	Change	Any Number where the NPA equals 399 and the NXX equals 199 or 299	Any Number where the NPA equals 515 and the NXX equals 274 or 277.
05/20/02	RLDQ5	Raw Loop Data Query (RLDQ)	WTN: Examples	Change	399-299-0000	515-277-0000
05/20/02	RLDQ5	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN = 399-<NXX-XXXX> used to query> The Street Address Number should match the NXX of the TN. <NXX> Smith RD, Des Moines, IA 22222 WCCLLI = DESMIASA	WTN = 515-<NXX-XXXX used to query> The Street Address Number should match the NXX of the TN. <NXX> Smith RD, Des Moines, IA 50310 WCCLLI = DESMIAWS
05/20/02	RLDQ5	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Van	SEGMENTNUM = 1 TERMINAL_ID = X Y Van

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					Cleve RD where Y = the NXX	Cleve RD [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.]
05/20/02	RLDQ5	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Smith Rd where Y = the NXX BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP where Y equals the NXX	SEGMENTNUM= 2 TERMINAL_ID = IT Y Smith Rd [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When NXX = 274 then Y = 199. When NXX = 277 then Y = 299.]
05/20/02	RLDQ6	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr where Y= the NXX used to query. When NXX = 532 then Y= 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr [When NXX = 532 then Y= 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.]
05/20/02	RLDQ6	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr where Y= the NXX used to query. When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP where Y equals the NXX. When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When NXX = 532 then Y = 699. When NXX = 533 then Y = 799. When NXX = 534 then Y = 899.]
05/20/02	RLDQ7	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR where Y= the NXX used to query. When NXX = 838 then Y = 399. When NXX = 835 then Y	SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When

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					= 499. When NXX = 747 then Y = 599.	NXX = 747 then Y = 599.]
05/20/02	RLDQ7	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR where Y = the NXX used to query. When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP where Y equals the NXX used to query. When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP [When NXX = 838 then Y = 399. When NXX = 835 then Y = 499. When NXX = 747 then Y = 599.]
05/20/02	RLDQ8	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd where Y = the NXX used to query. When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.	SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.]
05/20/02	RLDQ8	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Riverside Rd where Y = the NXX used to query. When NXX = 467 then Y = 199. When NXX = 468 then Y = 299. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP where Y equals the NXX. When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Riverside Rd [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP [When NXX = 467 then Y = 199. When NXX = 468 then Y = 299.]
05/20/02	RLDQ9	Raw Loop Data Query (RLDQ)	Address: Data Rules	Change	X Fedorowych DR, Denver, CO 33333 where X= 799	405 Fedorowych DR, Denver, CO 80209
05/20/02	RLDQ9	Raw Loop Data Query (RLDQ)	Address: Examples	Change	799 Fedorowych DR, Denver, CO 33333	405 Fedorowych DR, Denver, CO 80209
05/20/02	RLDQ9	Raw Loop Data Query (RLDQ)	Expected Results	Change	<SANO from Query> Fedorowych DR, Denver, CO 33333	405 Fedorowych DR, Denver, CO 80209

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					WCCLLI = DNVRCOSA	WCCLLI = DNVRCOMA
05/20/02	RLDQ9	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych Dr where Y = the SANO	SEGMENTNUM = 1 TERMINAL_ID = X 799 Fedorowych Dr
05/20/02	RLDQ9	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM= 2 TERMINAL_ID = IT Y Fedorowych Dr where Y = the SANO BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO	SEGMENTNUM = 2 TERMINAL_ID = IT 799 Fedorowych Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = 799SP
05/20/02	RLDQ10	Raw Loop Data Query (RLDQ)	Address: Data Rules	Change	X Fedorowych DR, Denver, CO 33333 where X = 999. The CALA for this address is DNV and the Zip Code is 33333.	446 Fedorowych DR, Denver, CO 80209. The CALA for this address is DNV and the Zip Code is 80209.
05/20/02	RLDQ10	Raw Loop Data Query (RLDQ)	Address: Examples	Change	999 Fedorowych DR, Denver, CO 33333	446 Fedorowych DR, Denver, CO 80209
05/20/02	RLDQ10	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN: 899-<SANO from Query>-0000 through 899-<SANO from Query>-0023 <SANO from Query> Fedorowych DR, Denver, CO 33333 WCCLLI = DNVRCOSA	WTN: 303-446-0000 through 303-446-0023 446 Fedorowych DR, Denver, CO 80209
05/20/02	RLDQ10	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X 999 Fedorowych DR
05/20/02	RLDQ10	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 2 TERMINAL_ID = IT 999 Fedorowych DR BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = 999SP
05/20/02	RLDQ11	Raw Loop Data Query (RLDQ)	Address: Data Rules	Change	X Fedorowych DR, Denver, CO 33333 where X= 499, 599, 699, 899. The CALA for this address is DNV and the Zip Code	X Fedorowych DR, Denver, CO 80209 where X= 260, 352, 389 or 436. The CALA for this address is DNV and the

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					in 33333	Zip Code is 80209
05/20/02	RLDQ11	Raw Loop Data Query (RLDQ)	Address Examples	Change	499 Fedorowych DR, Denver, CO 33333	360 Fedorowych DR, Denver, CO 80209
05/20/02	RLDQ11	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN: 399-<SANO from Query> 0000 through 899-<SANO from Query> 0023 <SANO from Query> Fedorowych DR, Denver, CO 33333 WCCLLI = DNVRCOSA	WTN: 301-<SANO from Query> 0000 through 301-<SANO from Query> 0023 <SANO from Query> Fedorowych DR, Denver, CO 80209 WCCLLI = DNVRCOMA
05/20/02	RLDQ11	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR where Y = the SANO	SEGMENTNUM = 1 TERMINAL_ID = X Y Fedorowych DR [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When SANO = 436 then Y = 899.]
05/20/02	RLDQ11	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR where Y = the SANO BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fedorowych DR [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When SANO = 436 then Y = 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When SANO = 260 then Y = 499. When SANO = 353 then Y = 599. When SANO = 389 then Y = 699. When SANO = 436 then Y = 899.]
05/20/02	RLDQ12	Raw Loop Data Query (RLDQ)	Address: Data Rules	Change	X Harrison RD, Denver, CO 33333 where X= 399 The CALA for this address is DNV The Zip Code is 33333	715 Harrison RD, Denver, CO 80209. The CALA for this address is DNV and the Zip Code is 80209
05/20/02	RLDQ12	Raw Loop Data Query (RLDQ)	Address: Examples	Change	399 Harrison RD, Denver, CO 33333	715 Harrison RD, Denver, CO 80209
05/20/02	RLDQ12	Raw Loop Data Query (RLDQ)	Expected Results	Change	<SANO from Query > Harrison RD, Denver, CO 33333 WCCLLI = DNVRCOSC	715 Harrison RD, Denver, CO 80209 WCCLLI = DNVRCOSO
05/20/02	RLDQ12	Raw Loop Data	Expected Results	Change	SEGMENTNUM = 1	SEGMENTNUM = 1

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		Query (RLDQ)			TERMINAL_ID = X Y Harrison Rd where Y = the SANO	TERMINAL_ID = X 399 Harrison Rd
05/20/02	RLDQ12	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison Rd where Y = the SANO BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO	SEGMENTNUM = 2 TERMINAL_ID = IT 399 Harrison Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL .800kf CABLE_NAME = 399SP
05/20/02	RLDQ12	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM= 3 TERMINAL_ID = IT Y Harrison Rd where Y = the SANO BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP where Y equals the SANO	SEGMENTNUM = 3 TERMINAL_ID = IT 399 Harrison Rd BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = 399SP
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Address: Data Rules	Change	X Harrison RD, Denver, CO 33333 where X= 199 or 299. The CALA for this address is DNV and The Zip Code is 33333.	X Harrison RD, Denver, CO 80209 where X= 282 or 698. The CALA for this address is DNV and the Zip Code is 80209.
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Address: Examples	Change	199 Harrison RD, Denver, CO 33333	282 Harrison RD, Denver, CO 80209
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Expected Results	Change	WTN: 899-<SANO from Query>-0000 through 899-<SANO from Query>-0023 <SANO from Query> Harrison Rd, Denver, CO 33333 WCCLLI = DNVRCOSC	WTN: 303-<SANO from Query>-0000 through 303-<SANO from Query>-0023 <SANO from Query> Harrison Rd, Denver, CO 80209 WCCLLI = DNVRCOSO
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Harrison DR [When SANO = 282 then Y = 199 When SANO = 698 then Y = 299.]
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison DR where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK	SEGMENTNUM = 2 TERMINAL_ID = IT Y Harrison DR [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] BRIDGE_TAP_OFFSET_DE

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					MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO used to query	SC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.]
05/20/02	RLDQ13	Raw Loop Data Query (RLDQ)	Expected Results	Change	SEGMENTNUM = 3 TERMINAL_ID = IT Y Harrison DR where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 3 TERMINAL_ID = IT Y Harrison DR [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .010kf CABLE_NAME = YSP [When SANO = 282 then Y = 199. When SANO = 698 then Y = 299.]
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Address: Data Rules	Change	X Mehling DR, Des Moines, IA 22222 where X= 399. The CALA for this address is IA. The Zip Code is 22222	288 Mehling DR, Des Moines, IA 50310. The CALA for this address is IA and the Zip Code is 50310.
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Address: Examples	Change	399 Mehling DR, Des Moines, IA 22222	288 Mehling DR, Des Moines, IA 50310
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Expected Results	Change	5.LXFU.1234XX..NW where XX= any value 00 through 99	1.LXFU.1234XX..NW where XX= any value 00 through 99
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Expected Results	Change	<SANO from Query> Mehling DR, Des Moines, IA 22222 WCCLLI = DESMIASD	288 Mehling DR, Des Moines, IA 50310 WCCLLI = DESMIADT
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling Dr where Y = the SANO	SEGMENTNUM = 1 TERMINAL_ID = X 399 Mehling Dr
05/20/02	RLDQ14	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling Dr where Y = the SANO BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL .800kf CABLE_NAME = YSP where Y equals the SANO	SEGMENTNUM = 2 TERMINAL_ID = IT 399 Mehling Dr BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC= 26NL .800kf CABLE_NAME = 399SP
05/20/02	RLDQ15	Raw Loop Data Query(RLDQ)	Address: Data Rules	Change	X Mehling DR, Des Moines, IA 22222 where X = 499 or 599. The CALA for this address is IA and the Zip Code is 22222	X Mehling DR, Des Moines, IA 50200 where X = 350 or 650. The CALA for this address is IA and the Zip Code is

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						50310
05/20/02	RLDQ15	Raw Loop Data Query(RLDQ)	Address Examples	Change	499 Mehling DR, Des Moines, IA 22222	558 Mehling DR, Des Moines, IA 50310
05/20/02	RLDQ15	Raw Loop Data Query(RLDQ)	Expected Results	Change	WTN: 399-<SANO from Query>-0000 through 399-<SANO from Query>-0023 <SANO from Query> Mehling DR, Des Moines, IA 22222 WCCLLI = DESMIASD MLTDIST = 8900	WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Mehling DR, Des Moines, IA 80209 WCCLLI = DESMIADT MLTDIST = 8900
05/20/02	RLDQ15	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Mehling DR [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.]
05/20/02	RLDQ15	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Mehling DR [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When SANO = 558 then Y = 499. When SANO = 698 then Y = 599.]
05/20/02	RLDQ16	Raw Loop Data Query(RLDQ)	Address: Data Rules	Change	X Van Cleve RD, Des Moines, IA 22222 where X = 799. The CALA for these numbers is IA and the Zip Code is 22222.	270 Van Cleve RD, Des Moines, IA 50310. The CALA for these numbers is IA and the Zip Code is 50310.
05/20/02	RLDQ16	Raw Loop Data Query(RLDQ)	Address: Examples	Change	799 Van Cleve RD, Des Moines, IA 22222	270 Van Cleve RD, Des Moines, IA 50310
05/20/02	RLDQ16	Raw Loop Data Query(RLDQ)	Expected Results	Change	<SANO from Query> Van Cleve RD, Des Moines, IA 22222 WCCLLI = DESMIASC	270 Van Cleve RD, Des Moines, IA 50310 WCCLLI = DESMIANW
05/20/02	RLDQ16	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve Rd where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X 799 Van Cleve Rd
05/20/02	RLDQ16	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd where Y = the SANO	SEGMENTNUM = 2 TERMINAL_ID = IT 799 Van Cleve Rd

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					used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = YSP where Y equals the SANO used to query	BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .800kf CABLE_NAME = 799SP
05/20/02	RLDQ17	Raw Loop Data Query(RLDQ)	Address: Data Rules	Change	X Van Cleve RD, Des Moines, IA 22222 where X = 699, 899 or 999. The CALA for these numbers is IA and the Zip Code is 22222.	X Van Cleve RD, Des Moines, IA 50310 where X = 251, 331 or 727. The CALA for these numbers is IA and the Zip Code is 50310.
05/20/02	RLDQ17	Raw Loop Data Query(RLDQ)	Address: Examples	Change	699 Van Cleve RD, Des Moines, IA 22222	251 Van Cleve RD, Des Moines, IA 50310
05/20/02	RLDQ17	Raw Loop Data Query(RLDQ)	Expected Results	Change	WTN: 399-<SANO from Query>-0000 through 399-<SANO from Query>-0023 <SANO from Query> Van Cleve RD, Des Moines, IA 22222 WCCLLI = DESMIASC MLTDIST = 8900	WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Van Cleve RD, Des Moines, IA 50310 WCCLLI = DESMIANW
05/20/02	RLDQ17	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.]
05/20/02	RLDQ17	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Van Cleve Rd [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When SANO = 251 then Y = 699. When SANO = 331 then Y = 899. When SANO = 727 then Y = 999.]
05/20/02	RLDQ18	Raw Loop Data	Address: Data Rules	Change	X Smith RD, Des Moines, IA 22222 where	X Smith RD, Des Moines, IA 50310

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		Query(RLDQ)			X = 199 or 299. The CALA for these numbers is IA and the Zip Code is 22222.	where X = 274 or 277. The CALA for these numbers is IA and the Zip Code is 50310.
05/20/02	RLDQ18	Raw Loop Data Query(RLDQ)	Address: Examples	Change	299 Smith RD, Des Moines, IA 22222	277 Smith RD, Des Moines, IA 50310
05/20/02	RLDQ18	Raw Loop Data Query(RLDQ)	Expected Results	Change	WTN: 399-<SANO from Query>-0000 through 399-<SANO from Query>-0023 <SANO from Query> Smith RD, Des Moines, IA 22222 WCCLLI = DESMIASA	WTN: 515-<SANO from Query>-0000 through 515-<SANO from Query>-0023 <SANO from Query> Smith RD, Des Moines, IA 50310 WCCLLI = DESMIAWS
05/20/02	RLDQ18	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD where Y = the SANO used to query	SEGMENTNUM = 1 TERMINAL_ID = X Y Van Cleve RD [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.]
05/20/02	RLDQ18	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Smith Rd where Y = the SANO used to query BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP where Y equals the SANO used to query	SEGMENTNUM = 2 TERMINAL_ID = IT Y Smith Rd [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When SANO = 274 then Y = 199. When SANO = 277 then Y = 299.]
05/20/02	RLDQ19	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr where Y= the SANO used to query. When SANO = 533 then Y = 799.	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr [When SANO = 533 then Y = 799.]
05/20/02	RLDQ19	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr where Y = the SANO used to query when SANO = 533 then Y = 799. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP where Y	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When SANO = 533 then Y = 799.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .900kf CABLE_NAME = YSP [When SANO = 533 then Y =

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					equals the SANO used to query. When SANO = 533 then Y = 799.	799.]
05/20/02	RLDQ20	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr where Y = the SANO used to query. When SANO = 532 or 534 then Y = 699 or 899.	SEGMENTNUM = 1 TERMINAL_ID = X Y Storefront Dr [When SANO = 532 or 534 then Y = 699 or 899.]
05/20/02	RLDQ20	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr where Y= the SANO used to query. When SANO = 532 or 534 then Y = 699 or 899. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP where Y equals the SANO used to query. When SANO = 532 or 534 then Y = 699 or 899.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Storefront Dr [When SANO = 532 or 534 then Y = 699 or 899.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 26NL .600kf CABLE_NAME = YSP [When SANO = 532 or 534 then Y = 699 or 899.]
05/20/02	RLDQ22	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR where Y= the SANO used to query. When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.	SEGMENTNUM = 1 TERMINAL_ID = X Y Fireside DR [When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.]
05/20/02	RLDQ22	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR where Y= the SANO used to query. When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP where Y equals the SANO used to query. When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Fireside DR [When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .300kf CABLE_NAME = YSP [When SANO = 838 then Y = 399. When SANO = 835 then Y = 499. When SANO = 747 then Y = 599.]

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05/20/02	RLDQ23	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd where Y = the SANO used to query. When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.	SEGMENTNUM = 1 TERMINAL_ID = X Y Riverside Rd [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.]
05/20/02	RLDQ23	Raw Loop Data Query(RLDQ)	Expected Results	Change	SEGMENTNUM = 2 TERMINAL_ID = IT Y Riverside Rd where Y = the SANO used to query. When SANO = 467 then Y = 199. When SANO = 468 then Y = 299. BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP where Y equals the SANO used to query. When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.	SEGMENTNUM = 2 TERMINAL_ID = IT Y Riverside Rd [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.] BRIDGE_TAP_OFFSET_DESC = BLANK MAKE_UP_DESC = 24NL .600kf CABLE_NAME = YSP [When SANO = 467 then Y = 199. When SANO = 468 then Y = 299.]
05/20/02	RLDQ24	Raw Loop Data Query(RLDQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match
05/20/02	RLDQ25	Raw Loop Data Query(RLDQ)	Expected Results	Change	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found.	• Unable to locate specified Address • OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry. Message [1] No exact street name/descriptive name matched in PREMIS. No partial match found. • Address not an exact match
05/20/02	SAQ2	Service Availability Query (SAQ)	LSO/NPA-NXX	Change	515241	515255
05/20/02	SAQ6	Service Availability Query (SAQ)	LSO/NPA-NXX	Change	899750	303534
05/20/02	SAQ6	Service Availability Query (SAQ)	Expected Results	Change	Switch Type: DMS00ON NPANXXs: 899499, 899599, 899699,	Switch Type: DMS00ON NPANXXs: 303260, 303352, 303389,

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					899799, 899899, 899999 Switch Type: 1AESS NPANXX: 303744	303405, 303436, 303446
05/20/02	TNAQ3	Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)	Address	Change	X Fedorowych DR, Denver, CO 33333 where X = any number equal to 499, 599, 699, 799, 899, or 999	X Fedorowych DR, Denver, CO 80209 where X = any number equal to 260, 352, 389, 405, 436, or 446
05/20/02	TNAQ3	Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)	Site ID	Change	DNVRCOSA	DNVRCOMA
05/20/02	TNAQ3	Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)	TTA	Change	750	534
05/06/02	TNAQ3	Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)	TNAR Expected Results	Change	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. • Message[0]=NO AVAILABLE NUMBERS SATISFY ALL THE VALID INPUT PARAMETERS. • No Telephone Numbers available for this query	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. Message [0] NO AVAILABLE NUMBERS SATISFY ALL THE VALID INPUT PARAMETERS. • No Telephone Numbers available for this query
05/06/02	TNAQ4	Telephone Number Availability Query (TNAQ) / Telephone Number Selection Query (TNSQ)	TNAR Expected Results	Change	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. • No Telephone Numbers available for this query	• OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters. • Message [0] NO AVAILABLE NUMBERS SATISFY ALL THE VALID INPUT PARAMETERS. • No Telephone Numbers available for this query
05/20/02	CEX1	Centrex Plus (CEX)	Common Block: AN	Change	899-699-0000-100	303-389-0000-100
05/20/02	CEX2	Centrex Plus (CEX)	Common Block: Name and Address	Change	R00 Corporation 620 Morel RD, Des Moines, IA 50309	R00 Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	CEX2	Centrex Plus (CEX)	Common Block: AN	Change	399-799-0000-100	515-270-0000-100

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05/20/02	CEX4	Centrex Plus (CEX)	Common Block: AN	Change	899-699-<CC>00-1<CC>	303-389-<CC>00-1<CC>
05/20/02	CEX4	Centrex Plus (CEX)	End User or Common Block: USOCs	Change	1FR, /TN 303 744-5000, /PIC 0718, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 555 555-5555, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;	1FR, /RIE, /TN 303 744-5000, /PIC 0288, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; LAWPA, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 303 722-9876, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;
05/20/02	CEX5	Centrex Plus (CEX)	Common Block: Name and Address	Change	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50311
05/20/02	CEX5	Centrex Plus (CEX)	Common Block: AN	Change	399-799-<CC>00-1<CC>	515-270-<CC>00-1<CC>
05/20/02	CEX5	Centrex Plus (CEX)	End User: Name and Address	Change	Alex Ferguson 515 Morel RD, Des Moines, IA 50309	Alex Ferguson 515 Morel RD, Des Moines, IA 50311
05/20/02	CEX5	Centrex Plus (CEX)	End User: AN	Change	515-241-5000-121	515-255-5000-121
05/20/02	CEX5	Centrex Plus (CEX)	End User: TN	Change	515-241-5000	515-255-5000
05/20/02	CEX5	Centrex Plus (CEX)	End User or Common Block: USOCs	Change	1FR, /RIE, /TN 515 241-5000, /PIC 0718, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 515 241-5000; 9ZR, /RAX 1R; AYK, /TN 515 241-5000; 9PZLX, /TN 515 241-50000; VMJXA, /TN 515 241-5000, /CFN 555 555-5555, /RCYC 3; NNK, /TN 515 241-5000 NKM, /TN 515 241-5000; 999AL, /TN 515 241-5000;	1FR, /RIE, /TN 515 255-5000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, /EDT CS\ 09-23-2001, /LSTP; PORXX, /TN 515 255-5000; 9ZR, /RAX 1R; AYK, /TN 515 255-5000; 9PZLX, /TN 515 255-5000; VMJXA, /TN 515 255-5000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 515 255-5000 NKM, /TN 515 255-5000; 999AL, /TN 515 255-5000;
05/20/02	CEX7	Centrex Plus (CEX)	Common Block: AN	Change	899-699-<CC>00-1<CC>	303-389-<CC>00-1<CC>
05/20/02	CEX8	Centrex Plus (CEX)	Common Block: Name and Address	Change	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	CEX8	Centrex Plus (CEX)	Common Block: AN	Change	399-799-<CC>00-1<CC>	515-270-<CC>00-1<CC>
05/20/02	CEX8	Centrex Plus (CEX)	End User: Name and Address	Change	Alex Ferguson 515 Morel RD, Des Moines, IA 50309	Alex Ferguson 515 Morel RD, Des Moines, IA 50311

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05/20/02	CEX10	Centrex Plus (CEX)	Common Block: AN	Change	899-699-<CC>00-1<CC>	303-389-<CC>00-1<CC>
05/20/02	CEX10	Centrex Plus (CEX)	End User: Name and Address	Change	Andy Cole 699 Fedorowych DR, Denver, CO 33333	389 Fedorowych DR, Denver, CO 80209
05/20/02	CEX10	Centrex Plus (CEX)	End User: TN	Change	899-699-<CC>00	303-389-<CC>00
05/20/02	CEX10	Centrex Plus (CEX)	End User or Common Block: USOCs	Change	PORXX, /RSID <CCNA>, /TN 899 699-<CC>00, /MIL 1; 9PZLC, /RSID <CCNA>, /TN 899 699-<CC>00; RHN, /RSID <CCNA>, /TN 899 699-<CC>00, /MIL 1, /PIC 0718, /LPIC 5123, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS *TGUUA, /IDP ID0137, /BFG <CCNA>:0, /CTX <CCNA>:0; 6APPK, /RSID <CCNA>, /TN 899 699-<CC>00, /CTX <CCNA>:0; N13, /RSID <CCNA>, /TN 899 699-<CC>00, /CTX <CCNA>:0; CV9, /RSID <CCNA>, /TN 899 699-<CC>00, /CTX <CCNA>:0; 9ZR, /RSID <CCNA>, /RAX 1B, /TN 899 699-<CC>00; 9PZLC, /RSID <CCNA>, /TN 899 699-0100; RTVXN, /RSID <CCNA>, /TN 899 699-<CC>00;	NP3, /RSID <CCNA>; EQA, /RSID <CCNA>, /SFG 204, /CTX <CCNA>, /GSZ 20; HYE, /RSID <CCNA>, /CTX <CCNA>; MUMHT, /RSID <CCNA>; PORXX, /RSID <CCNA>, /TN 303 389-<CC>00, /MIL 1; 9PZLC, /RSID <CCNA>, /TN 303 389-<CC>00; RHN, /RSID <CCNA>, /TN 303 389-<CC>00, /MIL 1, /PIC 0288, /LPIC 5123, /ZCN A40040, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS *TGUUA, /IDP ID0137, /BFG CTX0137, /CTX <CCNA>:0; 6APPK, /TN 303 389-<CC>00, /CTX <CCNA>:0; N13, /TN 303 389-<CC>00, /CTX <CCNA>:0; CV9, /TN 303 389-<CC>00, /CTX <CCNA>:0; 9ZR, /RSID <CCNA>, /RAX 1B, /TN 303 389-<CC>00; 69J, /TN 303 389-<CC>00, /CFN 303 534-9876, /CTX <CCNA>:0; GVJ, /TN 303 389-<CC>00, /CTX <CCNA>:0; 69H, /TN 303 389-<CC>00, /CFND 303 534-9876, /RCYC 3, /CTX <CCNA>:0; 303 389-<CC>00;
05/20/02	CEX11	Centrex Plus (CEX)	Common Block: Name and Address	Change	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	CEX11	Centrex Plus (CEX)	Common Block: AN	Change	399-799-<CC>00-1<CC>	515-270-<CC>00-1<CC>
05/20/02	CEX11	Centrex Plus (CEX)	End User: Name and Address	Change	Phil Neville 799 Van Cleve RD, Des Moines, IA 22222	Phil Neville 270 Van Cleve RD, Des Moines, IA 50310

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05/20/02	CEX11	Centrex Plus (CEX)	End User TN	Change	399-799-<CC>00	515-270-<CC>00
05/20/02	CEX11	Centrex Plus (CEX)	End User or Common Block USOCs	Change	WIN, /RSID <CCNA>; OLGFX, /RSID <CCNA>, /OCP UW; CV9, /RSID <CCNA>, /CTX <CCNA>:0; RGE, /RSID <CCNA>, /CTX <CCNA>:0; 6MD, /RSID <CCNA>, /CTX <CCNA>:0; 69A, /RSID <CCNA>, /CTX <CCNA>:0; 69B1X, /RSID <CCNA>, /CTX <CCNA>:0; 69H, /RSID <CCNA>, /CTX <CCNA>:0; AH8, /RSID <CCNA>, /CTX <CCNA>:0 FSW, /RSID <CCNA>, /CTX <CCNA>:0, /MP 03-02-95; CXV, /RSID <CCNA>, /RTE 1161.50(AUT)B017, /CTX <CCNA>:0, /RRF (1) , /CS (1), /NRT EXPIRED, /SP 12-11-97; UXTDH, /RSID <CCNA>, /CTX <CCNA>:0; NP3, /RSID <CCNA>:0; HYE, /RSID <CCNA>, /CTX <CCNA>:0, /MP 04-08-96; NSD, /RSID <CCNA>, /TN 399 799-<CC>01, /TER 10, /CTX <CCNA>:0, /HML 197, /TLI 399 799-<CC>00, /MP 08=03-00; M15, /RSID <CCNA>, /TN 399 799-<CC>00, /TER 9, /CTX <CCNA>:0, /HML 197, /TLI 399 799-<CC>00;	WIN, /RSID <CCNA>; OLGFX, /RSID <CCNA>, /OCP UW; CV9, /RSID <CCNA>, /CTX <CCNA>:0; RGE, /RSID <CCNA>, /CTX <CCNA>:0; 6MD, /RSID <CCNA>, /CTX <CCNA>:0; 69A, /RSID <CCNA>, /CTX <CCNA>:0; 69B1X, /RSID <CCNA>, /CTX <CCNA>:0; 69H, /RSID <CCNA>, /CTX <CCNA>:0; AH8, /RSID <CCNA>, /CTX <CCNA>:0 FSW, /RSID <CCNA>, /CTX <CCNA>:0, /MP 03-02-95; CXV, /RSID <CCNA>, /RTE 1161.50(AUT)B017, /CTX <CCNA>:0, /RRF (1) , /CS (1), /NRT EXPIRED, /SP 12-11-97; UXTDH, /RSID <CCNA>, /CTX <CCNA>:0; NP3, /RSID <CCNA>:0; HYE, /RSID <CCNA>, /CTX <CCNA>:0, /MP 04-08-96; NSD, /RSID <CCNA>, /TN 515 270-<CC>01, /TER 10, /CTX <CCNA>:0, /TLI 515 270-<CC>00, /MP 08-03-00; M15, /RSID <CCNA>, /TN 515 270-<CC>00, /TER 9, /CTX <CCNA>:0, /TLI 515 270-<CC>00; RKY, /TN 515 270-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /TGID 0101, /TLI 515 270-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-03-2000, /RTZ 2; PORXX, /TN 515 270-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /TGID 0101, /TLI 515 270-

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						<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-01-2000, /RTZ 2; 9PZLC, /TN 515 270-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>: 1, /LCC GNN, /TGID 0101, /TLI 515 270-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO\ 08-03-00, /LPIC 5123, /EDT BO\ 08-03-2000, /RTZ 2;
05/20/02	CEX12	Centrex Plus (CEX)	End User or Common Block, USOCs	Change	FFNUX, /ZCID <CCNA>; RHN, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA, /TGID 0052; CV9, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90; N13, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0 PORXX, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX<CCNA>:0; 69H, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 69J, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 9PZLC, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; 9ZR, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX DP0052; RKY, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA,/TGID 0052; GVT, /ZCID <CCNA>, /TN 509 747-<CC>00 /CTX <CCNA>:0;	FFNUX, /RSID <CCNA>; RHN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA, /TGID 0052; CV9, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90; N13, /RSIID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0 PORXX, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX<CCNA>:0; 69H, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 69J, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CFN 509 455-6543, /RCYC 2, /MSS *MSSAD MSSGRP.0020; 9PZLC, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; 9ZR, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>; RKY, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA,/TGID 0052, /RTZ 2;

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					MGN,/ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /MSS *MSSAD MSSGRP 0167; RTVXN, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /ZCID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90	GVT, /RSID <CCNA>, /TN 509 747-<CC>00 /CTX <CCNA>:0; MGN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /MSS *MSSAD MSSGRP 0167; RTVXN, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0; E3PPK, /RSID <CCNA>, /TN 509 747-<CC>00, /CTX <CCNA>:0, /CPG 90
05/20/02	CEN1	Centron (CEN)	End User: Name and Address	Change	R00 Corporation 799 Haxmeier BLVD, St Paul, MN 55345	R00 Corporation 799 Haxmeier BLVD, MPLS, MN 55403
05/20/02	CEN1	Centron (CEN)	End User: AN	Change	651-799-0000-100	612-331-0000-100
05/20/02	CEN2	Centron (CEN)	Common Block: Name and Address	Change	R<CC> Corporation 799 Haxmeier BLVD, St Paul, MN 55345	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403
05/20/02	CEN2	Centron (CEN)	Common Block: AN	Change	651-799-<CC>00-100	612-331-<CC>00-100
05/20/02	CEN2	Centron (CEN)	End User: Name and Address	Change	Wilson Carter 6666 Carter BLVD, St Paul, MN 55416	Wilson Carter 6666 Carter BLVD, MP:L, MN 55407
05/20/02	CEN2	Centron (CEN)	End User: AN	Change	651-499-0000-100	612-379-0000-100
05/20/02	CEN2	Centron (CEN)	End User: TN	Change	651-499-0000 through 651-499-0050	612-379-0000 through 612-379-0009
05/20/02	CEN2	Centron (CEN)	End User or Common Block: USOCs	Change	1FR, /RIE, /TN 651 499-0000, /PIC 0718, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 651 499-0000; 9ZR, /RAX 1R; AYK, /TN 651 499-0000; 9PZLX, /TN 651 499-0000; VMJXA, /TN 651 499-0000, /CFN 651 555-5555, /RCYC 3; NNK, /TN 651 499-0000; NKM, /TN 651 499-0000; 999AL, /TN 651 499-0000;	BSXUP; 1FR, /RIE, /TN 612 379-0000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, /EDT CS\ 10-21-2001, /LSTP; PORXX, /TN 612 379-0000; 9ZR, /RAX 1R; AYK, /TN 612 379-0000; 9PZLX, /TN 612 379-0000; VMJXA, /TN 612 379-0000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 612 379-0000; NKM, /TN 612 379-0000; 999AL, /TN 612 379-0000;
05/20/02	CEN3	Centron (CEN)	Common Block: Name and Address	Change	R<CC> Corporation 799 Haxmeier BLVD, St Paul, MN 55345	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403
05/20/02	CEN3	Centron (CEN)	Common Block: AN	Change	651-799-<CC>00-100	612-331-<CC>00-100
05/20/02	CEN3	Centron (CEN)	End User: Name and	Change	George Allen	George Allen

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			Address		11111 Allen ST, MPLS, MN 55416	11111 Allen ST, MPLS, MN 55413
05/20/02	CEN4	Centron (CEN)	Common Block: Name and Address	Change	R<CC> Corporation 799 Haxmeier BLVD, St Paul, MN 55345	R<CC> Corporation 799 Haxmeier BLVD, MPLS, MN 55403
05/20/02	CEN4	Centron (CEN)	Common Block: AN	Change	651-799-<CC>00-100	612-331-<CC>00-100
05/20/02	CEN4	Centron (CEN)	End User: Name and Address	Change	EU#1: George Allen 11111 Allen ST, MPLS, MN 55416 EU#2: Matt Taylor 22222 Taylor RD, Plymouth, MN 55901 EU#3: Jake Johnson 33333 Johnson AV, Rochester, MN 55426	EU#1: George Allen 11111 Allen ST, MPLS, MN 55413 EU#2: Matt Taylor 22222 Taylor RD, MPLS, MN 55406 EU#3: Jake Johnson 33333 Johnson AV, MPLS, MN 55408
05/20/02	CEN4	Centron (CEN)	End User: TN	Change	EU#1: 651-299-<CC>01 through 651-299-<CC>03 EU#2: 651-299-<CC>04 through 651-299-<CC>06 EU#3: 651-299-<CC>07 through 651-299-<CC>09	EU#1: 612-617<CC>01 through 612-617-<CC>03 EU#2: 612-617-<CC>04 through 612-617-<CC>06 EU#3: 612-617-<CC>07 through 612-617-<CC>09
05/20/02	CEN4	Centron (CEN)	End User or Common Block: USOCs	Change	E6GUR, /TN 651 799-<CC>01, /RSID <CCNA>, /CFND *110 285-0045, /CTX MCDAD9, /RRF 1, /MSS *MSAAD MSSGRP.0033, /RSID <CCNA>, /RIE; BGMAL, /RSID <CCNA>, /TN 651 799-<CC>01, /RSID <CCNA>; BGMFL, /RSID <CCNA>, /TN 651 799-<CC>01, /LCC RCF, /GSZ 5, /RRF 1; /RSID <CCNA>, /MP 02-24-97; EXM, /TN 651 799-<CC>01, /RSID <CCNA>, /TA 60,02-04-99, /RD 01-30-98, /ARS MCLARS2, /CAT 2, /CTX IDPMCLEOD, /TGID 1800, /CLT 3.CLNA.651.799-<CC>01, /RRF 1, /HTG A, /TGS *TGUUA, /RSID <CCNA>, /RAX A, /MP 02-24-97, /PIC 0718, /PCA BO,01-22-97, /LPIC 5123, /EDT BO,01-22-1997; HBQ, /TN 651 799-<CC>01, /RSID <CCNA>, /CTX MCLDAD9, /RSID <CCNA>;	E6GUR, /TN 612 331-<CC>01, /RSID <CCNA>, /CFND *110 285-0045, /CTX MCDAD9, /RRF 1, /MSS *MSAAD MSSGRP.0033, /RSID <CCNA>, /RIE; BGMAL, /RSID <CCNA>, /TN 612 331-<CC>01, /RSID <CCNA>; BGMFL, /RSID <CCNA>, /TN 612 331-<CC>01, /LCC RCF, /GSZ 5, /RRF (1); /RSID <CCNA>, /MP 02-24-97; EXM, /TN 612 331-<CC>01, /RSID <CCNA>, /TA 60,02-04-99, /RD 01-30-98, /ARS MCLARS2, /CAT 2, /CTX IDPMCLEOD, /TGID 1800, /CLT 3.CLNA.612.331-<CC>01, /RRF 1, /HTG A, /TGS *TGUUA, /RSID <CCNA>, /RAX A, /MP 02-24-97, /PIC 0288, /PCA BO,01-22-97, /LPIC 5123, /EDT BO, 01-22-1997; HBQ, /TN 612 331-<CC>01, /RSID

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					IIBS, /TN 651 799-<CC>01, /RSID <CCNA>, /TER 1, /CTX MCLDAD9, /HML 214, /TLI 651 799-<CC>01, /RSID <CCNA> C2U, /TN 651 799-<CC>01, /RSID <CCNA>, /TER 14, /HML 214, /TLI 651 799-<CC>01, /ZCN (B)MN11946, /RRF 1, /RSID <CCNA>; ESX, /TN 651 799-<CC>01, /RSID <CCNA>, /RSID <CCNA>, /MP 07-04-99; VGT, /TN 651 799-<CC>01, /RSID <CCNA>, /CTX MCLDAD9, /RSID <CCNA>, /MP 03-13-97; ESM, /TN 651 799-<CC>01, /RSID <CCNA>, /TA 60,02-04-99, /RD 01-30-98, /CTX IDPMCLEOD, /RSID <CCNA>, /MP 04-19-01;	<CCNA>, /CTX MCLDAD9, /RSID <CCNA>; IIBS, /TN 612 331-<CC>01, /RSID <CCNA>, /TER 1, /CTX MCLDAD9, /HML 214, /TLI 612 331-<CC>01, /RSID <CCNA> C2U, /TN 612 331-<CC>01, /RSID <CCNA>, /TER 14, /HML 214, /TLI 612 331-<CC>01, /ZCN (B)MN11946, /RRF 1, /RSID <CCNA>; ESX, /TN 612 331-<CC>01, /RSID <CCNA>, /RSID <CCNA>, /MP 07-04-99; VGT, /TN 612 331-<CC>01, /RSID <CCNA>, /CTX MCLDAD9, /RSID <CCNA>, /MP 03-13-97; ESM, /TN 612 331-<CC>01, /RSID <CCNA>, /TA 60,02-04-99, /RD 01-30-98, /CTX IDPMCLEOD, /RSID <CCNA>, /MP 04-19-01;
Clarification		Listings Only (LO)	Entire Table	Change	Table 13: Directory Listings Only (DL)	Table 13: Listings Only (LO)
05/20/02	LNP1	Local Number Portability (LNP)	AN	Change	899-899-0000-100	303-436-0000-100
05/20/02	LNP1	Local Number Portability (LNP)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 50 will be on the same CSR. 899-899-0000 through 0050	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009
05/20/02	LNP1	Local Number Portability (LNP)	TN: Examples	Change	899-899-0050	303-436-0009
05/20/02	LNP1	Local Number Portability (LNP)	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LNP2	Local Number Portability (LNP)	AN	Change	899-899-0051-100	303-436-0051-100
05/20/02	LNP2	Local Number Portability (LNP)	TN: Data Rules	Change	All numbers ending in the numbers 51 will be on their own CSR. 899-899-0051	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051
05/20/02	LNP2	Local Number Portability (LNP)	TN: Examples	Change	899-899-0051	303-436-0051
05/20/02	LNP2	Local Number Portability (LNP)	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LNP3	Local Number Portability (LNP)	AN	Change	899-899-0000-100	303-436-0000-100

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05/20/02	LNP3	Local Number Portability (LNP)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 50 will be on the same CSR. 899-899-0000 through 0050	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009
05/20/02	LNP3	Local Number Portability (LNP)	TN: Examples	Change	899-899-0050	303-436-0009
05/20/02	LNP3	Local Number Portability (LNP)	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LNP4	Local Number Portability (LNP)	AN	Change	899-899-0051-100	303-436-0051-100
05/20/02	LNP4	Local Number Portability (LNP)	TN: Data Rules	Change	All numbers ending in the numbers 51 will be on their own CSR. 899-899-0051	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051
05/20/02	LNP4	Local Number Portability (LNP)	TN: Examples	Change	899-899-0051	303-436-0051
05/20/02	LNP4	Local Number Portability (LNP)	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	POTS2	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Change	1FB, /TN 509 532-0100, /PIC 0288, /LPIC 5123, /RSID <CCNA>;	1FB, /TN 509 532-0100, /PIC 0288, /LPIC 5123, /LPS, /RSID <CCNA>;
05/20/02	POTS3	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Change	1FB, /TN 509 532-<CC>51, /RSID <CCNA>, /PIC 0288, /PCA, /LPIC 5123,	1FB, /TN 509 532-<CC>51, /RSID <CCNA>, /PIC 0288, /LPIC 5123,
05/20/02	POTS4	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Change	1FR, /TN 509 532-0051, /PIC 0288, /LPIC 5123;	1FR, /RIE, /TN 509 532-0051, /PIC 0288, /LPIC 5123;
05/20/02	POTS4	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Add	9PZLX, /TN 509 532-0051;	
05/20/02	POTS5	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Add	9PZLX, /TN 509 532-0000;	
05/20/02	POTS9	POTS Resale (POTS)	Existing USOCs & FIDs on the account	Add	9PZLX, /TN 509 532-0000;	
05/20/02	POTS11	POTS Resale (POTS)	AN	Change	602-494-<CC>47-9<CC>	602-328-<CC>47-9<CC>
05/20/02	POTS11	POTS Resale (POTS)	AN: Examples	Change	For RSID R01: 602-494-0147-901	For RSID R01: 602-328-0147-901
05/20/02	POTS11	POTS Resale (POTS)	Address: Data Rules	Change	1000 Red Twist LN, Phoenix, AZ 85032	1000 Red Twist LN, Phoenix, AZ 85020
05/20/02	POTS11	POTS Resale (POTS)	TN: Data Rules	Change	602-494-<CC>47	602-328-<CC>47
05/20/02	POTS11	POTS Resale (POTS)	TN: Examples	Change	For RSID R01: 602-494-0147	For RSID R01: 602-328-0147

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	POTS12	POTS Resale (POTS)	AN	Change	602-494-<CC>47-9<CC>	602-328-<CC>47-9<CC>
05/20/02	POTS12	POTS Resale (POTS)	AN: Examples	Change	For RSID R01: 602-494-0147-901	For RSID R01: 602-328-0147-901
05/20/02	POTS12	POTS Resale (POTS)	Address: Data Rules	Change	1000 Red Twist LN, Phoenix, AZ 85032	1000 Red Twist LN, Phoenix, AZ 85020
05/20/02	POTS12	POTS Resale (POTS)	TN: Data Rules	Change	602-494-<CC>47	602-328-<CC>47
05/20/02	POTS12	POTS Resale (POTS)	TN: Examples	Change	For RSID R01: 602-494-0147	For RSID R01: 602-328-0147
05/20/02	POTS13	POTS Resale (POTS)	AN	Change	602-494-<CC>47-9<CC>	602-328-<CC>47-9<CC>
05/20/02	POTS13	POTS Resale (POTS)	AN: Examples	Change	For RSID R01: 602-494-0147-901	For RSID R01: 602-328-0147-901
05/20/02	POTS13	POTS Resale (POTS)	Address: Data Rules	Change	1000 Red Twist LN, Phoenix, AZ 85032	1000 Red Twist LN, Phoenix, AZ 85020
05/20/02	POTS13	POTS Resale (POTS)	TN: Data Rules	Change	602-494-<CC>47	602-328-<CC>47
05/20/02	POTS13	POTS Resale (POTS)	TN: Examples	Change	For RSID R01: 602-494-0147	For RSID R01: 602-328-0147
Clarification		Shared Loop (SL)	Entire Table	Change	Table 16: Shared Loop (SHL)	Table 16: Shared Loop (SL)
05/20/02	UCEX1	UNE-P Centrex (UCEX)	Common Block: AN	Change	899-499-<DD>00-100	303-260-<DD>00-100
05/20/02	UCEX2	UNE-P Centrex (UCEX)	Common Block: Name and Address	Change	R<DD> Corporation 620 Morel RD, Des Moines, IA 50309	R<DD> Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	UCEX2	UNE-P Centrex (UCEX)	Common Block: AN	Change	399-899-<DD>00-100	515-331-<DD>00-100
05/20/02	UCEX4	UNE-P Centrex (UCEX)	Common Block: AN	Change	899-499-<CC>00-1<CC>	303-260-<CC>00-1<CC>
05/20/02	UCEX4	UNE-P Centrex (UCEX)	End User or Common Block: USOCs	Change	1FR, /TN 303 744-5000, /PIC 0718, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 555 555-5555, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;	BSXUP; 1FR, /RIE, /TN 303 744-5000, /PIC 0288, /LPIC 5123, /NMC, /LSTP; PORXX, /TN 303 744-5000; LAWPA, /TN 303 744-5000; 9ZR, /RAX 1R; AYK, /TN 303 744-5000; 9PZLX, /TN 303 744-5000; VMJXA, /TN 303 744-5000, /CFN 303 722-9876, /RCYC 3; NNK, /TN 303 744-5000; NKM, /TN 303 744-5000; 999AL, /TN 303 744-5000;

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	UCEX5	UNE-P Centrex (UCEX)	Common Block: Address	Change	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 515 Morel RD, Des Moines, IA 50311
05/20/02	UCEX5	UNE-P Centrex (UCEX)	Common Block: AN	Change	399-899-<CC>00-1<CC>	515-331-<CC>00-1<CC>
05/20/02	UCEX5	UNE-P Centrex (UCEX)	End User: Name and Address	Change	Alex Ferguson 515 Morel RD, Des Moines, IA 50309	Alex Ferguson 515 Morel RD, Des Moines, IA 50311
05/20/02	UCEX5	UNE-P Centrex (UCEX)	End User: AN	Change	515-241-5000-121	515-255-5000-121
05/20/02	UCEX5	UNE-P Centrex (UCEX)	End User: TN	Change	515-241-5000	515-255-5000
05/20/02	UCEX5	UNE-P Centrex (UCEX)	End User or Common Block USOCs	Change	1FR, /RIE, /TN 515 241-5000, /PIC 0718, /LPIC 5123, /NMC, /LSTP: PORXX, /TN 515 241-5000; 9ZR, /RAX 1R; AYK, /TN 515 241-5000; 9PZLX, /TN 515 241-5000;VMJXA, /TN 515 241-5000, /CFN 555 555-5555, /RCYC 3; NNK, /TN 515 241-5000; NKM, /TN 515 241-5000; 999AL, /TN 515 241-5000;	BSXUP; 1FR, /RIE, /TN 515 255-5000, /PIC 0288, /LPIC 5123, /PCA IC\ 10-21-01, \EDT CS\ 09-23-2001, /LSTP: PORXX, /TN 515 255-5000; 9ZR, /RAX 1R; AYK, /TN 515 255-5000; 9PZLX, /TN 515 255-5000; VMJXA, /TN 515 255-5000, /CFN 612 378-9876, /RCYC 3; NNK, /TN 515 255-5000; NKM, /TN 515 255-5000; 999AL, /TN 515 255-5000;
05/20/02	UCEX7	UNE-P Centrex (UCEX)	End User: AN	Change	899-499-<CC>00-1<CC>	303-260-<CC>00-1<CC>
05/20/02	UCEX8	UNE-P Centrex (UCEX)	Common Block: Name and Address	Change	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	UCEX8	UNE-P Centrex (UCEX)	Common Block: AN	Change	399-899-<CC>00-1<CC>	515-331-<CC>00-1<CC>
05/20/02	UCEX8	UNE-P Centrex (UCEX)	End User: Name and Address	Change	Alex Ferguson 515 Morel RD, Des Moines, IA 50309	Alex Ferguson 515 Morel RD, Des Moines, IA 50311
05/20/02	UCEX10	UNE-P Centrex (UCEX)	Common Block: AN	Change	899-499-<CC>00-1<CC>	303-260-<CC>00-1<CC>
05/20/02	UCEX10	UNE-P Centrex (UCEX)	End User: Name and Address	Change	Andy Cole 499 Fedorowych DR, Denver, CO 33333	Andy Cole 260 Fedorowych DR, Denver, CO 80209
05/20/02	UCEX10	UNE-P Centrex (UCEX)	End User: TN	Change	899-499-<CC>00	303-260-<CC>00
05/20/02	UCEX10	UNE-P Centrex (UCEX)	End User or Common Block USOCs	Change	NP3, /ZCID <CCNA>; EQA, /ZCID <CCNA>, /SFG 204, /CTX <CCNA>:1, /CTX <CCNA>:1, /GSZ 20; HYE, /ZCID <CCNA>, /CTX <CCNA>:1;	NP3, /ZCID <CCNA>; EQA, /ZCID <CCNA>, /SFG 204, /CTX <CCNA>:1, /CTX <CCNA>:1, /GSZ 20;

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					MUMHT, /ZCID <CCNA>:1; 9PZLC, /ZCID <CCNA>, /TN 899 499-<CC>00; RKY, /ZCID<CCNA>, /TN 899 499-<CC>00, /PIC 0718, /LPIC 5123, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS*TGUUA, /IDP ID0137, /BFG CTX0137, /CTX <CCNA>:1; UGUST, /ZCID <CCNA>, /TN 899 499-<CC>00; UGUFM, /ZCID <CCNA>, /TN 899 499-<CC>00; 6APPK, /ZCID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; N13, /ZCID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; CV9, /ZCID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; PORXX, /ZCID <CCNA>, /TN 899 499-<CC>00, /MIL 1; RTVXN, /ZCID <CCNA>, /TN 899 499-<CC>00; 69J, /ZCID <CCNA>, /TN 899 499-<CC>00, /CFN 555 555-5555, /CTX<CCNA>:1; GVJ, /ZCID <CCNA>, /TN 899 499-<CC>00, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /TN 899 499-<CC>00, /CFND 555 555-5555, /RCYC 3, /CTX <CCNA>:1;	HYE, /ZCID <CCNA>, /CTX <CCNA>:1; MUMHT, /ZCID <CCNA>:1; 9PZLC, /ZCID <CCNA>, /TN 303 260-<CC>00; PORXX, /ZCID <CCNA>, /TN 303 260-<CC>00; RKY, /ZCID<CCNA>, /TN 303 260-<CC>00, /PIC 0288, /LPIC 5123, /ZCN A40040, /NMC, /LCC NCN, /CAT 1, /TGID 0137, /TGS*TGUUA, /IDP ID0137, /BFG CTX0137, /CTX <CCNA>:1; UGUST, /ZCID <CCNA>, /TN 303 260-<CC>00; UGUFM, /ZCID <CCNA>, /TN 303 260-<CC>00; 6APPK, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; N13, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; CV9, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; PORXX, /ZCID <CCNA>, /TN 303 260-<CC>00, /MIL 1; RTVXN, /ZCID <CCNA>, /TN 303 260-<CC>00; 69J, /TN 303 260-<CC>00, /CFN 303 534-9876, /CTX<CCNA>:1; GVJ, /ZCID <CCNA>, /TN 303 260-<CC>00, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /TN 303 260-<CC>00, /CFND 303 534-9876, /RCYC 3, /CTX <CCNA>:1;
05/20/02	UCEX11	UNE-P Centrex (UCEX)	Common Block: Name and Address	Change	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50309	<CCNA> Corporation 620 Morel RD, Des Moines, IA 50311
05/20/02	UCEX11	UNE-P Centrex (UCEX)	Common Block: AN	Change	399-899-<CC>00-1<CC>	515-331-<CC>00-1<CC>
05/20/02	UCEX11	UNE-P Centrex (UCEX)	End User: Name and Address	Change	Phil Neville 899 Van Cleve RD, Des Moines, IA 22222	Phil Neville 331 Van Cleve RD, Des Moines, IA 50310
05/20/02	UCEX11	UNE-P Centrex (UCEX)	End User: TN	Change	399-899-<CC>00	515-331-<CC>00

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05/20/02	UCEX11	UNE-P Centrex (UCEX)	End User or Common Block USOC's	Change	CV9, /ZCID <CCNA>, /CTX <CCNA>:1; RGE, /ZCID <CCNA>, /CTX <CCNA>:1; 6MD, /ZCID <CCNA>, /CTX <CCNA>:1; 69A, /ZCID <CCNA>, /CTX <CCNA>:1; 69B1X, /ZCID <CCNA>, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /CTX <CCNA>:1 FSW, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 03-02-95; NP3, /ZCID <CCNA>; HYE, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 04-08-96; NSD, /ZCID <CCNA>, /TN 399 899-<CC>00, /TER 10, /CTX <CCNA>:1, /HML 197, /TLI 399 899-<CC>00, /MP 08-03-00; RKY, /TN 399 899-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /HML 197, /TGID 0101, /TLI 399 899-<CC>00, /IDP ID0001, /RRF 1, /TGS *TGUUT, /MP 09-08-00, /PIC 0718, /PCA BO 08-03-00, /LPIC 5123, /EDT BO 80-03-2000; E3PPK, /TN 399 899-<CC>00, /CTX <CCNA>:1, /RRF 1, /CPG 359; UGUST, /ZCID <CCNA>, /TN 399 899-<CC>00; UGUFM, /ZCID <CCNA>, /TN 399 899-<CC>00; MGN, /ZCID <CCNA>, /TN 399 899-<CC>00, /TER 9, /CTX <CCNA>:1, /HM 197, /TLI 399 899-<CC>00;	CV9, /ZCID <CCNA>, /CTX <CCNA>:1; RGE, /ZCID <CCNA>, /CTX <CCNA>:1; 6MD, /ZCID <CCNA>, /CTX <CCNA>:1; 69A, /ZCID <CCNA>, /CTX <CCNA>:1; 69B1X, /ZCID <CCNA>, /CTX <CCNA>:1; 69H, /ZCID <CCNA>, /CTX <CCNA>:1; FSW, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 03-02-95; NP3, /ZCID <CCNA>; HYE, /ZCID <CCNA>, /CTX <CCNA>:1, /MP 04-08-96; NSD, /ZCID <CCNA>, /TN 515 331-<CC>00, /TER 10, /CTX <CCNA>:1, /HML 197, /TLI 515 331-<CC>00, /MP 08-03-00; RKY, /TN 515 331-<CC>00, /TER 10, /CAT 1, /CTX <CCNA>:1, /LCC GNN, /HML 197, /TGID 0101, /TLI 515 331-<CC>00, /IDP ID0001, /RRF (1), /TGS *TGUUT, /MP 09-08-00, /PIC 0288, /PCA BO 08-03-00, /LPIC 5123, /EDT BO 80-03-2000, /RTZ 2; E3PPK, /TN 515 331-<CC>00, /CTX <CCNA>:1, /RRF 1, /CPG 359; UGUST, /ZCID <CCNA>, /TN 515 331-<CC>00; UGUFM, /ZCID <CCNA>, /TN 515 331-<CC>00; MGN, /ZCID <CCNA>, /TN 515 331-<CC>00, /TER 9, /CTX <CCNA>:1, /HML 197, /TLI 515 331-<CC>00;
05/20/02	UCEX12	UNE P CENTREX (UCEX)	End User or Common Block: USOCS	Change	RHCXX, /ZCID <CCNA>; RKY, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA, /TGID 0052;	RHCXX, /ZCID <CCNA>; RKY, /ZCID <CCNA>, /TN 509 835-<CC>00, /CTX <CCNA>:1, /PIC 0288, /LCC NC9, /LPIC 5123, /CAT 0, /LSO 509 455, /IDP ID0052, /BFG CTX0052, /TGS *TGUUA, /TGID 0052, /RTZ 2;

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	UCEX12	UNE P CENTREX (UCEX)	End User or Common Block USOCS	Change	GVT, /ZCID <CCNA>, /TN 309 835-<CC>00, /CTX <CCNA>-1 0052;	GVT, /ZCID <CCNA>, /TN 309 835-<CC>00, /CTX <CCNA>-1;
05/20/02	UNE-P POTS2	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 02 for the TN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the TN 360-457-<CC>00 through 360-457-<CC>07
05/20/02	UNE-P POTS2	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 360-457-0100 through 360-457-0102	For RSID R01: 360-457-0100 through 360-457-0107
05/20/02	UNE-P POTS2	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	First Line: UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; Additional Lines: U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01. /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; Additional Lines U5RAX, /TN 360 457-<CC>02, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>02, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>02, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>02, /ZCID <CCNA>;	**First Line:** UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01. /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 467-<CC>01, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>01, /ZCID <CCNA>;

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	AN: Data Rules	Change	899-299-<CC>99-1<CC>	303-698-<CC>99-1<CC>
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	AN: Examples	Change	For RSID, R01: 899-299-0199-101	For RSID, R01: 303-698-0199-101
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	Address: Data Rules	Change	299 Harrison RD, Denver, CO 33333	698 Harrison RD, Denver, CO 80209
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	899-299-<CC>99	303-698-<CC>99
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 899-299-0199	For RSID R01: 303-698-0199
05/20/02	UNE-P POTS3	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	U5R,/RSID <CCNA>; /TBE A; /RCU AC,AR,CRT, TWC; /BLKD,/NMC,/LCC TR2,/PROX; RTVXN,/RSID <CCNA>; RTY,/RSID <CCNA>; HBG,/RSID <CCNA>; HBQ/RSID <CCNA>; HBS,/RSID <CCNA>; 3BL,/RSID <CCNA>;	NPU, /ZCID <CCNA>; UHR, /ZCID <CCNA>; U5R,/ZCID <CCNA>, /PIC 0288, /LPIC 5123, /LCC LMB; PORXX, /ZCID <CCNA>; AYK, /ZCID <CCNA>; ESC, /ZCID <CCNA>; NSD, /ZCID <CCNA>;
05/20/02	UNE-P POTS4	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	BSXUP; 1FR, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM,/TN 509 532-0051 AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;	BSXUP; 1FR, /RIE, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; 9PZLX, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;
05/20/02	UNE-P POTS5	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 568-5252, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; TBX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9ZR, /TN 509 532-0000;	1FB, /TN 509 532-0000, /PIC 0288, /LPIC 5123, /RCU TWC; EVO, /TN 509 532-0000, /CFNB 509 568-5252, /DES 568-5252, /CFN 509 568-5252; OLGFX, /TN 509 532-0000; PORXX, /TN 509 532-0000; 3BL, /TN 509 532-0000; 9PZLX, /TN 509 532-0000; 9ZR, /TN 509 532-0000;
05/20/02	UNE-P POTS6	UNE-P POTS (UNE-P POTS)	AN: Data Rules	Change	899-299-<CC>99-1<CC>	303-698-<CC>99-1<CC>
05/20/02	UNE-P POTS6	UNE-P POTS (UNE-P POTS)	AN: Examples	Change	For RSID, R01 899-299-0199-101	For RSID, R01 303-698-0199-101

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	UNE-P POTS6	UNE-P POTS (UNE-P POTS)	Address Data Rules	Change	399 Harrison Rd, Denver, CO 80233	699 Harrison Rd, Denver, CO 80233
05/20/02	UNE-P POTS6	UNE-P POTS (UNE-P POTS)	TN Data Rules	Change	360-399-<CC>00	360-699-<CC>00
05/20/02	UNE-P POTS7	UNE-P POTS (UNE-P POTS)	TN Data Rules	Change	All numbers ending in the numbers 00 to 02 for the AN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07
05/20/02	UNE-P POTS7	UNE-P POTS (UNE-P POTS)	TN Examples	Change	For RSID R01: 360-457-0100 through 360-457-0102	For RSID R01: 360-457-0100 through 360-457-0107
05/20/02	UNE-P POTS8	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	BSXUP; 1FR, , /TN 509 532-0051, /PIC 0288, /LPIC 5123 ; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;	BSXUP; 1FR, /RIE, /TN 509 532-0051, /PIC 0288, /LPIC 5123; PORXX, /TN 509 532-0051; 9LM, /TN 509 532-0051; 9PZLX, /TN 509 532-0051; AYK, /TN 509 532-0051; VMJXA, /TN 509 532-0051, /CFN 509 568-5252, /RCYC 3; NNK, /TN 509 532-0051; NKM, /TN 509 532-0051;
05/20/02	UNE-P POTS9	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Remove	TBX, /TN 509 532-0000;	
05/20/02	UNE-P POTS9	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Add	9PZLX, /TN 509 532-0000;	
05/20/02	UNE-P POTS10	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 02 for the AN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07
05/20/02	UNE-P POTS10	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 360-457-0100 through 360-457-0102	For RSID R01: 360-457-0100 through 360-457-0107
05/20/02	UNE-P POTS10	UNE-P POTS (UNE-P POTS)	Existing USOCs & FIDs on the account	Change	First Line: UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID	**First Line:** UHR, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID

Effective Date	Scenario #	Field	Column	Action	Description	Description II
					<CCNA>; Additional Lines: U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; Additional Lines U5RAX, /TN 360 457-<CC>02, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>02, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>02, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>02, /ZCID <CCNA>;	<CCNA>; Additional Lines: U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /BTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;
05/20/02	UNE-P POTS11	UNE-P POTS (UNE-P POTS)	AN: Data Rules	Change	899-299 -<CC>00-1<CC>	303-698 -<CC>00-1<CC>
05/20/02	UNE-P POTS11	UNE-P POTS (UNE-P POTS)	AN: Examples	Change	For RSID, R01: 899-299-0100-101	For RSID, R01: 303-698-0100-101
05/20/02	UNE-P POTS11	UNE-P POTS (UNE-P POTS)	Address: Data Rules	Change	299 Harrison RD, Denver, CO 33333	698 Harrison RD, Denver, CO 80209
05/20/02	UNE-P POTS11	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 98 for the AN 899-299-<CC>00 through <CC>98	All numbers ending in the numbers 00 to 09 for the AN 303-698-<CC>00 through <CC>09
05/20/02	UNE-P POTS11	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 899-299-0100 through 899-299-0198	For RSID R01: 303-698-0100 through 303-698-0109
05/20/02	UNE-P POTS12	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 02 for the AN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07
05/20/02	UNE-P POTS12	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 360-457-0100 through 360-457-0102	For RSID R01: 360-457-0100 through 360-457-0107
05/20/02	UNE-P	UNE-P POTS	Existing USOCs &	Change	First Line:	**First Line:**

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	POTS13	UNE-P POTS	TN: Data Rules		U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; Additional Lines U5RAX, /TN 360 457-<CC>02, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>02, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>02, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>02, /ZCID <CCNA>;	U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;
05/20/02	UNE-P POTS13	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 02 for the AN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07
05/20/02	UNE-P POTS13	UNE-P POTS (UNE-P POTS)	TN: Examples	Change	For RSID R01: 360-457-0100 through 360-457-0102	For RSID R01: 360-457-0100 through 360-457-0107
05/20/02	UNE-P POTS14	UNE-P POTS (UNE-P POTS)	TN: Data Rules	Change	All numbers ending in the numbers 00 to 02 for the AN 360-457-<CC>00 through 360-457-<CC>02	All numbers ending in the numbers 00 to 07 for the AN 360-457-<CC>00 through 360-457-<CC>07

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	Change	First Line: U5RAX, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; Additional Lines: U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; Additional Lines U5RAX, /TN 360 457-<CC>02, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 542, /ZCID <CCNA>; EO3, /TN 360 457-<CC>02, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>02, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>02, /ZCID <CCNA>;	First Line: U5R, /ZCID <CCNA>; U5R, /TN 360 457-<CC>00, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>00, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>; **Additional Lines:** U5RAX, /TN 360 457-<CC>01, /PIC 0288, /LCC LMB, /LPIC 5123, /LSO 360 452, /ZCID <CCNA>, /RTZ 2; EO3, /TN 360 457-<CC>01, /ZCID <CCNA>; EVB, /TN 360 457-<CC>01, /CFNB 360 542-1232, /ZCID <CCNA>; EVD, /TN 360 457-<CC>01, /CFND 360 542-1232, /RCYC 4, /ZCID <CCNA>; PORXX, /TN 360 457-<CC>00, /ZCID <CCNA>; RTVXN, /TN 360 457-<CC>00, /ZCID <CCNA>;
Clarification		Unbundled Loop (LS)	Entire Table	Change	Table 19: Unbundled Loop (UBL)	Table 19: Unbundled Loop (LS)
05/20/02	LSI	Unbundled Loop (LS)	CFA	Change	ALT01/VF-2WIRE/37/ DNVRCOSC/ DNVRCOSC<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSC/ DNVRCOSC<ACNA> through	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
05/20/02	LS2	Unbundled Loop (LS)	TNs	Change	303-744-0000 through 303-744-0099	303-744-0000 through 303-744-0009
05/20/02	LS3	Unbundled Loop (LS)	CFA	Change	ALT03/VF-2WIRE/01/ DNVRCOSC/ DNVRCOSC<ACNA>	ALT03/VF-2WIRE/01/ DNVRCOSO/ DNVRCOSO<ACNA>
Clarification	LS4	Unbundled Loop (LS)	Address	Change	620 Morel RD, Des Moines, Iowa 50309	620 Morel RD, Des Moines, IA 50311
05/20/02	LS4	Unbundled Loop (LS)	Circuit ID	Change	5.LXFY.12<CC>02..NW	1.LXFY.12<CC>02..NW
05/20/02	LS4	Unbundled Loop (LS)	CFA	Change	ALT03/VF-2WIRE/02/ DESMIASA/ DESMIASA<ACNA>	ALT03/VF-2WIRE/02/ DESMIAWS/ DESMIAWS<ACNA>
05/20/02	LS5	Unbundled Loop (LS)	Circuit ID	Change	3.LXFY.12<CC>03..PN	4.LXFY.12<CC>03..PN
05/20/02	LS5	Unbundled Loop (LS)	AN	Change	509-A34-<CC>03-1<CC>	509-T34-<CC>03-1<CC>
05/20/02	LS6	Unbundled Loop (LS)	Circuit ID	Change	3.LXFY.12<CC>03..PN	4.LXFY.12<CC>03..PN
05/20/02	LS6	Unbundled Loop (LS)	AN	Change	509-A34-<CC>03-1<CC>	509-T34-<CC>03-1<CC>
05/20/02	LSNP1	Unbundled Loop With Number Portability	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LSNP1	Unbundled Loop With Number Portability	AN	Change	899-899-0000-100	303-436-0000-100
05/20/02	LSNP1	Unbundled Loop With Number Portability	TNs	Change	All numbers ending in the numbers 00 to 50 will be on the same CSR. 899-899-0000 through 0050	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009
05/20/02	LSNP1	Unbundled Loop With Number Portability	Example TNs	Change	899-899-0050	303-436-0009

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05/20/02	LSNP1	Unbundled Loop With Number Portability	CFA	Change	ALT01/VF-2WIRE/37/ DNVRCOSC/ DNVRCOSC<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSC/ DNVRCOSC<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSC/ DNVRCOSC<ACNA>	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
05/20/02	LSNP2	Unbundled Loop With Number Portability	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LSNP2	Unbundled Loop With Number Portability	AN	Change	899-899-0051-100	303-436-0051-100
05/20/02	LSNP2	Unbundled Loop With Number Portability	TNs	Change	All numbers ending in the numbers 51 will be on their own CSR. 899-899-0051	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051
05/20/02	LSNP2	Unbundled Loop With Number Portability	Example TNs	Change	899-899-0051	303-436-0051
05/20/02	LSNP2	Unbundled Loop With Number Portability	CFA	Change	ALT01/VF-2WIRE/37/ DNVRCOSC/ DNVRCOSC<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSC/ DNVRCOSC<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSC/ DNVRCOSC<ACNA>	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
05/20/02	LSNP3	Unbundled Loop With Number Portability	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LSNP3	Unbundled Loop With Number Portability	AN	Change	899-899-0000-100	303-436-0000-100
05/20/02	LSNP3	Unbundled Loop With Number Portability	TNs	Change	All numbers ending in the numbers 00 to 50 will be on the same CSR. 899-899-0000 through 0050	All numbers ending in the numbers 00 to 09 will be on the same CSR. 303-436-0000 through 0009

Effective Date	Scenario #	Field	Column	Action	Description	Description II
05/20/02	LSNP3	Unbundled Loop With Number Portability	Example TNs	Change	899-899-0050	303-436-0009
05/20/02	LSNP3	Unbundled Loop With Number Portability	CFA	Change	ALT01/VF-2WIRE/37/ DNVRCOSC/ DNVRCOSC<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSC/ DNVRCOSC<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSC/ DNVRCOSC<ACNA>	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> **Additional CFAs:** ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
05/20/02	LSNP4	Unbundled Loop With Number Portability	Scenario Description	Change	Account with multiple numbers, Single Line Account ACT = V	Account with multiple numbers, Single Line Account ACT = Z
05/20/02	LSNP4	Unbundled Loop With Number Portability	Address	Change	899 Fedorowych DR, Denver, CO 33333	436 Fedorowych DR, Denver, CO 80209
05/20/02	LSNP4	Unbundled Loop With Number Portability	AN	Change	899-899-0051-100	303-436-0051-100
05/20/02	LSNP4	Unbundled Loop With Number Portability	TNs	Change	All numbers ending in the numbers 51 will be on their own CSR. 899-899-0051	All numbers ending in the numbers 51 will be on their own CSR. 303-436-0051
05/20/02	LSNP4	Unbundled Loop With Number Portability	Example TNs	Change	899-899-0051	303-436-0051
05/20/02	LSNP4	Unbundled Loop With Number Portability	CFA	Change	ALT01/VF-2WIRE/37/ DNVRCOSC/ DNVRCOSC<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSC/ DNVRCOSC<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSC/ DNVRCOSC<ACNA>	ALT01/VF-2WIRE/37/ DNVRCOSO/ DNVRCOSO<ACNA> Additional CFAs: ALT01/VF-2WIRE/38/ DNVRCOSO/ DNVRCOSO<ACNA> through ALT01/VF-2WIRE/100/ DNVRCOSO/ DNVRCOSO<ACNA>
05/20/02	UDL1	Unbundled Distribution Loop (UDL)	End User: Address	Change	25 E Florida AV, Mesa, AZ 85208	25 E Florida AV, Mesa, AZ 85205
05/20/02	UDL1	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205

Effective Date	Scenario #	Field	Column	Action	Description	Description #
05/20/02	UDL2	Unbundled Distribution Loop (UDL)	End User: Address	Change	25 E Florida AV, Mesa, AZ 85208	25 E Florida AV, Mesa, AZ 85205
05/20/02	UDL2	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDL2	Unbundled Distribution Loop (UDL)	AN	Change	480-373-0046-134	480-324-0046-134
05/20/02	UDL3	Unbundled Distribution Loop (UDL)	End User: Address	Change	32 Brenda ST, Mesa, AZ 85208	32 Brenda ST, Mesa, AZ 85205
05/20/02	UDL3	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDL4	Unbundled Distribution Loop (UDL)	End User: Address	Change	32 Brenda ST, Mesa, AZ 85208	32 Brenda ST, Mesa, AZ 85205
05/20/02	UDL4	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDL5	Unbundled Distribution Loop (UDL)	End User: Address	Change	FROM: 44 Brenda ST, Mesa, AZ 85208 TO: 32 Brenda ST, Mesa, AZ 85208	FROM: 44 Brenda ST, Mesa, AZ 85205 TO: 32 Brenda ST, Mesa, AZ 85205
05/20/02	UDL5	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	FROM: 46 Embretsen BLVD, Mesa, AZ 85208 TO: 46 Embretsen BLVD, Mesa, AZ 85208	FROM: 46 Embretsen BLVD, Mesa, AZ 85205 TO: 46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDL6	Unbundled Distribution Loop (UDL)	End User: Address	Change	32 Brenda ST, Mesa, AZ 85208	32 Brenda ST, Mesa, AZ 85205
05/20/02	UDL6	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDLNP1	Unbundled Distribution Loop (UDL)	End User: Address	Change	662 N Kings ST, Gilbert, AZ 85233	662 N Kings ST, Mesa, AZ 85215
05/20/02	UDLNP1	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85208	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDLNP1	Unbundled Distribution Loop	TNs	Change	480-539-<DD>71	480-396-<DD>71

Effective Date	Scenario #	Field	Category	Action	Description	Clean Version #
		(LTK)				
05/20/02	UDLNP1	Unbundled Distribution Loop (UDL)	AN	Change	480-373-0046-71-345	480-324-0046-71-345
05/20/02	UDLNP2	Unbundled Distribution Loop (UDL)	End User Address	Change	25 E Florida AV, Mesa, AZ 85209	25 E Florida AV, Mesa, AZ 85209
05/20/02	UDLNP2	Unbundled Distribution Loop (UDL)	Field Connection Point: Address	Change	46 Embretsen BLVD, Mesa, AZ 85205	46 Embretsen BLVD, Mesa, AZ 85205
05/20/02	UDLNP2	Unbundled Distribution Loop (UDL)	TNs	Change	480-373-0046	480-324-0046
05/20/02	UDLNP2	Unbundled Distribution Loop (UDL)	AN	Change	480-373-0046-134	480-324-0046-134

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SATE Summary Evaluation Report

for Qwest IMA-EDI SATE

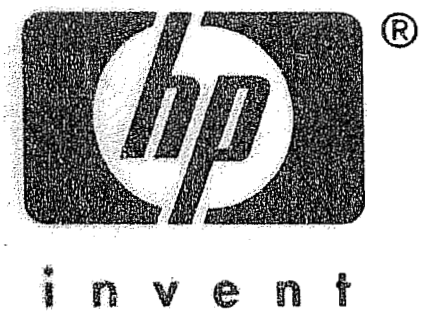
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SATE Summary Evaluation Report

For Qwest IMA-EDI SATE

Arizona Corporation Commission



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1.0 Overview

1.1 Background

As an extension to the Arizona 271 testing effort, Qwest commissioned HP to evaluate its IMA-EDI Stand Alone Test Environment (SATE). HP's primary objective is to provide the Arizona Corporation Commission (ACC), Qwest and the CLEC community with an evaluation of SATE that is unbiased, factual and representative of the experience that a CLEC would face in using SATE for interoperability testing to establish an IMA-EDI interface with Qwest. In addition, HP's objective is to determine whether the SATE provides an adequate means of testing and support to CLECs seeking to compete in the Arizona marketplace.

In accomplishing its objective and developing this report, HP performed the following general steps:

- Met with ACC personnel to understand the regulatory objectives of this engagement
- Solicited feedback of both Qwest and CLEC personnel regarding their experience and opinions of the SATE for EDI development and interoperability testing. This was accomplished utilizing a CLEC Input Questionnaire.
- Reviewed formal comments filed by parties in connection with the SATE.
- Examined Qwest CLEC documentation for adequacy, and used this documentation to establish and test the appropriate EDI interconnection.
- Used Qwest CLEC documentation to develop a suite of transactions to test in the SATE environment.
- Examined Qwest processes for adequacy in assisting CLECs establish interconnection using SATE.
- Conducted SATE functionality testing using the documentation and processes that would be available to CLECs.
- Communicated issues and questions to Qwest, the ACC and CLECs.
- Conducted re-testing of corrective actions implemented by Qwest in response to issues and questions.

1.2 Purpose of the Document

The purpose of the SATE Summary Evaluation Report (SER or the report) is to provide a description of the processes that Hewlett-Packard used in conducting the SATE evaluation, and to communicate the findings and recommendations to the ACC, Qwest, and the CLEC community.

1.3 Scope

The scope of this document is to report the results that HP discovered during the course of this evaluation. These results are from the findings that were uncovered as a result of executing the SATE Evaluation Plan and the four subsequent domain evaluation plans in the areas of SATE Documentation, SATE Process, Transaction Testing and CLEC Input Evaluation Plans. This document is the final report for these areas and supplements the preliminary report that was delivered on December 1, 2001.

1.4 Audience

This document is intended for use by the ACC, Qwest, CLEC members of the TAG and other interested third parties to understand HP's evaluation and its over all assessment of Qwest's SATE.

1.5 Document Structure

The structure of this document is based in part on the Institute of Electrical and Electronics Engineers (IEEE) Standard for Software Test Documentation (IEEE std 829-1983) ©1983.

The following table shows the different sections of this document and the information contained within that section. In addition it will serve as a guide to reading this document.

Section	Title	Description
1.0	Overview	General background information, and general information concerning this report.
2.0	Executive Summary	Contains the Executive Summary.
3.0	Assessment of SATE Adequacy	Contains the overall assessment of the adequacy of SATE in meeting testing needs for CLECs in Arizona.
4.0	CLEC Input Evaluation	Contains the results from the execution of the CLEC Input Evaluation Plan.
5.0	Document Evaluation	Contains the results from the execution of the Document Evaluation Plan.
6.0	Process Evaluation	Contains the results from the execution of the Process Evaluation Plan.
7.0	Transaction Testing Evaluation	Contains the results from the execution of the Transaction Test Plan.
8.0	Issues	Contains a description of the Issues Management process used, and the results of logging issues for this project.
Appendix A	Documentation Evaluations	Reviews of Qwest documentation.
Appendix B	Process Evaluation – Supporting Documents	Supporting document on processes relating to Qwest's IMA EDI SATE access and use by CLECs.
Appendix C	Transaction Testing Evaluation – Supporting Documentation	Contains Transaction Test Results and Data Document Change History.
Appendix D	CLEC Input Evaluation – Supporting Documentation	Contains Co-Provider Questionnaires.
Appendix E	Internal Issues Tracking Log	List of candidate issues to be presented through the formal issues management process.
Appendix F	External Issues Tracking Log	List of issues that have been formally presented to Qwest and the community in compliance with the formal issues management process.
Appendix G	Error List Analysis	Comparison of SATE errors to the IMA-EDI Production error log.
Appendix H	Transaction Test Results Reporting Summary	Results from the Transaction Test.

2.0 Executive Summary

Prior to development of the SATE, CLECs in the Arizona local telecommunications market had to rely on Qwest's Interoperability Testing process for production certification and to prepare for new software releases. Interoperability Testing uses production systems. However, it requires that the CLECs use valid account data of live customers for testing purposes, since all transactions are edited

against production and legacy systems. This practice is costly, time consuming, and inconvenient for both CLECs and their customers. HP also observed instances in which customer accounts were inadvertently changed.

The SATE environment was deployed by Qwest in August of 2001, and represents a significant improvement for CLECs that are experienced in Interoperability Testing and wish to use a more automated, less manually dependent environment. The SATE provides CLECs with a "trial and error" type of testing environment and provides test accounts for use during SATE testing, thus avoiding the major shortcoming of Interoperability Testing – the requirement to use valid production account data and requiring multiple manual reviews. These factors make it easier for CLECs to develop their OSS and EDI interface systems for entry into the Arizona market, to program for new releases, and to test new releases of the CLECs' own interface. It is important to note that in developing the SATE, Qwest did consider CLEC testing requirements. However, Qwest obtained little direct input from the CLEC community.

The SATE does not use live production systems for test transactions. Instead, it uses a front-end, IMA EDI that is identical to the corresponding production interfaces, and a "stubbed" environment to simulate the back-end, legacy systems. Qwest's stated reason for using this approach is that the Company has not yet developed the means to ensure that test transactions executed in interoperability will not impact live accounts. Based on HP's IMA EDI Certification Testing experiences and HP's understanding of Qwest's current system architecture, Qwest's concern is reasonable, as HP has experienced adverse impacts to live accounts when utilizing Qwest's Interoperability Testing process.

The impact of the SATE's simulation of back-end systems, is that Qwest has an additional responsibility to ensure the synchronization of SATE test results to make certain that CLECs receive responses to transactions that are indeed the same responses that would be received from production systems. This is particularly important if test transactions produce behavior that is different than production systems, as the nature of the behavior cannot be anticipated and planned for in advance. Management of a test environment of this type requires the involvement of knowledgeable personnel who can evaluate orders submitted and ensure that the CLEC receives a response that mirrors production. It also requires adequate resources and careful planning to ensure scalability. HP examined Qwest's effectiveness in performing this responsibility through an assessment of the organization, processes and resources, and through comparison to Production systems.

In conducting this evaluation, HP reviewed SATE documentation and compared it to production documentation, where appropriate and necessary to evaluate the SATE. In addition, HP executed transactions that conformed to the SATE documentation, but also submitted transactions designed to be non-conforming. In addition, HP executed a suite of transactions in both the SATE and in Production, to test for similarity of responses.

Due to the relative newness of the SATE at the outset of this engagement, HP's evaluation constitutes the most rigorous examination (over 1,000 transactions submitted), involving the most diverse testing of transactions, performed to date. Therefore, it was expected that HP would identify issues that had not been previously identified. It is important to note that Qwest responded promptly and appropriately to most of the issues identified, and that the closed-unresolved issues, while they should be corrected, do not significantly diminish the overall usability of the SATE.

2.1 Findings

HP finds that the SATE is adequate to support Qwest CLEC testing in the State of Arizona, given current levels of CLEC usage. However, HP found noteworthy discrepancies related to business rule consistency between the SATE and production systems. HP was able to use the SATE to execute a

suite of transactions that HP believes is representative of those that are currently used by CLECs in Arizona and will be submitted in the State of Arizona.

During this engagement, HP identified issues associated with documentation, test account data, and the overall SATE testing process. HP believes that these problems were the result of the SATE's newness and small amount of use prior to HP's evaluation. The problems identified are considered by HP to have a minor to moderate impact on the overall usability of the SATE. Qwest has initiated corrective actions for most of the issues identified to date. For example, Qwest is using their Change Management Process (CMP) to allow formal tracking of issues and their resolution. HP only realized minor schedule impacts to its overall transaction evaluation as a result of the problems identified.

HP has developed recommendations aimed at ensuring that the SATE remains adequately robust to provide consistency between the SATE and Production systems, particularly with respect to business processes. This will ensure that Qwest provides an environment that supports certification and new release testing to serve Arizona CLECs' needs on an ongoing basis. The specific issues and recommendations are summarized below.

2.1.1 SATE Documentation

HP found that Qwest's SATE documentation is generally adequate. However, much of the SATE documentation reviewed in this evaluation was newly developed and required support from Qwest SATE personnel to allow HP to properly use the SATE environment. In addition, the SATE documentation contained numerous, relatively minor inaccuracies that HP believes are the result of hasty preparation and poor version control. Qwest made improvements to its documentation during the course of HP's review, which addressed many of the concerns raised by HP.

Qwest's ability to efficiently update documents to address HP's concerns suggests a level of resources that is sufficient to support CLEC testing, and SATE evolution. The recommendations in this report are, in part, aimed at ensuring resource levels allocated to SATE continue to meet the needs of Arizona CLECs.

2.1.2 SATE Processes

Based upon its review, HP believes that the SATE processes are generally adequate to support CLEC testing. However, support of Qwest's EDI Implementation Team is an important factor in ensuring successful use of SATE by CLECs. Therefore, the SATE process should be formalized and refined to provide an ease of understanding by CLECs and to ensure consistent repeatability.

2.1.3 Accuracy and Consistency of Test Responses

Based upon its testing, HP found that the accuracy and consistency of SATE test responses was adequate to support certification. At the time of this report, 100% of SATE Release 7.0 and 8.0 transactions have either passed the initial test or the re-test. The only areas that are not at 100% are with SATE Release 7.0 Regression Testing (3 of 7 re-test transactions successful, currently tracked by issue HPSATEEV2032) and SATE Positive Production Mirror testing (2 of 3 re-test transactions successful). HP believes that the level of errors observed is reasonable given the relative newness of the SATE, and that the errors are manageable given the benefits SATE provides compared to standard Interoperability Testing. HP noted that Qwest's approach of implementing corrective actions in a timely and effective manner allowed HP to complete re-testing. Additionally, it shows the flexibility and adequacy of resources necessary to deal with unexpected problems in the future.

2.1.4 Use of CLEC Input

During initial design of the SATE, Qwest's use of CLEC input was informal. HP believes that Qwest will need to take proactive steps to ensure that the SATE remains adequate to meet the needs of Arizona CLECs and meets future CLEC testing requirements. Qwest has begun a series of SATE

Enhancement Meetings, aimed at obtaining CLEC input. HP has observed that Qwest is making use of CLEC input to improve the SATE. HP believes that this is a step in the right direction that should provide Qwest with the means of ensuring that the SATE remains adequate in the future.

2.1.3 Mirroring the Production Environment

As a result of its testing, HP found the SATE to be an effective tool for IMA EDI map testing, compared to the alternative of standard Interoperability Testing. However, HP found noteworthy discrepancies related to business rules consistency between the SATE and production systems. During testing, the discrepancies were addressed quickly and correctly by Qwest's EDI Implementation Team, which is the same organization that addresses such issues for CLECs using the SATE. In large part, HP's recommendations are aimed at ensuring that the EDI Implementation Team continues to have the resources to perform this function in the future.

2.1.4 Accommodation of New Release Testing

HP evaluated the SATE's adequacy for new release testing by evaluating pre-release testing for IMA 8.0. Qwest's process for SATE new release testing appeared to be an exception to Qwest's normal point release implementation. Point releases normally do not affect the EDI or BPL layer, however, version 8.0 did provide the implementation of new BPL edits. This evaluation is inconclusive because HP was not able to fully verify that the SATE is adequate for new release testing.

2.1.7 CLEC Acceptance and Meeting CLEC Needs

HP believes that Qwest appears to have developed the SATE by attempting to anticipate CLEC requirements, rather than by formally requesting CLEC input and using that input. Qwest was successful in that it has developed a testing system that adequately meets current requirements. Qwest is now taking steps to obtain CLEC input and to identify CLEC testing requirements. HP believes that the steps Qwest is taking, if continued, are adequate to identify CLECs testing needs.

2.2 Recommendations

Based on its findings, HP recommends that:

1. Qwest submit a plan to ensure that it meets CLEC needs for testing of all products available in Arizona, including new technologies.

2. Qwest implement a quality assurance process and a release management practice specifically for the SATE documentation. As a minimum, this should specifically address the Data Documents and the Production Errors Lists.

3. To ensure continued adequacy of the SATE, HP recommends:

   - That Qwest clearly and specifically identify the roles and responsibilities of each individual and organization involved in the SATE. This definition of roles and responsibilities should include goals and objectives and mission statements for each organization and for all personnel. In addition, the job description for each employee should be clearly defined.
   - That Qwest develop a system of internal controls to ensure accountability for organizations and individuals involved in the SATE process. These controls should use clearly defined goals and objectives and should be specifically to functional responsibility, such as quality of documentation, accuracy of test account data, mirror image of production, etc. Employees working in the SATE should be encouraged to accomplish these goals and objectives.
   - That Qwest develop process flow documentation that accurately reflects actual SATE processes and is a reliable guide to CLECs using the SATE.

4. Qwest publish a list of variances between SATE and production business edits to ensure that CLECs are fully aware of any such discrepancies so that a CLEC may effectively develop their business processes in this 'simulated' environment. This list should be concentrated into a single document and become a permanent part of the SATE documentation library.

5. Qwest formally incorporate the SATE into the CMP process, and future changes and modifications should be subject to that process and that Qwest develop a permanent, formalized method of obtaining CLEC input and identifying current and future SATE requirements in connection with the CMP process. This process should proactively seek CLEC evaluation of the SATE process, suggestions for improvement, and forecasts for testing requirements. HP also recommends that Qwest obtain input from the CLECS to determine the full suite of products that must be included in the SATE.

6. Qwest develop a formal process by which the SATE will be available for new release testing on an ongoing basis.

7. To ensure that the SATE is adequate for full release testing, HP recommends that IMA SATE release 9.0 be tested. This release is expected to take place February 2002.

8. A SATE performance standard be developed for Arizona that addresses the need for Qwest to demonstrate that the SATE remains an adequate mirror image of production as OSS systems evolve. In reviewing this standard, the ACC may wish to consider the nature and volume of transactions that are executed in production. HP did submit a recommendation for PO-19 to the TAG for consideration on 12/18/2001.

9. Qwest file with the ACC an implementation plan for the above recommendations, which includes specific deliverables, milestones, and dates, no later than December 31, 2001.

3.0 CLEC Input Evaluation

3.1 Overview

HP evaluated the extent to which Qwest solicited CLEC input on the IMA EDI SATE functional specifications and design requirements, and the extent that this input was utilized in Qwest's development of the SATE. Additionally, the CLEC Input Evaluation assessed the manner in which Qwest solicited the input.

To establish the basis for the evaluation, HP solicited information from the CLECs and Qwest through a Questionnaire and interviews with key personnel from CLECs that participated in the SATE process. The key areas addressed in the Questionnaires and interviews were:

- SATE related processes
- Supporting documentation for SATE
- Communication related to the development, implementation and utilization of SATE
- As additional input to the evaluation, HP also requested Qwest's documentation and records of its solicitation of CLEC input, and the corresponding input Qwest received.

3.2 Summary

HP developed a SATE CLEC Input Evaluation Plan, which defines the methodology to be utilized in the evaluation, and the steps to be performed in the evaluation process. The plan also lists the criteria used to evaluate the results. HP administered questionnaires and conducted interviews in accordance with the Evaluation Plan. Further explanation of the evaluation and subsequent findings are contained in the remaining sections of this report.

Key steps performed in the evaluation are as follows:

- Determine Evaluation Criteria
- Develop Questionnaires
- Prepare Questionnaire mail-out list
- Mail Questionnaires
- Develop follow-up interview questions
- Schedule interviews
- Conduct interviews with key CLECs
- Evaluate completion of Questionnaires
- Review SATE related documentation, enhancements, meeting announcements and meeting minutes
- Review Qwest documentation and records regarding solicitation of CLEC input prior to the SATE Enhancement kick-off meeting on November 6,2001
- Compile all evaluation results
- Analyze and report findings

2.3 Variances

The following are variances from the CLEC Input Evaluation Plan:

- Qwest's records of input received from CLECs in response to its solicitation for input on SATE prior to the SATE Enhancement kick-off meeting on November 6, 2001 were not available to be used for the evaluation. Qwest provided HP with a compilation of documents surrounding its solicitation of input, but did not provide copies of inputs provided by CLECs to Qwest.

2.4 Summary of Results

Based on the Questionnaire responses and information obtained in the interviews, Qwest did not widely solicit and act upon CLEC input related to SATE in a manner that was adequately structured and thorough. However, based on observation during the evaluation process, HP believes that Qwest has made improvements in their CLEC Input Process, and its responsiveness to the input. Ongoing adherence to the recommendations presented in the Evaluation section of this report will ensure Qwest maintains a satisfactory rating in obtaining and utilizing CLEC input on SATE implementation and testing.

2.5 Evaluation

As previously noted, the evaluation was conducted across three key areas: SATE related processes; Supporting documentation for SATE, and Communication related to the development, implementation and utilization of SATE.

The results of the evaluation are listed in the table below. Attributes and related criteria were identified for each key area. The numeric score is the average of all respondents for each item. For the purpose of this evaluation, scores below 3 are considered "Unsatisfactory" (for an explanation of the numeric scoring and mapping of questionnaire questions into the tables below, see CLEC Input Data in Appendix B - CLEC Input Evaluation Supporting Documentation)

The evaluation results presented below are based on the data obtained from the questionnaires that were completed and returned by four CLECs and Qwest. Please see Appendix D – CLEC Input Evaluation Supporting Documentation for copies of the completed questionnaires.

3.5.1 Process

Attribute	Description	Examples	Detail	Clarity	Adherence	Average
[illegible]	3.8	3.8	3.2	3.6	3.8	3.64
[illegible]	3.8	3.6	N/A	3.6	3.6	3.65
[illegible]	3.8	N/A	N/A	3.6	N/A	3.7
[illegible]	3.4	N/A	3.2	3.2	3.6	3.35
[illegible]	2.8	2.8	2.8	N/A	2.8	2.8
[illegible]	3.8	N/A	3	3	3.1	3.225
[illegible]	2.8	N/A	2.8	N/A	2.8	2.8
					Overall Score	3.31

Note: For the Process category, "CMP Guidelines" and "Schedule Defined and Documented" attributes received "Unsatisfactory" scores

3.5.2 Documentation

Attribute	Description	Examples	Detail	Clarity	Adherence	Average
[illegible]	4	N/A	3.8	3.8	4	3.875
[illegible]	4.2	3	3.8	3.8	3.4	3.64
[illegible]	3.3	N/A	3	3	3.2	3.125
[illegible]	2.8	2.75	2.2	2.9	2.6	2.65
[illegible]	3.2	3.8	2.8	3	2.8	3.12
[illegible]	3.2	N/A	N/A	3.4	N/A	3.3
[illegible]	3.1	N/A	N/A	N/A	N/A	3.1
[illegible]	N/A	N/A	N/A	N/A	3.7	3.7
[illegible]	3	3.4	3.2	2.8	N/A	3.1
[illegible]	3.4	3.6	3.3	3.2	N/A	3.375
					Overall Score	3.31

Note: For the Documentation category, the "Technical Architecture/Interface Specification" attribute received an "Unsatisfactory" score

3.5.3 Communication

Attribute	Ease	Depth	Frequency	Average
[illegible]	3.2	N/A	N/A	3.2
[illegible]	N/A	N/A	3.5	3.5
[illegible]	N/A	3.5	N/A	3.5

Attribute	Ease	Depth	Frequency	Average
Accessibility	3.7	N/A	N/A	3.7
Responsiveness	N/A	3.15	N/A	3.15
			Overall Score	3.41

Note: For the Communication category, all attributes received a "Satisfactory" score. A chronological list of conference calls, change management notifications, and other announcements distributed to the CLEC community is included in Appendix D – CLEC Input Evaluation Supporting Documentation – Qwest SATE Communications."

A separate group of questions addressed " Did Qwest solicit CLEC input during the initial design phase of SATE?" The results are as follows:

- Four responses were received; two stated Qwest solicited input during SATE design, and two stated Qwest did not solicit input during this time frame.
- The responses that indicated Qwest solicited design input, stated that the solicitation was conducted in a very informal/ unstructured manner.

It is noteworthy that the responses received in the interview generally match those received on the Questionnaire. The actual interview responses are contained in Appendix D - CLEC Input Evaluation Supporting Documentation.

After reviewing the SATE related documents provided by Qwest, it was observed that no formal structure existed to obtain input from CLECs during the initial design of SATE.

Based on the overall findings of the CLEC Input Evaluation, HP recommends the following:

- Continue to provide a forum for obtaining CLEC input on SATE Technical Architecture/Interface Specifications (i.e., the SATE Users Group Meetings that were initiated in November of 2001 and have been well received by the CLEC community)
- Ensure the CMP Process meets its designed purpose related to SATE
- Ensure schedules of key SATE activities are well defined and thoroughly documented

3.6 Summary of Activities

The Input Evaluation process began by establishing basic guidelines for administering the questionnaires and conducting the interviews. Additionally, evaluation criteria had to be developed. The questionnaire was then developed, and mailed to the TAG Members and CLEC Community.

An attempt to contact personnel form the CLECS and Qwest participating in the SATE initiative to address any questions or concerns related to the questionnaire/interview process. Completed questionnaires were received. Questionnaire input was analyzed and a determination was made of what CLECs required follow-up interviews to obtain clarification on interview responses.

Interviews were scheduled and conducted. Interview responses were then analyzed, and the input from the questionnaires and interviews was complied in a manner to allow more in-depth analysis, the results were summarized. Additionally, analysis of Qwest's scheduling of CMP notifications and other communications relative to SATE was performed

Evaluation criteria were applied and CLEC Input Process strengths and areas needing improvement were identified.

Final results were then quantified and packaged for reporting purposes. Overall results were calculated and resulting recommendations were developed

4.0 Document Evaluation

4.1 Overview

The Documentation Evaluation consisted of HP evaluating documentation provided by Qwest and documentation available to CLECs on the Qwest Disclosure web-site. The evaluation provided a review of the documentation based upon a set of criteria that HP has used for other 271 OSS Evaluation Engagements to judge the completeness and adequacy of Qwest supplied documentation for the SATE

The evaluation was conducted using the following documents initially provided by the Qwest Lead Implementation Project Manager:

- IMA EDI Implementation Guide v. 5.0 - Dated July 25, 2001
- IMA EDI 7.0 Data Document for SATE – Dated June 2001/ Version 1
- IMA EDI Data Request Form – Dated, None/Version, None
- IMA EDI Stand Alone Test Environment (SATE) Overview – Dated July 11,2001/Version 1.01
- IMA EDI Stand Alone Test Environment White Paper – Dated May 25,2001/Version 1.00
- Qwest SATE Regression Usage Plan – Dated August 28, 2001/Version, None
- IMA EDI 7.05 Data Document for SATE – Dated September 25, 2001/Version 5.0
- IMA EDI 8.03 Data Document for SATE Dated September 25,2001/Version 1.03

4.2 Summary

The Document Evaluation consisted of HP performing the following activities:

- Request all documentation identified by Qwest
- Evaluate all documentation received from Qwest
- Raise specific questions pertaining to the documentation and indicate issues on the HP/Qwest SATE Question Log
- Circulate the HP/Qwest SATE Question Log to all parties via electronic mail
- Review and discuss questions and issues contained in the HP/Qwest SATE Question Log via weekly conference calls

The Document Evaluation Process also used the following sub-processes:

- Log Document
- Inspect Document
- Review Document
- Close-Out Document Review
- Evaluate Documents

4.3 Variances

During the document review period, Qwest distributed updated or replacement versions of documents to the CLEC community. As a result, some documents initially received for review were replaced with newer versions. To the extent possible, and within the context of the project schedule, HP evaluated the updated documents and reported its findings in this evaluation based upon the most current versions. If a document was not reviewed because it was replaced by an updated document, the document was logged as being received and closed with a status of 'not reviewed'. The documents received but not reviewed are listed below.

The following documents were not evaluated because they were replaced or discontinued:

- IMA-EDI Implementation Guide version 5.0 - Replaced
- IMA-EDI SATE Overview – Discontinued per Qwest's July 11 Community Notice
- IMA-EDI 7.06 Data Document for SATE – Replaced
- IMA-EDI 8.04 Data Document for SATE – Replaced

The following documents that were evaluated were not included in the initial list of documents to be reviewed:

- IMA-EDI Implementation Guide version 6.0 – Replaced the old Version 5.0 document
- IMA-EDI 7.07 Data Document for SATE – Replaced the old Version 7.06 document
- IMA-EDI 8.05 Data Document for SATE – Replaced the old Version 8.04 document
- IMA-EDI Implementation Guide version 7.0 – Replaced the old Version 6.0 document
- IMA-EDI Implementation Guide version 8.0 – Reviewed only those sections related to process exceptions (see Section 5 for details)

4.4 Summary of Results

HP found that Qwest's SATE documentation was adequate to support use of the environment. However, most of the documentation reviewed in this evaluation was newly developed and required extensive support from Qwest SATE personnel to allow HP to properly use the SATE environment. SATE documentation contained numerous minor inaccuracies that HP believes are the result of hasty production and poor version control. Therefore, HP recommends that Qwest implement a quality assurance process and a release management practice specifically for the SATE documentation. This documentation management process should be clearly defined so that the ACC can review its content and performance, if warranted in the future. The following table summarizes the individual results.

Document Name	Completeness	Relevance	Brevity	Clarity	Correctness	Consistency	Reference	Comment	Risk	Purpose	Feedback	Approval
IMA-EDI Implementation Guide v6.0	Un	S	S	Un	S	S	S			S		
IMA-EDI 7.0 Data Document for SATE	Un	S	S	Un	S	S	S	S		S		
IMA-EDI Data Request Form	Un	S	S	Un	Un	S				S	U	U
IMA-EDI SATE Overview (Not Reviewed)												
IMA Stand Alone Test Environment White Paper	S	S	S	S	S	S	S			S		
Qwest SATE Regression Design Plan	S	S	S	S	S	S	S			S		
IMA-EDI 7.07 Data Document for SATE	Un	S	S	Un	S	S	S	S		S		
IMA-EDI 8.05 Data Document for SATE	Un	S	S	Un	S	S	S	S		S		

S	Satisfactory	A Satisfactory rating is assessed which supports that the documentation meets or exceeds the criteria specified.
U	Unsatisfactory	An Unsatisfactory rating is assessed which defines that the documentation does NOT meet the criteria specified.
U*	Unsatisfactory with note reference	An Unsatisfactory rating is assessed with explanatory notes to assist in further clarification of the unsatisfactory assessment when the documentation does NOT meet the criteria specified.

4.5 Evaluation

4.5.1 IMA EDI Implementation Guide v. 6.0

The IMA EDI Implementation Guide provides documentation designed to explain the steps a CLEC would use to establish connectivity, connect to Qwest's EDI environment, and perform firewall and IA-level implementation and testing. Once a CLEC has completed these steps, it may choose to use the SATE in place of the standard Interoperability Testing environment.

The Guide contained instances of incomplete information or information that was not clearly understood during the evaluation and required Qwest clarification during the actual use of the SATE testing environment.

The evaluation identified some EDI Production-related information in the SATE section of the Guide. While it is expected that some inter-mixing of information will occur for comparison reasons, the degree to which SATE and Production information is mixed caused confusion. Using the document with inconsistent SATE and Production environment information would prove time consuming for the CLEC, resulting in additional interaction with Qwest to clarify the issue or procedure.

In active use of the document, HP identified:

Formal Issue HPSATEEV2002: This issue regards LSR responses in SATE. Qwest has identified this as a documentation issue, however this issue also affects other domains of the SATE evaluation.

"The statement is made on page 14, the goal of SATE is to supply a test environment that can be used to accomplish the following: "Enable the CLEC to identify where to refine their business processes and modify the technology that supports their EDI interface.

HP noted that there is inconsistent data content in responses from SATE as compared to those of Interoperability and Production for like LSRs, and that this situation may negatively affect the CLEC. The CLEC may not be able to develop and test their business processes based on their LSR Interoperability testing while using the IMA EDI SATE.

Qwest has replied as follows: Qwest believes that the incident identified herein is a documentation issue – not an issue that results in SATE responses different from production responses. Qwest will supply updates to the IMA-EDI Implementation Guide documentation

to clarify the language regarding "refine their business process". This update was provided on November 9th, 2001. This release of the documentation was evaluated as part of the Process Evaluation. See Section 5 for details.

Formal Issue HPSATEEV1001: This issue is related to SATE connectivity when following the processes for "Establishing a Dedicated Circuit" and "Firewall and IA to IA Test Phase" as described in the Guide. On page 11, the section entitled, "Establishing a Dedicated Circuit" does not explain that the SATE interconnection does not use the same IP address as the standard Qwest Interoperability environment. HP did not understand by reviewing this section of the documentation that HP was required to submit a SATE IP Worksheet to establish a connection to the SATE.

On page 12 in the section entitled "Firewall and IA -to-IA Test Phase", the IA-to-IA tests are described, but the Entrance Criteria, Process and Exit Criteria for the Firewall Tests are not described.
Qwest notified HP during the weekly SATE Conference Calls that the next version of the IMA-EDI Implementation Guide will address the specific issues raised regarding incomplete information and other information that requires clarification.

Qwest made updates to the IMA-EDI Implementation Guide per its November 9, 2001 release of the guide (Version 7.0). HP reviewed these updates and recommended that Qwest make further clarifications to several process related issues. On November 30, 2001 Qwest released Version 8.0 of the Guide. HP reviewed this version from a process exception perspective only (Qwest indicated it had addressed several process-related issues in the updated guide). HP's findings related to version 8.0 are contained in Section 5 of this report (the Process Evaluation Section).

It is HP's opinion, based on the findings, that this document is supportive in assisting a CLEC when incorporating the use of the SATE into its environment. HP, however, believes that it should be refined and improved by Qwest to meet process standards described as part of HP's Process Evaluation.

4.5.2 IMA EDI 7.0 Data Document for SATE

The IMA EDI 7.0 Data Document has an Overview section that describes how SATE is set up with regard to USOC use, PIC/LPIC assignment, and CLEC CCNA/ACNA assignments. The Overview also details SATE's implementation of various account data elements such as Billing Account Numbers, Non-Exempt tax status and CLEC's operating state. These account data elements are pre-defined in the SATE environment.

HP believes that the document did not contain the level of detail needed in its explanation of the differences between the SATE test bed and the traditional EDI Interoperability and Production environments. It may require CLECs to make additional inquiries to Qwest before being able to implement SATE for testing purposes.

The Test Scenario Section contained multiple errors that were discovered during transaction testing efforts. In future releases of the Data Document, Qwest has agreed to clarify the issues discovered during the qualitative review of this document and the discrepancies found while using the content of the document during the transaction testing. For example, correction of known problems did occur in the new 7.07 Data Document, which has been recently released. Therefore, Hewlett-Packard believes that the Data Document now adequately supports CLEC testing in the overall framework of the SATE.

4.5.3 SATE Data Request Form

The SATE Data Request Form is a one-page electronic form that the CLEC completes when it wishes to add new account information to the SATE for its unique testing requirements. The completed form is returned to Qwest via e-mail. The form does not contain instructions or procedures to assist the CLEC in completing the required fields. It does not state the expected interval required to complete the request for additional account information. Additionally there is no provision for CLEC feedback.

When HP attempted to use the form for its stated purpose, it received a string of e-mail questions and requests for additional information from Qwest. HP believes that this is an inefficient way to proceed.

To help clarify and expedite the Data Request Process in the future, Qwest made changes to both the Data Request Form and the IMA-EDI Implementation Guide per HP's recommendation. These changes were released to the community on November 9, 2001 (IMA-EDI Implementation Guide Version 7.0). HP reviewed these modifications and recommended some minor adjustments. Qwest provided an updated IMA-EDI Implementation Guide (version 8.0) with the appropriate modifications on November 30, 2001. HP evaluated those additional changes. Use of the Data Request form is now adequately explained.

4.5.4 White Paper on the IMA EDI SATE Environment

The SATE White Paper provides a high-level definition of the steps undertaken at Qwest to provide the CLEC community with an alternative to the existing IMA-EDI Interoperability process. The introduction outlines the five key sections of the document pertaining to the SATE project at its inception.

The document provides information regarding advantages to the CLEC of using SATE as an alternative to the standard Interoperability testing environment. HP noted that the document could more fully describe how the stubbed systems associated with the SATE differ from the Production version of EDI.

HP believes this document is well suited for its intended audience and helpful to a CLEC's efforts to understand and implement the SATE.

4.5.5 Qwest SATE Regression Usage Plan

This one page document is well suited for defining a regression usage plan. The document proved easy to use, and HP observed a one-day turnaround by Qwest to approve HP's Regression Usage Plan.

HP believes that this document is adequate and supportive to CLECs efforts to implement the SATE.

4.5.6 IMA EDI Data Document Version 7.07 for SATE

The IMA EDI version 7.07 Data Document has been modified from earlier versions to include a section on how to use the document, new information regarding NC/NCI Code combinations, and expanded information regarding the use of USOCs in SATE accounts. HP noted several defects related to changes in the scenario section that were not updated in Appendix A of the Data Document. The Version 7.07 document incorporates changes to correct problems identified by HP during its review of the 7.6 Data Document.

HP believes that, with assistance from Qwest's EDI Implementation Team, the 7.07 versionwas adequate and supportive to a CLEC's efforts to utilize the SATE.

4.5.7 IMA EDI Data Document Version 8.05 for SATE

The IMA EDI version 8.05 Data Document includes enhancements from earlier versions to provide new information regarding NC/NCI Code combinations, expanded information regarding the use of USOCs, and a new section on how to use the document. The document is more focused toward the CLEC in each of its eight subsections.

In reviewing the Scenario Section, several defects were discovered regarding instances of mismatched information between the Expected Results section and Appendix A of the Scenario Section. The noted Scenario Section defects are in the process of being addressed by Qwest.

Changes to the text section of this document have been incorporated to reflect HP's findings during its review of the earlier document.

HP believes that, with assistance from Qwest's EDI Implementation Team, despite the noted defects in the Scenario Section, the document is adequate and supportive to a CLEC's efforts to implement the SATE into its environment.

4.6 Summary of Activities

Qwest assigned an IMA-EDI SATE Implementation Manager to establish a business relationship between HP and Qwest. This relationship consisted of the exchange of documents, initiation of a Kick-Off call and the establishment of weekly EDI Implementation conference calls. The purpose of the weekly EDI Implementation conference calls was to review open items and issues that were created as a result of using Qwest documentation and the SATE during HP's IMA-EDI 7.0, 8.0 and 8.01 Implementation. These open items and issues were entered in the HP/Qwest SATE Open Question Log, developed to obtain and track answers pertaining to Qwest documentation and procedures provided for establishing the use of the SATE for interface testing.

These scheduled weekly conference calls, the supplied SATE documents supplied by the EDI Implementation Team and the IMA-EDI documents HP acquired from the Qwest disclosure web-site, and the HP/Qwest SATE Open Question Log formed the basis for conducting HP's Documentation Evaluation. HP evaluated the documents provided by Qwest and acquired from the Qwest Disclosure web-site

The documents obtained from Qwest were logged, inspected, review and evaluated based upon the criteria contained in the Documentation Evaluation Plan.

Final results were then compiled and analyzed. Overall evaluation results were determined and recommendations were developed.

5.0 Process Evaluation

5.1 Overview

HP evaluated the processes related to Qwest's IMA-EDI SATE access and use by CLECs. The purpose of the evaluation was to assess the IMA-EDI SATE processes that a CLEC must follow to establish and test its EDI connection, and assess the extent to which these processes facilitate a CLEC's use of SATE for transaction testing.

In order to conduct the evaluation, HP developed evaluation criteria, identified the processes to be evaluated, performed the evaluation, and analyzed the results. The evaluation and subsequent findings are based on established Process Evaluation Criteria[1].

5.2 Summary

HP completed and evaluated the SATE processes listed below, as described in the IMA EDI Implementation Guide. However, it is noteworthy that their completion was based heavily on the interaction of Qwest and CLEC test team members rather than on the process documentation itself.

Processes:

- Implementation and set-up steps required of a CLEC in IMA-EDI SATE. This includes all initialization and connectivity steps in order to get a CLEC started in IMA-EDI SATE.
- Interoperability testing through IMA-EDI SATE with Qwest monitoring the transactions of HP as a CLEC.
- Submission and processing of IMA EDI SATE Data Request Forms.
- Submission of requests through CMP.
- The monthly clean-up process of resetting the test accounts.
- Technical support for CLECs.

The documentation used to establish the baseline for the process evaluation is as follows:

- IMA EDI Implementation Guide v. 5.0 – Dated July 25, 2001
- IMA EDI 7.0 Data Document for SATE – Dated June 2001/ Version 1
- IMA EDI Data Request Form – Dated, None/Version, None
- IMA EDI Stand Alone Test Environment (SATE) Overview – Dated July 11,2001/Version 1.011
- IMA EDI Stand Alone Test Environment White Paper – Dated May 25,2001/Version 1.02
- Qwest SATE Regression Usage Plan – Dated August 28, 2001/Version, None
- IMA EDI 7.05 Data Document for SATE – Dated September 25, 2001/Version 5.0
- IMA EDI 8.03 Data Document for SATE Dated September 25,2001/Version 1.03

5.3 Variances

The following are variances from the original Process Evaluation Plan:

- Technical Support for CLECs was not fully evaluated. This is due to the lack of a standard set of tech support guidelines or procedures within the reviewed SATE documentation.
- Process performance was not measured against clearly established process objectives for time, cost or quality. With the exception of transaction testing, there was no evidence of clearly defined process measurements or objectives.
- Submission of requests through CMP was determined to be out of the scope of the evaluation.

5.4 Summary of Results

Based on the Overall Rating and observations listed in the Evaluation section of this report, the Qwest IMA-EDI SATE Process is not documented to a degree of detail and clarity to reasonably support:

- Ease of understanding by CLECs
- Consistent repeatability.

[1] Qwest IMA-EDI SATE Process Evaluation Plan – Section 4

5.5 Evaluation

Following is the Overall Rating of the Qwest IMA-EDI SATE Processes:

Process Owners Identified	FC
Process Dimensions Defined	PC
Process Roles Defined	PC
Process Performance Criteria Established	PC
Process Documentation Complete	PC

FC – Fully Compliant: Meets all of the stated process evaluation criteria
PC – Partially Compliant: Meets some of the stated process evaluation criteria, but not to an adequate level
NC – Not Compliant: Does not meet stated process evaluation criteria

HP made the following Observations during the execution of the Process evaluation Plan:

- Not all functional roles have been identified at the individual activity level. CLEC Only Qwest roles were identified and defined at the functional level, therefore a "Partially Compliant" rating was given for these criteria.
- Accountability for the completion of key SATE implementation and testing activities is not consistently defined (i.e., deliverable descriptions, responsible parties clearly identified and time frames established).
- Process flows are not documented in a thorough and consistent fashion. This problem is magnified by the fact that SATE related activities are interwoven with the activities related to other EDI applications in the EDI Implementation Guide. Additionally, process activities are not always presented chronologically.
- Although activity inputs and outputs are often implied, generally they are not defined clearly enough to ensure understandability by CLECs. Therefore they were evaluated as "Partially Compliant" across all SATE processes.
- Quantifiable process performance objectives are not clearly documented.

Due to the observations that are documented above, HP makes the following recommendations:

- Identify and define key functional roles within the SATE Implementation and Testing process (CLEC roles)
- Document responsible parties, time frames and descriptions for key deliverables
- Document process flows for key activities performed by both Qwest and CLECs. This documentation should illustrate the order in which the activities are performed, identify the roles that perform them, and provide a clear activity description including inputs/outputs.
- Modify the Implementation Guide to clearly identify the activities related to SATE (as opposed to the other test modes described in the Guide), and ensure that the SATE activities are listed chronologically within the guide
- Develop additional performance objectives for key activities within the SATE Implementation and Testing Process.

5.6 Summary of Activities

After the project kickoff, the first step taken was to document the processes to be evaluated and create a Baseline Responsibility Matrix[2]. This was accomplished by documenting the activities and

[2] Qwest IMA-EDI SATE Process Evaluation Plan - Attachment E

related functional roles that are listed in the SATE documentation. It is noteworthy that roles in the documentation were only provided at the company entity level (i.e., Qwest or CLEC).

Next, input from HP IMA-EDI SATE subject matter experts was obtained to capture additional details of the processes, including individual activities, activity flows and the roles that perform each activity. At this point in the evaluation, process flowcharts (maps[3]) were developed. This entire package was reviewed with Qwest subject matter experts to ensure accuracy and completeness.

To divide the overall SATE Implementation and Testing Process into manageable components, the evaluation team split the maps into the following categories (sub-processes): IMA-EDI SATE Initiation and Planning, Connectivity Set-up, Physical Connectivity Testing, Transaction Testing (including Add Data), and Technical Support. Process observations, weekly project calls and additional subject matter expert input was used to complement the SATE process documentation in describing each activity[4], including activity inputs and outputs.

Checklists[5] were then developed to evaluate each sub-process based on the criteria contained in the Process Evaluation Plan (Process Evaluation Criteria)

Processes were evaluated on an activity-by-activity basis. Each sub-process and individual activity was evaluated and ranked as Fully Compliant, Partially Compliant or Not Compliant. Discrepancies were first captured as Process Evaluation Exceptions. They were then referred to Qwest through the project Question Log. All discrepancies remain on the Exception Log, even though some were resolved by Qwest, some were transitioned to formal issues, and others were the basis for recommendations.

Prior to HP completing the evaluation, Qwest released an updated version of the EDI Implementation Guide (Version 8.0). As a last step before compiling the final results, an evaluation of those sections of the updated guide that had changed was conducted. Findings and related preliminary recommendations were updated accordingly. Additionally, HP provided responses to the questions and concerns from Qwest and the community related to the Preliminary Final Report. Final results were then compiled and analyzed. Overall evaluation results were determined and final recommendations developed.

6.0 Transaction Testing Evaluation

6.1 Overview

HP evaluated the ability of Qwest's IMA-EDI SATE to support their IMA-EDI Releases of V7.0, V8.0 and V8.01. The transaction test evaluation has assessed the adequacy of Qwest's IMA-EDI SATE to facilitate CLECs in testing their EDI interfaces and to determine to what degree the following capabilities exist:

- Does Qwest's IMA-EDI SATE provide an environment that allows CLECs to train its service representatives outside of their live production-provisioning environment where mistakes would have a negative impact?
- Do CLECs have the ability to test the IMA-EDI pre-ordering and ordering processes when a CLEC makes changes to their own system?
- Do CLECs have the ability to test the IMA-EDI pre-ordering and ordering processes when Qwest makes changes to its OSS, such as those identified in CMP notifications of updates, or in a new release such as 8.01?

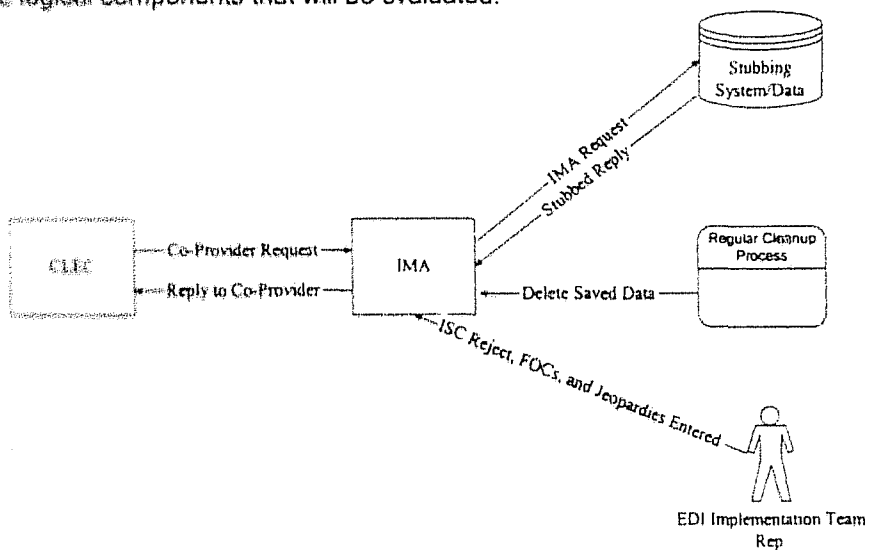
[3] Process Maps – Attachments A1, B1, C1, and D1
[4] Activity Descriptions – Attachments A2, B2, C2, and D2,
[5] Process Checklists – Attachments A3, B3, C3, and D3

HP executed the following activities as the evaluation was performed:

- Preparation for the test
- Development of test success criteria
- Development of the HP technical testing environment
- EDI connectivity testing
- Execution of the transaction test
- Evaluation of transaction test results
- Development of the findings report
- Delivery of the findings
- Transaction test closeout

6.2 Summary

HP's transaction test evaluation tested versions 7.0, 8.0 and 8.01 of the SATE. The following figure [6] describes the logical components that will be evaluated.



The following modules were tested by HP during the transaction test evaluation:

- The IMA Module (including an EDI Translator)
- Stubbing System Module
- Regular Clean-Up Process

Below is a description of each module as it is documented in the Qwest White Paper[7].

IMA Module (including an EDI Translator) - This is an actual version of IMA configured to direct requests to the Stubbing System instead of the back-end systems it normally calls. It runs all the edits

[6] This figure is taken from the Qwest White Paper on the IMA EDI Stand-Alone Test Environment, May 25, 2001, Version 1.00

[7] NOTE: the Qwest White Paper is no longer supported as it has been incorporated into the EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL); however this specific architecture information was not carried forward.

to determine whether the detailed fields within a transaction are valid. The only modifications made especially for this version are listed below:

- Certain edits are turned off. These edits in no way affect acceptance of a function performed by a CLEC. These edits are most often used to determine whether an LSR requires Manual Handling before service orders are sent.
- The SATE uses generic CLECs that can be used by different actual CLECs over time. The SATE version of IMA is therefore configured to hold identification information for these generic CLECs.
- Other minor changes determined during detailed design.

Stubbing System Module - IMA will be accessing this system using the same Application Programming Interfaces (APIs) that the Production version of IMA uses when calling back-end systems.

The system, in most cases, returns responses to IMA using data-driven stubs. For example, CLECs send requests to IMA to find the address associated with a given telephone number. In Production, IMA sends a request to the Fetch 'n' Stuff system, which in turn sends a request to PREMIS to gather such information. In the SATE however, the request is sent from IMA to the Stubbing System. There, the request is parsed and the telephone number is looked up in a database. If the number is found, the preset response specified for that number is sent back to IMA. If it is not, a generic "No Match " response is sent to IMA.

This basic stub process is replicated for calls to most of the stubbed back-end systems. In some cases, however, an external system is not called, but instead a database is accessed. For instance, in Production, calls to the Loop Qualification Database (one of the systems that is stubbed) are made via SQL Query. Therefore, for this case, the Stubbing System simply has a database view which matches the view called in production and the underlying tables are populated with SATE specific data.

Regular Cleanup Process - Since CLEC IDs can be passed from one CLEC to another in the SATE, the environment is flushed of all transactional data on a monthly basis. This data includes reserved appointments, telephone numbers, and the LSRs entered by CLECs."

In addition to exercising the Qwest SATE infrastructure elements, HP performed different types of testing to evaluate the behavior of transaction results associated to processing LSRs within SATE under various situations. The situations included the execution of transactions within an IMA EDI release, across IMA EDI releases, for a single trading partner, for multiple trading partners, with expectation of generating positive results and with expectation of generating negative results. All of these situations can be categorized as one of the following test methods:

- SATE Data Document Validation
- Negative Testing
- Production Mirror Testing
- Multiple Trading Partner Testing
- Multiple Release Testing
- New Release Process Test

Furthermore, due to changes made to the SATE environment during the evaluation, there was the need for quality assurance testing and transaction re-testing to ensure the reliability of the SATE environment and its supporting documentation. These test methods have been categorized as:

- Data Document Delta Testing
- Full Regression Testing

Additional SATE processes were examined as part of the transaction test evaluation to ensure the capability of this functionality is usable to the extent documented in the EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL).

These processes include:

- Add Account Data to SATE
- Add Products/Activities to SATE

6.2.1 Purpose of Evaluation Methods

The purpose of each of the test methods is explained as follows:

SATE Data Document Validation - This evaluation utilized the scenarios and account data provided in the Qwest Data Documents for both 7.0 and 8.0. All scenarios listed in the v7.04 data document and selected scenarios from the v8.01 data document were executed with the expectation of the SATE returning the expected results as listed in the data document. All variances to the expected results were documented for each affected scenario and provided to Qwest for their follow-up. HP requested Qwest to research and provide clarifications accordingly.

In addition to evaluating the outcomes of executing the scenarios provided by the Qwest SATE for 7.0, 8.0 and 8.01, HP developed test scenarios to verify that consistency in responses exist within SATE, and, between SATE and "live" production. This was accomplished by performing Negative Testing and Production Mirror testing.

Negative Testing - The purpose of the Negative testing was to force a Business Process Layer (BPL) failure so that an error response was returned. The error response returned was compared to the existing Qwest production error list to ensure the error response could be found in the production error list and that the content of the SATE error response is consistent with that of the error message appearing in the production error list. All inconsistencies in error message responses or variances to expected results for affected scenarios were presented to Qwest for follow-up. HP requested Qwest to research any inconsistencies found when comparing the actual SATE response received to the expected response found in the production error list and provide clarifications accordingly.

Production Mirror Testing - The purpose of the Production Mirror testing was to verify that the responses returned in SATE are equal in content and EDI format to the responses returned by the Qwest Production environment. This was accomplished by submitting an LSR to SATE and submitting the same LSR with production account data to the Qwest production environment. The responses were compared to verify that there was consistency in the response content and EDI format. In any case where there was an inconsistency, HP requested Qwest to follow-up and to clarify the unexpected outcome.

Multiple Trading Partner Testing - The purpose of Multiple Trading Partner testing was to evaluate the outcome of more than one trading partner utilizing SATE at the same time and submitting the same test scenarios simultaneously. The intent was to ensure that multiple trading partners could use the account data within the SATE, and to establish that consistent responses could be produced for the same test scenarios executed by different trading partners.

Multiple Release Testing - The purpose of Multiple Release Testing was to evaluate the SATE's capability to support more than one IMA-EDI release concurrently. As SATE was implemented it solely supported IMA Release 7.0. As HP began the SATE evaluation the environment was updated to support IMA Release 8.0. HP requested trading partner relationships be established for HP as a 7.0 trading partner and a different trading partner relationship for HP as an 8.0 trading partner. As Qwest published the 8.0 Data Documents, HP determined that a selected group of scenarios would be executed to support this evaluation. HP did submit both 7.0 and 8.0 test scenarios to the SATE.

the actual outcomes when compared to the expected results were recorded. In any case where there was an inconsistency, HP requested Qwest to follow-up and to clarify the unexpected outcome.

New Release Testing - In an effort to test the implementation process for New Release testing, HP attempted to demonstrate the capability of SATE to provide new release testing 30 days in advance of the IMA-EDI production implementation of the new release. Qwest did supply the Point release of 8.01 within SATE 27 days in advance of the production implementation. By Qwest's definition of a Point release this did not meet the expectations of a new IMA-EDI release implementation. A Point Release does not normally affect the IMA-EDI or Business Process Layer.

Add Account Data to SATE - The purpose of this evaluation was to ensure that both the process and the new account data provided will allow the CLEC to have a capability to add CLEC specific data to SATE per the expectations set in the IMA-EDI Implementation Guidelines.

Add Products / Activities to SATE - The purpose of this evaluation was to ensure that a CLEC could successfully request the addition of a product and associated order activities that are not currently supported by SATE. Additionally, once the product was made available within the SATE the test scenarios provided in the updated Data Document were executed to ensure the expected results of each scenario could be obtained. HP requested the addition of Unbundled Distribution Loop product to SATE. With the distribution of Data Document v7.09 and v8.07 on 11/28/01, Qwest added the UDL and UDLNP products and their associated test scenarios.

6.2.3 Scope of SATE Functionality Evaluated

HP selected the following Products and their associated activities per the Data Documents and the test scenarios provided by SATE for release 7.0 and 8.0. The table below summarizes the Products and the related test scenario ID's that HP included in the execution of each transaction test evaluation method.

Release 7.0	Release 8.0
Pre-Order	Pre-Order
Address Validation	Address Validation
AVQ1 - 3[1]	AVQ1-3, AVQ5, AVQ10, AVQ14, AVQ22,
Customer Service Record	Customer Service Record
CSR1 - 11	CSR1 - 4, CSR7 - 11
Appointment Scheduling	Appointment Scheduling
AAQ1 - 4A, 4B, 5A, 5B	AAQ4A, 4B, 5A, 5B
Service Availability Query	Service Availability Query
SAQ1 - 8	SAQ2, 5, 7
Facility Availability Query	Facility Availability Query
FAQ1 - 18	FAQ1, 4, 5, 8, 14 - 18
Connecting Facility Assignment Query	Connecting Facility Assignment Query
CFA1 - 4	CFA1, 3, 4
Telephone Number Availability	Telephone Number Availability
TNAQ1, 1B, TNAQ2, 2B, TNAQ3, 4	TNAQ1, 1B, TNAQ3, 4
Meet Point Query	Meet Point Query
MPT1 - 6	MPT1-4, MPT6
Raw Loop Data Query	Raw Loop Data Query
RLDQ1 - 19	RLDQ1, 11, 18, 19, 24

[1] Each scenario ID is described further in the SATE Data Documents. The v7.07 and v8.05 Data Documents are appended to the Transaction Test Reporting Results Summary document described in section 5.6.1 of this document.

Release 7.0	Release 8.0
Order	Order
POTS Resale	POTS Resale
POTS1, 6, 8	POTS1, 6, 8
Unbundled Loop	Unbundled Loop
UBL2, UBL4	UBL2, UBL4
UNE-P POTS	UNE-P POTS
UNEP3, 4, 7, 9 – 14	UNEP3, 4, 7, 9 – 14
Local Number Portability	Local Number Portability
LNP3	LNP3
Loop with Number Portability	Loop with Number Portability
LSNP4	LSNP4
Centrex Plus Resale	Centrex Plus Resale
CEX1	CEX1
Centron Resale	Centron Resale
CEN2	CEN2
Shared Loop (Line Sharing)	Shared Loop (Line Sharing)
SHL1, 5	SHL1, 5
UNE-P Centrex	UNE-P Centrex
UCEX9, 12	UCEX9, 12
UNE-P POTS	UNE-P POTS
UNEP3, 4, 7, 9 – 14	UNEP3, 4, 7, 9 – 14
Stand Alone Directory Listings	Stand Alone Directory Listings
DL1 – 9	DL1 – 9

Note: Products and scenarios that are applicable to the 8.01 IMA-EDI sub-release of SATE are incorporated into the 8.0 Data Document.

4.3 Testing Techniques

Qwest supports two types of testing within the SATE: Progression and Regression. HP executed a mix of scenarios utilizing each of these testing techniques. HP used the existing (per AZ 271 Test) production certified products / activities as the basis for Regression Testing. Any other product / activity combinations that are not production certified fell into the Progression Testing process. This guideline for separation of Regression and Progression testing was employed across all the aforementioned Transaction Test methods.

4.3.1 Progression Testing

The Progression Testing Phase affords the CLEC the opportunity to validate their technical development efforts and to quantify LSR processing results[9]. Progression Testing will identify the CLEC's ability to submit correct EDI transactions through the IMA/Facilities Based Directory Listing (FBDL) system. For this test, Qwest will provide the account data in its IMA EDI SATE Data Document. Order scenario submissions do not leave the SATE testing environment, do not affect the existing production data, nor are they provisioned while in use for the Progression Testing Phase. This type of testing is used for CLECs that have not been certified for product/feature sets in EDI.

4.3.2 Regression Testing

For CLECs wishing to test EDI functionality without supervision or direct support, Qwest permits access to SATE for what is referred to as "regression" testing. Access to SATE for this purpose then

[9] Qwest IMA EDI Implementation Guidelines, Version 7.0, November 9, 2001, Page 22

required the Initial Discussion, negotiated regression Usage Plan, Requirements Review, Circuit Validation Configuration, and Firewall and IA-to-IA Testing requirements as described in sections of Qwest's IMA EDI Implementation Guidelines (see Typical Implementation Timeline)10. Regression testing is primarily for those with 'no intent' toward meeting any Qwest entry or exit criteria within an implementation process

In order to execute these test methods HP established multiple trading partner relationships within the Qwest SATE to fulfill the standard IMA-EDI requirements. The trading partner Ids and the associated test methods are as follows:

Trading Partner ID	Description	Test Method
HP%	Hewlett-Packard SATE	Release 7.0 SATE Test Bed Validation
HPT	Hewlett-Packard additional Trading Partner	Release 7.0 Multiple Trading Partner Testing
HP8	Hewlett-Packard SATE for 8.0	Release 8.0 Multiple Releas Testing
HPE	Hewlett-Packard Production Trading Partner	Production Mirror Testing

5.4 Variances

The SATE evaluation was not intended to execute as a true "CLEC Experience". There were parts of the evaluation that provided an assurance that transaction data could be executed to provide expected outcomes; however, there were processes that were expedited due to the necessity for HP to adhere to a static completion date for the delivery of this evaluation. These include the addition of a new product to SATE and the addition of new account data to SATE.

As HP performed the transaction test evaluation there were continual changes made to the test bed scenarios and account data provided in the SATE. Due to these changes, HP needed to ensure that any account data changes or scenario additions continued to provide consistent results within SATE. Because of this HP analyzed the changes to the Data Document as each updated data document was published. The following test methods have been employed by HP to ensure quality data management exists within SATE.

Data Document Delta Testing - The definition of DELTA for the purpose of analysis of the SATE Data Documents. A SATE scenario is to be considered a candidate for delta testing if it is a new scenario or if the account data has been modified as shown on the most recent release of the data document.

As HP performed the aforementioned evaluations there were multiple discrepancies found within the Data Documents for both release 7.0 and 8.0. These discrepancies were noted and presented to Qwest for clarification. The corrective action taken by Qwest caused the generation of additional updates to the Data Documents. It became necessary for HP to ensure that any scenarios that were added or any scenarios where account data was modified were evaluated to ensure the consistency in the actual SATE response and the expected results listed in the Data Document.

Full Regression Testing - The purpose of Full Regression Testing is a quality assurance test based on the multiple changes that HP requested during the aforementioned evaluation methods. HP has executed each scenario supplied in the SATE as documented in the v7.8 and v8.6. The outcome of

[10] Qwest IMA EDI Implementation Guidelines, Version 7.0, November 9, 2001, Page 41

each transaction was balanced to the expected result listed in the respective Data Document. All variances were reported to Qwest.

6.5 Summary of Results

Each evaluation method provides a conclusion as to the original percent of unexpected results in relation to the total number of scenarios executed. Additionally, the percentage of re-tested transactions that have expected results that meet expected outcomes after corrective action was taken by Qwest is provided.

The accessed table provides a summary of each transaction test evaluation method with the following details:

Environment - The column labeled environment identifies the Evaluation Method utilized to generate the related transaction test information.

The environments are categorized by transaction test families as follows:

- SATE 7.0 - IMA-EDI Release 7.0
- SATE 8.0 - IMA-EDI Release 8.0
- Negative Test
- Production Mirror Test
- Data Testing
- Full Regression
- Unbounded Distribution Loops

Total Transactions - The total transactions represent the sum of transactions executed within each environment.

Total Unexpected Results - The total unexpected results represent the sum of transactions that produced a "fail" or unfavorable outcome. A transaction will be considered to "Fail" if the transaction produces a response that does not match the expected result in the data document or HP's expected result.

% Error - The percentage of error is calculated as the total unexpected results divided by the total transactions executed.

Total Retest Complete - This represents the total number of transactions that were successfully re-tested. The transactions that are candidates for re-test are represented in the Total Unexpected Results column.

% Retest Successfully - This represents the percentage of re-tests that were successful as compared to the number of total transactions with unexpected results. This percentage is calculated as the total retest complete divided by the total unexpected results.

Environment	Total Transactions	Total Unexpected Results	% in Error	Total Retest Complete	% Retest Successfully
GATE 1.0					
[illegible]					
[illegible]	67	31	35.63218391	28	90.32258065
[illegible]	95	15	15.78947368	14	93.33333333
[illegible]	162	46	**25.27472527**	42	**91.30434783**
[illegible]					
[illegible]					
[illegible]	32	10	31.25	7	70
[illegible]	12	0	0	0	
[illegible]	44	10	22.72727273	7	70
[illegible]	**226**	**56**	**24.77876106**	**49**	**87.5**
GATE 2.0					
[illegible]					
[illegible]	52	17	32.69230769	14	82.35294118
[illegible]	39	4	10.25641026	4	100
[illegible]	91	21	23.07692308	18	85.71428571
[illegible]	**91**	**21**	**23.07692308**	**18**	**85.71428571**
Negative Test					
[illegible]	5	1	20	0	0
[illegible]	25	4	16	0	0
[illegible]	**30**	**5**	**16.66666667**	**0**	**0**
[illegible]					
[illegible]	9	3	33.33333333	0	0
[illegible]	26	4	15.38461538	2	50
[illegible]	35	7	20	2	28.57142857
Negative Test Total	**65**	**12**	**18.46153846**	**2**	**16.66666667**
Production Mirror Test					
[illegible]	18	2	11.11111111	1	50
[illegible]	18	2	11.11111111	2	100
[illegible]	**36**	**4**	**11.11111111**	**3**	**75**
[illegible]					
[illegible]	14	1	7.142857143	0	0
[illegible]	14	1	7.142857143	0	0
[illegible]	**28**	**2**	**7.142857143**	**0**	**0**
Production Mirror Total	**64**	**6**	**9.375**	**0**	**0**
Data Testing (changes from Data Document Updates that need Re-test)					
[illegible]	31	3	9.677419355	1	33.33333333
[illegible]	33	7	21.21212121	2	28.57142857
[illegible]	**64**	**10**	**15.625**	**3**	**30**
[illegible]					
[illegible]	43	2	4.651162791	0	0
[illegible]	39	3	7.692307692	0	0
[illegible]	**82**	**5**	**6.097560976**	**0**	**0**
Data Testing Total	**146**	**15**	**10.2739726**	**3**	**20**

Figure 1 Preliminary Summary Report

The transaction test data that was used to generate the above summary information was the data that was collected up through and including 11/21/2001.

Table 1 Final Summary Report

Environment	Total Transactions	Total Unexpected Results	% in Error	Total Retest Complete	% Retest Successfully
SATE 7.0					
HP5					
Regression	93	31	33.33333333	31	100
Progression	95	15	15.78947368	15	100
sub-total	188	46	**24.46808511**	46	**100**
HP7					
Regression	32	10	31.25	10	100
Progression	12	0	0	0	0
sub-total	44	10	22.72727273	10	100
7.0 Total	232	56	24.13793103	56	100
SATE 8.0					
HP5					
Regression	52	19	36.53846154	19	100
Progression	39	4	10.25641026	4	100
sub-total	91	23	25.27472527	23	100
8.0 Total	91	23	25.27472527	23	100
Negative Test					
7.0 Progression	5	2	40	2	100
7.0 Regression	25	4	16	4	0
sub-total	30	6	20	6	100
8.0 Progression	9	3	33.33333333	3	100
8.0 Regression	28	4	14.28571429	4	100
sub-total	37	7	18.91891892	7	100
Negative Test Total	67	13	19.40298507	7	100
Production Mirror Test					
Real Positive	18	2	11.11111111	2	100
SATE Positive	18	3	16.66666667	2	66.66666667
subtotal	36	5	13.88888889	4	80
Real Negative	14	1	7.142857143	1	100
SATE Negative	14	1	7.142857143	1	100
subtotal	28	2	7.142857143	2	100
Production Mirror Total	64	7	10.9375	6	85.71428571

Environment	Total Transactions	Total Unexpected Results	% in Error	Total Retest Complete	% Retest Successfully
Delta Testing (changes from Data Document Updates that need Re-test)					
HPS 7.06	32	3	9.375	3	100
HPS 7.07	33	7	21.21212121	7	100
subtotal	**65**	**10**	**15.38461538**	**10**	**100**
HP8 8.04	43	2	4.651162791	2	100
HP8 8.05	39	3	7.692307692	3	100
subtotal	**82**	**5**	**6.097560976**	**5**	**100**
Delta Testing Total	**147**	**15**	**10.20408163**	**15**	**100**
Full Regression Testing					
7.0 Regression	103	7	6.796116505	3	42.85714286
7.0 Progression	117	10	8.547008547	10	100
subtotal	**220**	**17**	**7.727272727**	**13**	**76.47058824**
8.0 Regression	100	6	6	6	100
8.0 Progression	127	8	6.299212598	8	100
subtotal	**227**	**14**	**6.167400881**	**14**	**100**
Full Regression Testing Total	**447**	**31**	**6.935123043**	**27**	**87.09677419**
Unbundled Distro Loops					
7.0 Progression Positive	11	2	18.18181818	2	100
7.0 Progression Negative	8	0	0	0	
subtotal	**19**	**2**	**10.52631579**	**2**	**100**
8.0 Progression Positive	12	2	16.66666667	2	100
8.0 Progression Negative	8	0	0	0	
subtotal	**20**	**2**	**10**	**2**	**100**
Unbundled Distro Loops Total	**39**	**4**	**10.25641026**	**4**	**100**

The transaction test data that was used to generate the above summary information was the data that was collected up through 12/19/2001.

6.5.1 Summary of Issues

As the summary results present, a number of transactions contributed to a percentage of error that indicates unfavorable results. The errors that appeared overall were of minor to medium impact when considering the overall capability of the SATE. Per the formal Issues Management process that was approved and accepted as the methodology for communicating incidents of failure or requirements for clarifications, all of the issues derived from transaction testing are listed in the HP Internal and External Issues Tracking Logs.

All Transaction Test issues have been logged into the HP Internal Issues Tracking Log as soon as the problem was identified as a candidate issue by appearing on the SATE Open Question Log or as a transaction test failed and HP requested additional research by Qwest.

All Transaction Test issues have been categorized internally by HP as one of the following types of issues:

1. **Transaction testing - Validation of the Data Document** - data document expected results do nc match actual transaction testing results.
2. **Transaction testing - Negative Testing** - SATE returned errors not documented in the Errors List (7.0 or 8.01) or HP could not produce the error as it is documented in the Errors List (7.0 or 8.01).
3. **Transaction testing - Production Mirror Testing** - SATE testing results do not match production testing results (positive and/or negative).
4. **Transaction testing - EDI Issue** - The SATE response was not in accordance with standard EDI processing practices.
5. **Transaction testing - Business Rules** - The SATE response was not in accordance with Qwest IMA EDI Disclosure documentation .

Once Qwest responded with a resolution to the Transaction Test issue, HP attempted a re-test of the transaction(s) that were affected by the issue. If the re-test was unsuccessful, the issue remained open until a successful re-test is achieved. Once a successful re-test was achieved, the issue was updated to a closure status.

The aggregate of Transaction Test issues can be found in Appendix E - the SATE Internal Issues Tracking Log. This log includes all issue candidates that were identified across the overall SATE evaluation.

6.6 Evaluation

6.6.1 Transaction Item Pass/Fail Criteria

A transaction was considered to "Pass" if the expected result was received as the SATE Data document has presented and the response was received within the negotiated time frame noted on the transaction test schedule. Additionally the transaction was considered to have "Passed" only if the transaction flow and the business rules were applied as they are documented in the appropriate release of the Network Disclosure document.

A transaction was considered to "Fail" if the transaction produced a response that did not match the expected result in the data document or HP's expected result. HP expected results were established based on the expectation for positive or negative outcomes. Additionally the transaction was

considered to have "Failed" if the transaction flow and the business rules were not applied as they are documented in the appropriate release of the Network Disclosure document.

6.6.2 Transaction Test Results Ranking

The following Transaction Test Evaluation provides a result rank per the transaction test results as of the data available on 12/19/01. This evaluation utilized the Transaction Test Criteria as documented in the SATE Transaction Evaluation Plan. The result rank was determined based on the percentage of transactions that produced unexpected results inclusive of any re-testing activity. HP has determined that any percentage of error that is greater than 5 % will cause an evaluation result of U = unsatisfactory. This is based on the existence of adequacy measurements for test environments in the telecom industry.

The following definitions apply to the results identifier:

- **Satisfactory** - this criteria has been met as shown by the transaction test results outcome per the requirements of the confirmation. .
- **Unsatisfactory** - this criteria has NOT been met as shown by the transaction test results outcome per the requirements of the confirmation.
- **Inconclusive** - a conclusion cannot be derived with the current transaction test results further testing and evaluation is necessary.
- **Not available** - this test result is not available as the transaction test is in progress at the present time.

6.6.3 Overall Transaction Test Evaluation Findings Summary- FINAL

	Criteria	Results[1]	Summary
1	HP will confirm the SATE test data is valid • Is the Scenario Data supplied as documented in the SATE Data document available to the community as it is intended to be per the specifications provided? • Is the outcome of the execution of the SATE provided scenarios as the expected results are documented.	S	This **Satisfactory** result reflects the evaluation of the outcomes received when processing LSR's through the SATE for Release 7.0 and 8.0. Both the Regression and Progression environments were included in this evaluation. When utilizing the SATE account data for the scenarios provided, HP realized a 25% Error rate when the actual results were compared to the expected results. Qwest has provided updates to the account data per the detected errors. As a result of Qwest corrective actions, the current data document and account data have reduced the current error rate to 3%. However, even at this lower level of error, there is an impact to the community when unpredictable results and a lack of consistency to expected results are probable based on these facts. HP recommends that a performance metric be implemented to ensure the performance of SATE achieves expected results within a diagnostic measure. This measure will be important as Qwest makes changes to reduce the error rate noted

[1] S = Satisfactory
U = Unsatisfactory
I = Inconclusive - Re- test Required
N = Not available - Test In Progress

	Criteria	Results[1]	Summary
			above, as changes are made to the SATE application environment must be carefully executed and regression tested to ensure that the quality of expected results is maintained.
2	HP will confirm that the SATE business rules are consistent with the rules published in the Qwest Network Disclosure Document		
	• Does the SATE support the pre-order, order and post order transaction flow as it is documented in the Qwest Network Disclosure documentation? (850, 855 FOC, 865 SOC/ 850, 855 Fatal, New 850 / 850, 855, 860, 865 FOC, 865 SOC etc)	S	This **Satisfactory** result reflects that this criterion was met successfully for both regression and progression testing. Qwest generated LSR responses per their SATE process of either the negotiated scenario summary worksheets or a SATEDI e-mail. Qwest manually generated FOCs and SOCs as HP requested for each transaction.
	• Does the SATE capture BPL and back-office errors that may be caused by LSR data entry mistakes?	U	This **Unsatisfactory** result reflects an evaluation of the outcomes received when processing LSR's through the SATE for Release 7.0 and 8.0. Both the Regression and Progression environments were included in this evaluation. When utilizing a small sampling of the SATE account data from the scenarios provided, HP realized a 20% Error rate when the expected results are compared to the actual results. HP prepared LSR's to induce fatal errors. The fatal error generation was pre-determined by analysis of the published production Error List. Specific error messages were selected and the LSR's were built to cause that error to occur. When these LSR's were executed in SATE there were unexpected results. The unexpected results fall into one of the following categories:
	• Does the SATE employ the business rules edits as provided in the network disclosure documentation?	U	• Planned error did not occur • Planned error message content did not match the error list • Error message received is not on the published production Error List
	• Does the SATE support the testing of transactions across all of the Qwest geography – regional	U	As HP evaluated the variances in expected responses to actual responses it became evident

	Criteria	Results	Summary
	[illegible]		[illegible]
3	HP will confirm the SATE is capable of supporting multiple users simultaneously. • Does the SATE support more than one CLEC utilizing the same data as the Qwest SATE Data Developer?	S	[illegible]

	Criteria	Results[1]	Summary
	provides? • Is the SATE Usage Plan for Regression Testing monitored for a CLEC's compliance to the utilization of SATE as was presented on the Usage Plan forecast?	I	HP observed no systemic limitation on the number of CLECs that can test at one time. In addition, HP observed no limitation on multiple users accessing the same SATE account data. This **Inconclusive** result is based on the outcome calculated as a comparison of the HP forecast (SATE Usage Plan) to the actual number of transactions submitted to SATE based on the SATE Usage Plan Summary. This report shows a remarkable variance in the number of transactions submitted for each trading partner id, HPS, HP7 and HP8 when compared to the approved Usage Plans for each respectively. This variance was allowed with no inquiries from Qwest. This may be inherent due to the testing that HP has undertaken, as this was not meant to be a pseudo-CLEC test.
4	HP will confirm that the SATE test accounts are reset monthly	S	This **Satisfactory** result is based on the outcome of the transaction test that was directed at verifying that the SATE database is cleared each month end. The transactions that HP presented to SATE to supplement an order that was FOC'd in the prior month did reject as expected. The expected results were achieved for two months. HP believes that the month end clearing process has been implemented successfully.
5	HP will confirm the results of a scenario in SATE will match that scenario's results in production • Does the SATE react to transactions with the same results they would receive if submitted to the controlled production environment?	I	This **Inconclusive** result reflects the evaluation of the outcomes received when processing LSR's through the SATE for Release 7.0 and comparing their results to the results of the same LSR's in 7.0 Production. HP added account data to SATE utilizing the CSR of a production account as a model account. Once the account data was present in SATE, HP ran a group of Flow-through LSR's in SATE 7.0 and received responses. HP then submitted production LSR's for the same flow-through order activity with the production account data. The production LSR's were run utilizing the AZ H10 trading partner id. The production responses were also received. When the SATE responses were compared to the Production responses for the "like or equal" LSR's there was a variance of 8%. This variance represents the possibility of SATE results not being compatible to the production environment. Additionally, it should be noted that HP could not test back-office legacy system edits to ensure this 8% error rate does not increase due to the generation of errors that were unable to be detected during SATE Progression or Regression testing. In

	Criteria	Results[1]	Summary
			some instances of unexpected responses there were back office errors embedded in the response. HP recommends that Qwest publish a listing of all responses that will vary between SATE and production. In the final evaluation, this error rate dropped to 3.3%. In some instances of unexpected responses there were back office (legacy) errors embedded in the response. The closure of issue 2005 resulted in Qwest providing an explanation of the structure and message content of these legacy system errors. Issue 2005 was closed upon the distribution of the production error list 8.01 v3 as HP verified that the legacy system error explanation was included in that distribution. As HP further analyzed the data provided by the results for the final report it was realized that their continues to be a variance in messages appearing in the production mirror transaction test output. The final summary of Production mirror testing comparison results table shown in Transaction Test Results Reporting Summary showed that 12.5 % of the message content between Production v7.0 and SATE did not match. During the preliminary reporting HP recommended that Qwest publish a listing of all responses that will vary between SATE and Production. This was a result of HP's overall evaluation of SATE where HP identified these variances to production: • Address Validation Resolution • CSR Query Resolution • USOC Availability- no contract validation • SAQ- Service Availability Response • Error Messages – Legacy System Messages, Messages produced but not on Error list, Oracle Error • Telephone Number Reservation Behavior – reservation expiration • Feature Activity behavior inconsistency HP recognizes that Qwest has addressed the majority of these identified variances in multiple locations throughout their SATE and IMA-EDI documentation. A CLEC could assimilate a concise list of Production variances through analysis of this documentation
6	HP will confirm the SATE returns	I	HP has determined that the evaluation of this criterion remains ***Inconclusive***. HP identified that

	Criteria	Results[1]	Summary
	consistent responses • Does the SATE react to test data producing a consistent outcome when the data is presented as a Regression test vs a Progression test ? • Does the SATE react to transactions presented as a Progression test method when a CLEC is already certified in the product? • Do transactions submitted to the SATE receive the same responses as those transactions would in the interoperability environment? • Do transactions submitted to the SATE for Release 7.0 produce consistent responses for like transactions in Release 8.0 of SATE ?		most of the error message variances found relate to the incidence of legacy system errors that are not included on the production error list, and messages that present LSR FORM and SECTION Headers. Additionally, HP found occurrences of error messages being generated in SATE that were not equivalent to what was published on the error lists. HP ran 30 scenarios, of which 11 scenarios successfully matched and 19 scenarios did not match. See the Transaction Test Reporting Summary for further details.
7	HP will confirm that the SATE supports all		

	Criteria	Results[1]	Summary
	transactions described in the SATE supporting documentation		
	• Are the scenarios supported in the SATE inclusive of the products and activities that are required to support the business processes of a CLEC operations center?	S	During this examination, the SATE did prove to be capable of supporting the business processes of CLECs in the state of Arizona. However, its effectiveness for this purpose was limited by differences identified between the responses to be expected in SATE and Production. Therefore, HP recommends that Qwest publish a full listing of differences between SATE and Production.
	• Are the scenarios supported in the SATE inclusive of the products and activities that are available to the community per the Qwest Network Disclosure documentation ?	I	This **Inconclusive** result is based on the most recently delivered SATE Data Documents. All products are not offered in SATE when compared to the products found available in the IMA EDI Network Disclosure documentation HP recommends that Qwest obtain input from CLECs to determine the full suite of products that shall be included in SATE. However per Qwest's, response to data request HP DEC01-001, the products associated to Arizona CLECs are the following: • Resale POTS, Unbundled Loop, Local Number Portability, Loop with Number Portability, Listings Only, Line Sharing (Shared Loop), and UNE-P POTS In lieu of this response HP has assessed SATE to satisfactorily support the products required by a CLEC doing business in the state of Arizona. HP recommends that Qwest on an ongoing basis should obtain input from CLECs to maintain the full suite of products that should be available in SATE for CLECs in the state Arizona.
	• Do the test accounts in the SATE support the testing of all valid combinations of SATE supported products and order activities?	S	This **Satisfactory** result is based on the capability of a CLEC to submit LSR's to SATE for all scenarios that are listed in the current Data Document. HP has tested all scenarios available within the 7.0 version of SATE. All of the scenarios could be sent and responses were provided. There were no occurrences of the SATE becoming unavailable due to a system failure. The expectation of a CLEC's capability to utilize the SATE to test transactions that fall within the available account data and product/activity combinations has been met.

	Criteria	Results[1]	Summary
			product/activity combinations has been met. There is one issue that aligns with the expectation of the utilization of this SATE. This is relative to the SATE availability. It has been noted that the eastern time zone cannot utilize the SATE until 10:00am. It may be advisable for Qwest to consider extended hours of availability to accommodate multiple time zones.
8	HP will confirm the SATE accurately supports all post-order transactions and functional acknowledgements. • Do the SATE responses get created per the expectations set by the documented time frame?	S	This evaluation is **Satisfactory** based on the current documented SATE process. The existing SATE response process does not make consideration to the automated process known as "VICKI" which is to be Implemented into SATE in January. The expectations set in the IMA EDI Implementations Guide relative to the generation of responses for both the SATE Regression and Progression environments has been met. Qwest accommodated more transactions per day then required by the commitment established in the IMA EDI Implementation Guide.
	• Do the SATE responses received provide expected outcomes?	S	
	• Do the SATE responses received provide comprehensive messages when warranted by the test scenario?	I	The preliminary finding of inconclusive was based on the responses that contained back office legacy systems errors. The final evaluation of **Inconclusive** is a result of the conclusion of formal issue 2005. Per Issue 2005 HP recommended that there, be clarification provided to the community regarding the format and content of a Legacy system error. Further HP requested that a sample of a legacy system error be provided along with a description of what situations generate a legacy system error. Qwest provided this explanation and example of legacy system errors in v8.03 of the Production IMA errors list. Even with this explanation of legacy system errors there is no conclusion on the number or situations that cause of legacy system errors.
	• Does the SATE accurately	S	The result of **Satisfactory** is the outcome due to the overall test results based upon the available

	Criteria	Results[1]	Summary
	accurately support all pre-order and post-order transactions and functional acknowledgements?		functionality supported in Qwest's Data Documents for both 7.0 and 8.0.
9	HP will confirm that a data request submitted to the SATE can successfully be tested in the SATE	S	This result is **Satisfactory** as shown by the summary provided in the Data Request report. This presentation of the HP Request form, Qwest's response and the eventual outcomes of the transactions executed in SATE utilizing the new accounts, provides proof that a CLEC can successfully add data to SATE for their specific circumstance. It should be noted that there was a need for the Request form and documented process to be enhanced to bring clarity to the Data Request process. There was a formal Issue documented to care for this necessary update. This issue – **HPSATEEV2001** – Data Doc was closed Upon closure of this issue HP added an additional data request for the final report as a retest of the data request process. As HP followed the updated process it should be noted that Qwest met the time line to deliver the data, however there was an inconsistency in process step execution when compared to the documented process. HP successfully ran transactions using the new SATE data that further supports the satisfactory evaluation. See Appendices for the data request forms and a recap of chronological steps HP executed to evaluated this process.
10	HP will confirm that a request to add a product/activity/pre-order function request submitted to the CMP can be successfully tested in the SATE.	S	This result is **Satisfactory** as Qwest has added Unbundled Distribution Loops and Unbundled Distribution Loops with Number Portability in response to a request from HP. HP was able to validate the expected results were achieved for the test bed scenarios added to accommodate Unbundled Distribution Loops. HP was able to conclude that Unbundled Distribution Loops with Number Portability was also added to SATE with the expected results achieved.
11	HP will confirm that the SATE will support both release 7 and release 8 testing	S	HP's updated evaluation for this criteria renders a **Satisfactory** rating. Upon re-test of all scenarios that previously had unexpected results, Qwest has achieved a 100% successful re-test. This re-test has proven that the scenarios executed as

	Criteria	Results[1]	Summary
			documented in Qwest releases 7 & 8 Data Documents will present the expected results as they appear in those respective documents.
12	HP will determine whether the SATE adequately accommodates new release testing	I	HP tested the implementation of the Qwest point release 8.01. This test was **Inconclusive** because it was an exception to the Qwest's *normal point release* implementations. The point releases normally do not affect the EDI or BPL layer; however, the 8.01 point release did provide the implementation of new BPL edits. The intent of new release testing was to ensure that the new release was available 30 days in advance of the production implementation of the new release. The 8.01 release was available 27 days in advance of the IMA EDI production implementation. The documentation of this point release was also inclusive. The new edits were introduced as IMA GUI Release notes, but there were no specific IMA EDI release notes that detailed the BPL edits with the expected error messages. The 8.01 Error List was not successfully updated with all of the new BPL edit error messages (see Formal Issue 2017). HP was directed to resolve the requirements of the 8.01 SATE implementation by using Appendix E of the Network Disclosure and Release 8.0 Addendum 4 documentation. HP concludes an **Inconclusive** finding due to this 8.01 outcome and its lack of consistency with Qwest's *normal process for IMA EDI release* changes.

6.6.4 Assumptions

1. This test was attempting to test the syntax and characteristics semantic of real live business orders. Computation of statistical data was not deemed necessary in the scope of this test. The test data was base-lined using the account data provided in the SATE data document.

2. HP did not perform volume capacity testing

3. *Production Mirror test included flow through order product / activity combinations only.*

4. The error rates found in the transaction test, may cause confusion to the CLECs. The clarification of this error rate may provide detail for those attempting to build an automated OSS and utilizes SATE to qualify their EDI transactions. The CLEC may encounter unforeseen results as this test has shown. This may delay their OSS implementation due to the need to engage resources to evaluate and draw conclusions regarding any inconsistent results. This delay may be unacceptable to CLECs.

6.6.5 Limitations

1. CLEC tariff based USOC and Geography edits are not applied to the CLEC's view of SATE as they would exist in production. The whole Qwest universe of valid USOCs and Services is made available to the tester.

2. Back office system integration is not available so HP cannot conclude that the results in SATE will be the expected results in Production.

3. Special programs that are arranged by CLEC / Account Managers are not implemented in SATE thus they cannot be tested as part of this evaluation.

6.7 Summary of Activities

The purpose of the Transaction test was to validate the information provided in the Qwest Documentation relative to the capabilities and expectations set for its use by the CLEC community and independent vendors for interoperability testing. This includes the competence of SATE to edit business rules as if the LSR's would be scrutinized in the IMA-EDI production environment. Additionally this transaction test specifically validated the level of support for pre-order, order transactions and combinations of product and activities along with the timeliness and consistency of responses. This transaction test evaluated the Qwest IMA EDI 7.0, 8.0 and 8.01 release for all SATE supported transactions.

This transaction evaluation followed the general principles established in the Qwest EDI Implementation Guide (http://www.uswest.com/wholesale/ima/edi/document.html). It did not evaluate any transactions that fall outside of the available data supported within SATE.

HP executed this transaction test in the role of an objective third party and trusted advisor to all parties – Qwest, ACC and the CLEC community. HP did not execute this transaction test as a Pseudo-CLEC.

This transaction test utilized one of HP's existing Pseudo-CLEC certification interconnections in Arizona. This allowed the Regression testing of those products that HP has already been certified in for Release 7.0 for the purposes of the Arizona capacity testing. The HP Test Harness environment did run apart from any other HP 271 OSS Test that was currently in progress. This environment supported an order entry tool and an EDI translation tool that allowed the entry and formatting of LSR's as prescribed by the Qwest pre-order and ordering rules for IMA EDI 7.0. Once the orders were translated into the standard EDI format according to the Qwest 7.0 release specifications, they were sent on to SATE. Responses received from Qwest provided the basis for comparison to the Qwest documents for expected responses. This data was collected using the same technology that is currently used for the Arizona 271 OSS Test.

An Issues Management process was utilized to identify and manage resolution of transaction test issues that may potentially cause a negative evaluation. Details of this process are provided in the SATE Issues Management Process found separately.

A public weekly call was held to review the status of the transaction testing with all parties. All documentation and assistance made available to HP by Qwest for use by HP in the development and/or establishment of the required interfaces to the SATE will be made available to all participants to verify that HP is not being given special treatment.

All transaction test results have been captured in a number of Microsoft Excel worksheets. The transaction test results have been captured on these worksheets and provided to the community each week. These worksheets include Qwest's standard Scenario Summary worksheets as well as HP's standard Transaction Test Scenario Comments Log. A Scenario Summary worksheet exists for each

Transaction Test Evaluation Method as well as a corresponding scenario Comments Log. The Scenario Summary worksheet lists each scenario that was submitted with the date the LSR was sent to Qwest, and the date a corresponding response was received by HP. The Comments Log also lists each scenario with the outcome status. If the outcome was not successful then HP enters a comment in the log that details the transaction processing events and the unexpected results. The Comments Log is reviewed by Qwest, and the appropriate action is taken to bring resolution to the unfavorable results.

The following worksheets exist and will be included as appendices to the Transaction Test Results Reporting Summary document which is described below:

Release 7.0 Transaction Testing Evaluation
- HP5 - Regression Scenario Summary
- HP5 - Progression Scenario Summary
- HP5 - Regression Scenario Comments
- HP5 - Progression Scenario Comments

Release 8.0 Transaction Testing Evaluation
- HP8 - Regression Scenario Summary
- HP8 - Progression Scenario Summary
- HP8 - Regression Scenario Comments
- HP8 - Progression Scenario Comments

Release 7.0 Multiple Trading Partner Testing
- HPT - Regression Scenario Summary
- HPT - Progression Scenario Summary
- HPT - Regression Scenario Comments
- HPT - Progression Scenario Comments

Release 7.0 Negative Testing
- HP5 - Regression - Progression Scenario Summary
- HP5 - Regression - Progression Scenario Comments

Release 8.0 Negative Testing
- HP8 - Regression - Progression Scenario Summary
- HP8 - Regression - Progression Scenario Comments

Production Mirror Testing
- HP5 - Controlled Prod Positive - Scenario Summary
- HP5 - SATE Positive - Scenario Summary
- HP5 - Controlled Prod Negative - Scenario Summary
- HP5 - SATE Negative - Scenario Summary
- HP5 - Controlled Prod Positive - Scenario Comments
- HP5 - SATE Positive - Scenario Comments
- HP5 - Controlled Prod Negative - Scenario Comments
- HP5 - SATE Negative - Scenario Comments

7.0 Delta Testing
- 7.0R Delta Scenario Summary
- 7.0T Delta Scenario Summary
- 7.0R Delta Scenario Comments
- 7.0T Delta Scenario Comments

8.0 Delta Testing

6.04 Delta Scenario Summary
6.05 Delta Scenario Summary
6.06 Delta Scenario Comments
6.06 Delta Scenario Comments

Full Regression Testing
7.0 Progression – Positive
7.0 Regression – Negative
8.0 Progression – Positive
8.0 Regression – Negative

Unbundled Distribution Loops
7.0 Progression – Positive
7.0 Regression – Negative
8.0 Progression – Positive
8.0 Regression – Negative

6.7.1 Transaction Test Results Reporting Summary

The attached Appendix will provide a comprehensive summary of the overall Transaction Test evaluation process and the methods used to derive the evaluation results. This appendix includes the following information:

- Transaction Test Methodology
- Functions to be Tested
- Entrance Criteria
- Inputs
- Transaction Test Architecture
- Qwest's IMA-EDI Architecture
- HP Test Transaction Architecture
- Transaction Test Approach
- Transaction Test Report Generation
- Transaction Test Results
- Transaction Test Validation Criteria
- Additional Supporting Information
- References
- Limitations
- Summary Evaluation

7.0 Issues

7.1 Overview

As part of its SATE Evaluation Plan, HP developed an Issues Management Plan to address the issues encountered during this engagement. The purpose of this plan was to provide the ACC, Qwest, and the CLEC members of the TAG a vehicle for tracking issues identified by HP, and ascertain the methodology used by HP in identifying and resolving issues. This section briefly describes the methodology used by HP, and the results of executing this plan.

7.2 Methodology

As described in HP's Issue Management Plan, an issue was assumed to be a gap between the actions of the Qwest documented processes and applications and stakeholder expectations. Issue Management was the process used to close that gap by analyzing the problem and determining the

proper corrective action. It consisted of identifying, documenting, tracking, prioritizing, resolving, and communicating to project stakeholders the issues that arose during the overall HP evaluation.

Issues were tracked in the four Evaluation Domains: Documentation, Co-Provider Input, Process and Transaction. Transaction issues were further broken down into the following sub-categories:

* Regression/Progression: Issues related to this sub-test of the overall transaction test.
* Negative: Issues related to negative testing.
* Production Mirroring: Issues related to testing the production mirroring functionality of SATE
* Business Rules: Issues related to unexpected responses due to business rules.
* EDI Map: Issues related to unexpected errors with EDI Mapping.
* Documentation: Issues uncovered during transaction testing that did not match Qwest documentation.

During the course of the evaluation, questions or problems were noted by the HP team, and logged on a Question Log. This log was used as a way of tracking candidate issues, and communicating them to Qwest. Inputs to this log could have come from several sources: reading Qwest documentation, analyzing transaction responses; questions raised during weekly calls with Qwest; questions raised during process interviews with Qwest; or analyzing CLEC and Qwest input on SATE design.

The severity of issues were classified according to the following definitions:

* Low severity issues were those that did not impact the completion of a transaction test scenario, or the completion of any of the specific review or the overall evaluation. Examples of low severity issues could have included:
  * Editorial issues with documentation
  * Completeness of an individual CLEC (Co-Provider) interview
* Medium severity issues were those that impacted the completion of a transaction test scenario, but did not impact the completion of other transaction test scenarios or any of the specific review or the overall evaluation. Examples of medium severity issues could have included:
  * Ability to complete test scenarios for a certain product type
  * Unable to open or print a document.
  * Unable to schedule interviews for a process evaluation.
  * Process failures based on the expectations set by documentation.
  * Unexpected Transaction errors.
* High severity issues were those that impacted the completion of the transaction test, the completion of a specific review, and the completion of the overall evaluation. Examples of high severity issues could have included:
  * EDI interface down for a period of time impacting the ability to enter test transactions
  * T1 Lines not working impacting the ability to enter test transactions
  * New revisions to SATE environment requiring development/upgrades to HPC interface.
  * Digital Certificate, IA/IA, Firewall or other security barriers that cause interconnection delays
  * IMA-EDI SATE Stub environment producing inconsistent or no responses as expected per the IMA EDI disclosure documentation
  * IMA-EDI SATE application changes required as noted by Qwest's internal change request generation

Issues were also tracked according to its status throughout its resolution. The following status designations were used:

* Candidate: A problem or question that has been identified and logged as a potential issue.
* Open: A candidate issue that has been clarified as an issue.

- Under Investigation: An issue that has a defined corrective action plan, and is being worked on by Qwest.
- Resolved: An issue that has been corrected according to Qwest's corrective action plan, and being verified by HP.
- Verified: An issue that has been resolved and the correction verified by HP.
- Impasse: An issue that has reached impasse, and transferred to ACC staff for resolution.
- Closed: An issue that has been resolved and verified by HP, and closed.
- Closed – Unresolved: An issue that has been resolved verified and closed but unresolved. If there were open questions or comments against closing the issue, and HP was not able to come to agreement before the end of the evaluation, HP changed the status of the Issue in the Issues tracking system to Closed – Unresolved.

7.3 Results

The following table summarizes the issues identified and tracked by HP during this engagement. Please see Appendix F for complete details on each issue.

Issue Number	Domain	Severity	Summary Description	Status	Comments
HP-SATE-V-1001	Process	Low	There was some confusion over SATE connectivity issues when following the processes for "Establishing A Dedicated Circuit" and "Firewall and IA-to IA Test Phase" as described in Qwest Communications, Inc., EDI Implementation Guidelines dated October 11, 2001.	Closed	12/19/01 – HP - Issue 1001 has remained open because HP was awaiting the clarification of the IT I&D contact in the "Establishing a Dedicated Circuit" section of the IMA EDI Implementation Guidelines. It is HPs understanding that the IT I&D contact assignment occurs when a Service Manager is assigned to the CLEC. However, because HP did not follow the normal CLEC process, HP was not assigned a CLEC Service Manager, and subsequently, the assignment of a contact from the IT I&D Team by the CLEC Service Manager did not occur. HP views the assignment of the IT I&D contact as a part of the process and documentation associated with the Account/Service Manager Process, and thus, considers outside the scope of this evaluation. HP is recommending closure of this low severity

Issue Number	Domain	Severity	Summary Description	Status	Comments
					issue with the following If the IT I&D role is not already defined as a part of the process associated with the Service Manager role, Qwest will perform the activities necessary to clearly define the process for, and the role of, the IT I&D contact. 12/19/01 – HP has closed this issue.
[illegible]	Transaction – Documentation	Low	7.0 ProgressionScenario STAVQ-A-A-00101 - AVQ - Address Validation by TN = Multi CALA- returned an unexpected response.	Closed	HP has re-tested the transaction after the fix was implemented and received the expected response. Recommended closure on 11/12/01 and closed on 12/3/01.
[illegible]	Transaction – EDI Maps	Low	7.0 Scenario STAVQ-A-A-01801 – AVQ – Address Validation by Address - Exact Match w/ Supplemental information returned a questionable response.	Closed	The associated industry notification was issued on 11/15/01 with the subject line, "IMA EDI Release 8.0 Disclosure Document Addendum #6." HP closed this issue On 12/3/01.
[illegible]	Process	Medium	The SATE Data Document Overview and the SATE Data Request Form do not sufficiently describe the process a Co-provider will use to request new data be added to SATE.	Closed – Unresolved	12/17/01: In the next version of the IMA EDI Implementation Guide, Qwest will change the last bullet point in the "Adding Additional Data to SATE" section from: If multiple CLECs request similar data, the Data Document will be updated To: Although Qwest replicates all new data to all SATE CLEC accounts as part of loading new data, the data document will only be updated when multiple CLECs request similar data. The next version of the IMA EDI Implementation Guide is scheduled for January 21, 2001 and will be published to the CLEC community using the Release Notice

Issue Number	Domain	Severity	Summary Description	Status	Comments
					process. Response/Recommendation provided by HP 12/18/01 – HP has reviewed the clarification provided by Qwest. HP recommends closure of this issue per the January 21, 2002 update of the IMA EDI Implementation Guide.
[illegible] 2062	Transaction – Production Many	Medium	HP would have difficulty establishing and finalizing CLEC operational processes using the SATE because the SATE does not return LSR responses that are consistent in content to responses for like LSR's that would process through Qwest's standard Interoperability and /or Production environments.	Closed	12/18/01 - HP has updated this document for the Qwest supplemental response received on 12/17/01. This issue was closed by HP on 12/14/01.
[illegible] 2063	Transaction – EDI Map	Medium	7.0 Progression Scenario AAQ4 – Obtain Appoint Availability for order non-specific - returned unexpected response.	Closed	Qwest fixed the system on October 24th, 2001 to address the issue discovered while testing with HP. HP re-tested the transaction after the fix was implemented and received the expected response. 11/12/01 - HP recommended closure of this issue per the positive results of the Re-Test activity on 11/12/01. HP closed this issue On 12/3/01.
[illegible] 2064	Transaction – EDI Map	Medium	7.0 Progression Scenario SHL3 – Shared Loop Service Disconnect Single Line - returned unexpected EDI format in the 865 Completion response.	Closed	The fix to the REF segment for SENUM in IMA 7.0, as outlined in Qwest's Supplemental Response (11/13/01) was implemented on 11/19/01. The associated industry notification was issued on 11/19/01 with subject: "IMA EDI Release 7.0 Completion Transaction Problem Corrected." 12/3/01 – HP has closed this issue.
[illegible] 2065	Transaction – Negative	Medium	Negative testing of the 7.0 and 8.0 Errors List using data from	Closed	12/15/01 - HP has received the updated error list 8.01

Issue Number	Domain	Severity	Summary Description	Status	Comments
	Testing		the scenarios CSR3, AAQ4 and TNAQ1 did not return the expected response.		version 3. Qwest distributed Release Notification to the community on 12/14/01. "SYST.12.14.01.F.02480.IMA_GUI_&_EDI_Doc_V3_Errors_List_for_Rel_8.01"Per HP's review of the new error list, the introductory narrative explains the Legacy System Error responses. HP recommends closure of this issue. 12/19/01 – HP has closed this issue.
HPSATEEV 2006	Transaction – EDI Map	Medium	Regression testing of the 7.0 Data Document using the scenario for CSR4 returned an EDI response that was not in accordance with standard EDI processing practices.	Open	12/18/01 - HP has reviewed Qwest's supplemental response and found that Chapter 2 in the 8.0 Addendum has been updated to reflect "There are situations where a backend system will return a blank in a data field. An example is for address validation query (AVQ) exact match response with supplemental data the N1|DT|SUPPMATCH loop may be returned as "empty" if the building, room, or floor is blank in the Qwest back-end system. This is a valid response." Per this update which explains that there is the possibility of a blank in a data field, HP recommends closure of this issue. 12/19/01 – HP closed this issue.
HPSATEEV 2007	Transaction – EDI Map	Medium	Regression testing of the 7.0 Data Document using the scenario for CSR4 returned a response that was not in accordance with the Qwest IMA Using EDI Disclosure Appendix A, Chapter 3.	Closed	Qwest implemented the fix referenced in the 12/5/01 response on 12/8/01. The fix corrects the EDI map to create a complete BADWTN loop. The first associated industry notification, identifying the problem, was issued on 12/7/01 with the subject

Issue Number	Domain	Severity	Summary Description	Status	Comments
					line, "IMA EDI Release 7.0 Customer Service Record Query Problem." The second associated industry notification, indicating the problem had been resolved, was issued on 12/10/01 with the subject line, "IMA EDI Release 7.0 Customer Service Record Query Problem Corrected." 12/13/01 – HP has closed this issue based upon successful retest.
HPSATEEV 2008	Transaction – EDI Map	Medium	Regression testing of the 7.0 Data Document using the scenario for CSR6 returned an EDI response that was not in accordance with standard EDI processing practices.	Closed	12/03/01: HP submitted query and received the expected response. HP did not receive a supplement regarding the completion of the system work. 12/04/01 - HP closed this issue per the successful re-test.
HPSATEEV 2009	Transaction – EDI Map	Medium	Regression testing of the 7.0 and 8.0 Data Document using the scenario for CSR11 returned a response that was not in accordance with the Qwest IMA Using EDI Disclosure Document Appendix A.	Closed	HP received the release notification on 12/03/01, which indicated that the Release 7.0 environment was updated and available on 11/30/01 and the Release 8.0 environment was updated on 12/03/01. HP submitted a re-test and received the expected results. HP closed this issue on 12/5/01.
HPSATEEV 2010	Transaction – Negative Testing	Medium	Progression testing of the 8.0 Errors List using data from the scenario for POTS3 – POTS Change Single Line did not return a matching response to the Qwest production response.	Closed	12/04/01 – HP notes when re-testing PON R8E8-POTCS-00301 and ensuring that the AN and TN were consistent, HP received the expected error response "Can not add existing USOCs: F- ESx already on the account". HP recommended closure of this issue on 12/4/01, and closed it on 12/5/01.
HPSATEEV 2011	Transaction – Negative Testing	Medium	Progression testing of the 8.0 Errors List using data from the scenario POTS3 – POTS Change Single Line did not return the expected response.	Closed - Unresolved	12/20/01 – HP has closed this issue as 'Closed - Unresolved'. This item was closed based upon Qwest's demonstrated history o

Issue Number	Domain	Severity	Summary Description	Status	Comments
					making updates to their documentation. HP will verify the above suggested update on Friday, December 21, 2001 and will inform the community if the update was not made or does not reflect the above.
HPSATEEV 2012	Transaction – Production Mirror	Medium	7.0 Progression testing of the 7.0 Data Document using data from the scenario POTS3 – POTS Change Single Line did not return a matching response to the Qwest production response.	Closed - Unresolved	12/18/01: HP re-tested to ensure the USOC edits are currently working. HP submitted scenarios to create expected USOC errors. HP submitted re-test transactions and received expected results for one of the transactions. Other transactions did not return expected responses. During HP's re-test of this issue, Qwest acknowledged that there was a problem and further Qwest acknowledged that there should have been an event notification issued to the SATE community. HP concludes that the USOC edit is currently working; however, HP is strongly recommending that there should be a notification issued to the users of SATE upon a SATE problem discovery, upon it's impact analysis and upon it's problem resolution. HP recommends closure of this issue per the implementation of the aforementioned SATE Event Notification provision. 12/19/01 – HP has closed this issue
HPSATEEV 2013	Transaction – Production Mirror	Medium	Production Mirror testing of the 7.0 Errors List using data from the scenario POTS3 – POTS Change Single Line did not return the expected response.	Closed	12/07/01 - HP has reviewed the update to the 8.0 Errors List. The Errors List has been updated to reflect the aforementioned items. HP recommends closure of this issue. 12/13/01 – H

Issue Number	Domain	Severity	Summary Description	Status	Comments
					has closed this item.
HPSATEEV 2014	Transaction – Documentation	Medium	Delta testing of the 7.0 Data Document using the scenario for POTS5 – Conversion as Specified with Directory Listings Multiple Line did not return the expected response. Delta testing of the 7.0 Data Document using the scenario for POTS9 – Conversion As Specified Multiple Line with no DL did not return the expected response. Regression testing of the 8.0 Data Document using the scenario for UNE-P POTS9 – Conversion as Specified with no DL Multiple Line did not return the expected response.	Closed	12/03/01 - HP has reviewed Qwest's response. The data document has been updated to correctly identify the format of the phone number for /CFNB and /CFN. HP submitted test transaction and received the expected response. 12/04/01 – HP has closed this issue.
HPSATEEV 2015	Transaction – Negative Testing	Medium	Regression testing of the 8.0 Data Document using the scenario for UNE-P POTS9 – Conversion as Specified with Directory Listings Single Line did not return the expected response.	Closed	12/03/01 - HP has reviewed Qwest's response. The data document has been updated to correctly identify the format of the phone number for /CFNB and /CFN. HP submitted test transaction and received the expected response. 12/04/01 – HP has closed this issue.
HPSATEEV 2016	Transaction – Documentation	Medium	Regression testing of the 7.0 Data Document using the scenario for UNE-P did not return the expected response.	Closed	The data document has been updated. HP re-tested by submitting test transaction. HP received the expected response. HP is recommended closure of this issue on 12/4/01. Issue closed on 12/5/01.
HPSATEEV 2017	Transaction – Negative Testing	Medium	Negative testing of the 8.0 Errors List using data from the scenario UBL4 did not return the expected response.	Closed	12/07/01 - HP did receive the updated 6.01 IMA Errors list along with the associated notification. Upon review of the updated error list the class of service error message has been included."WO COS 999 The Class of Service for this account is not valid for UBL". HP recommends Closure of this issue. 12/19/01 – HP closed this issue.

Issue Number	Domain	Severity	Summary Description	Status	Comments
HPSATEEV 2018	Transaction – Negative Testing	Medium	Negative testing of the 7.0 Errors List using data from the scenario TNAQ1 did not return the expected response.	Closed - Unresolved	11/27/01 - A new IMA Errors List was generated for IMA release 8.01. This errors list included the new 8.01 USOC edits. Beginning with 9.0, Qwest will provide a change summary with the list to identify the changes in the IMA Errors List from one version to the next. A Release Notification will be distributed to the CLEC community with the new IMA Errors List and corresponding Change Summary attached. HP recommends this issue remain open pending the implementation of the 9.1 release and the verification that the Errors List published to support that release will include the change summary and those modifications to eliminate error messages that have become obsolete. 12/20/01 – HP has closed this issue as 'Closed – Unresolved'. This issue has been closed, but will be tracked with Recommendation #4 of the SATE Summary Evaluation Report for Qwest IMA-EDI SATE
HPSATEEV 2019	Transaction – Documentation	Medium	Regression testing of the 7.0 Data Document using the scenario for SAQ4 did not return the expected response.	Closed	12/13/01 – HP notes that the latest Data Documents have been updated to include to indicate "Data for 1FR and a list of PIC/LPICs are returned". HP recommends closure of this issue. 12/19/01 – HP closed this issue.
HPSATEEV 2020	Transaction – Documentation	Medium	Delta testing of the 8.0 Data Document using the scenario for CEN3 did not return the expected response.	Closed	On 12/04/01 HP submitted PON D7PB-CNTXC-00702 as a re-test. HP received the expected response. HP has closed this issue on

Issue Number	Domain	Severity	Summary Description	Status	Comments
					12/5/01
HPSATEEV 2021	Transaction – EDI Map	Medium	Delta testing of the 8.0 Data Document using the scenario for UCEX1 returned a response that was not in accordance with the Qwest IMA Using EDI Disclosure Document Appendix C and Chapter 45.	Closed	12/04/01 HP reviewed Chapter 45 of The Disclosure Document. It has been updated to correctly list the required forms. HP closed this issue on 12/5/01.
HPSATEEV 2022	Transaction – Negative Testing	Medium	The established process does not return expected descriptive data.	Closed	12/19/01- HP reviewed the IMA Disclosure located at http://www.qwest.com/wholesale/ima/gui/imauser_601.html. The verbiage has been added to page 23. HP recommends closure of this issue.
HPSATEEV 2023	Transaction – Negative Testing	Medium	Progression testing of the 7.0 and 8.0 Errors List using data from the scenario UNE-P POTS Conversion As Specified with Directory Listings - Single Line did not return the expected response.	Closed	12/15/01: HP recommends closure of this issue. This issue will be tracked per Issue 2018 to ensure that the Errors List to be distributed as part of the 9.1 release implementation will accommodate the change summary and the elimination of obsolete error messages. 12/19/01 – HP closed this issue.
HPSATEEV 2024	Transaction – Documentation	Medium	Delta testing of the 8.0 Data Document using the scenario for UNE-P POTS8 Conversion As Specified no DL Single did not return the expected response.	Closed	12/13/01: The latest release of the Data Documents have been updated to include the verbiage "In cases where multiple options for populating SANO and NXX are provided with a single scenario listing, the SANO and NXX must match. For example, in scenario DL1, both the NXX and SANO have 699 or 799 as options. When inserting this data into the EDI transaction, either 699 or 799 should be populated into both fields." HP recommends closure. 12/19/01 – HP closed this issue.
HPSATEEV 2025	Transaction – Documentation	Medium	Progression testing of the 7.0 Data Document using the scenario for Raw Loop Data	Closed	12/04/01 Per the Data Document Updates to reflect Van Cleve Road as

[illegible]	[illegible]	Severity	Summary Description	Status	Comments
			Query by Address RLDQ14 did not return the expected response.		a Terminal ID (field connection point) in the expected results. HP closed this issue on 12/5/01.
[illegible]	[illegible]	Medium	Delta testing of the 8.0 Data Document using the scenario for Raw Loop Data Query by Address RLDQ23 did not return the expected response.	Closed	12/04/01HP submitted an RLDQ re-test transaction. HP received the expected response. HP closed this issue on 12/5/01.
[illegible]	[illegible]	Medium	Delta testing of the 8.0 Data Document using the scenario for Raw Loop Data Query by TN RLDQ7 did not return the expected response.	Closed	12/07/01: HP submitted a re-test query. Received the expected response. HP recommended closure of this issue. 12/13/01: HP has closed this issue.
[illegible]	[illegible]	Medium	Delta testing of the 7.0 Data Document using the scenario for Raw Loop Data Query by TN RLDQ2 did not return the expected response.	Closed	12/13/01 – The latest release of the Data Documents no longer list a CALA for the RLDQ scenarios. HP recommends closure of this issue. 12/19/01 – HP closed this issue.
[illegible]	[illegible]	Medium	Delta testing of the v8.04 Data Document using the scenario for CSR5 did not return the expected response.	Closed	12/18/01: HP reviewed the 9.0 document provided. The 9.0 EDI Mapping Example and 9.0 Disclosure documents indicate "and". HP agrees that the change to the use of "and" will produce the appropriate expected results when the Response = M and MIXTYPE = E and when Response =M and MIXTYPE = T. HP recommends that this issue be closed. 12/19/01 – HP closed this issue.
[illegible]	[illegible]	Medium	Regression Testing of the 8.0 Data Document using the scenario for CSR9 did not return the expected response.	Closed	12/19/01 - HP reviewed the v8.09 Data Document distributed on 12/19/01 and confirmed that this update was completed by Qwest. HP re-tested CSR9 in SATE and received the expected response. Both the v8.09 Data Document and the response contain USOC=9PZLC once. This

[illegible]	[illegible]	[illegible]	Summary Description	Status	Comments
					issue is recommended for closure. 12/19/01 – HP closed this issue.
[illegible]	[illegible]	[illegible]	Attempts to access USOCs for the UNE-P products on the Qwest unbundled web page using the Qwest distributed URL were unsuccessful.	Closed	12/14/01: HP has not been able to verify the receipt of this release notification, however HP recommends closure of this issue as HP is not testing the Release Notification process as part of the scope of the SATE evaluation. 12/19/01 – HP closed this issue.
[illegible]	[illegible]	[illegible]	As new releases of the 7.0 and 8.0 Data Documents were distributed by Qwest and reviewed by HP, HP noticed that the specific error responses that had been listed in the Expected Results had been modified to say "Error Response Returned".	Closed - Unresolved	12/19/01: Qwest distributed updated versions of the data documents – v7.11 and v8.09. The expected error response was not updated for TNAQ3. HP retested and did not receive the expected results as depicted in the data document. As this does not match the v7.11 data document expected response, this remains open. HP requests clarification of the expected response for TNAQ3. 12/20/01 – HP has closed this issue as 'Closed – Unresolved'. HP has not been able to verify that the update has been made, however, HP does not feel that the resolution of this issue will significantly impact the findings of the transactional test results.

The following table further summarizes the issues logged by HP. In total, HP logged and tracked 35 [illegible] issues. Of these, 3 have a current status of Closed-Unresolved. All other issues were closed through the Change Management process. The majority of the issues were document related, but identified through Transaction testing, not through the Document Evaluation domain. The most common example of these issues dealt with consistency of the Qwest Data Document. In most cases, SATE did not return the response listed in the Data Document. All of those issues, however, were later closed after Qwest implemented a fix, and verification by HP.

[illegible]	Low Severity	Medium Severity	High Severity	Total Closed - Unresolved	Total Closed	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] the Closed-Unresolved issues, the organizers of the SATE workshop and the Expert Panel [illegible] the issues to the issue being closed as unresolved. For each Closed-Unresolved issue, the Expert Panel provides a Recommendation in Section 3 [illegible] to provide a resolution to the issue.

The following table summarizes the issue candidates identified and reviewed by the Expert Panel during the SATE Evaluation along the assignment. Please see Appendix E for complete details on each issue candidate.

Candidate Issue Assignment Number	Domain	Candidate Issue Statement	Candidate Issue Description	Comments
1	Documentation Evaluation	Closed Questions, Section 1, #10	1.2.3 – "Users approved to utilize SATE" How is a co-provider approved to use SATE? What document is used to designate approval?	12/20/01 - HP 'Closed-Unresolved'. This issue candidate is closed as HP would not be able to verify the updates to the IMA-ED Implementation Guide until 1/21/01
2	Process Evaluation	Closed Questions, Section 1, #15	# 15 When will SATE be 8.0 capable? Will SATE support multiple releases?	12/20/01 - HP 'Closed-Unresolved' This issue candidate is closed to HP Recommendation #2 of the Final SATE Summary Evaluation Report.
3	Documentation Evaluation	Closed Questions, Section 1, #21	1.2.4 – Responses – "FOC's are sent each business day for the first ten (10) Order Transactions received the prior business day". Why are only the first ten (10) transactions responded to?	12/20/01 - HP 'Closed-Unresolved'. This issue candidate is closed as HP would not be able to verify the updates to the IMA-ED Implementation Guide until 1/21/01
4	Documentation Evaluation	Closed Questions, Section 2, #1	Overview – "is for those co-providers approved to utilize SATE for testing." How is a co-provider approved?	12/20/01 - HP 'Closed-Unresolved'. This issue candidat is closed as HP would not be able to verify the updates to the IMA-El Implementation Guide until 1/21/0

Candidate Sequence Number	Domain	Candidate Issue Statement	Candidate Issue Description	Comments
1	Documentation Evaluation	Closed Questions, Section 2, #1	When does a SATE release get retired ? The same date as it does in Production. You must have started test on 7.0 by 10/20 in SATE or Interop. Based on the dates set in the Re-certification letter. A co-provider can add products if they are certified in the Release. When 7.0 goes out of Production the 7.0 goes out of SATE. 7.0 will be available in Regression only for the period of time between the retirement of the release and the Interop testing cutoff for a new release.	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed as HP would not be able to verify the updates to the IMA-EDI Implementation Guide until 1/21/01.
2	Documentation Evaluation	Closed Questions, Section 2, #11	In the Data Document for the SAQ, the state is not provided. It is required if INFOTPYE=S. This effects SAQ 1, 2, 3, 4, 7.	**12/20/01 - 'HP Closed'.** This issue candidate is closed on 12/11/01 as per the SATE Closed Question Log.
3	Process Evaluation	Closed Question Log, Section 4, #9	When will the new VICKI method of response automation be available in SATE?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #5 of the Final SATE Summary Evaluation Report.
4	Process Evaluation	Closed Question Log, Section 4, #10	What is the maximum number of transactions that will be allowed for a co-provider to execute in SATE? There seems to be no specific guidelines regarding the number of transactions acceptable for a Usage Plan forecast. Please provide the information that suggests a maximum guideline for a co-provider's usage of the SATE.	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #5 of the Final SATE Summary Evaluation Report.
5	Process Evaluation	Closed Question Log, Section 4, #12	When new account information was requested for SATE, we received a response containing a list of questions. Is there	**12/20/01 - HP 'Closed'.** This candidate issue is closed to forma issue HPSATEEV2001.

Candidate Sequence Number	Domain	Candidate Issue Statement	Candidate Issue Description	Comments
			documentation available that explains how to fill out the form and what is necessary?	
10	Document Evaluation	Closed Question Log, Section 4, #14	There have been many Release Notices regarding the BPL Layer changes. Are these updates available in SATE? How do they affect SATE regarding release 8.0?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #4 of the Final SATE Summary Evaluation Report.
11	Process Evaluation	Closed Questions, Section 4, #20	How do addendums to IMA EDI get scheduled? The current CMP provides a scheduled addendum to occur 2 weeks after the production turn up a major Release. Any further addendums do not appear on the calendar. If the SATE data document will change due to the implementation of an addendum how far in advance of the addendum implementation will the SATE data document be made available to the co-providers?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #5 of the Final SATE Summary Evaluation Report.
12	Process Evaluation	Closed Questions, Section 4, #22	#22. The Release Notices for 8.01 - both the reminder notice from 10/23/01 and the 8.01 Candidates/Descriptions of 10/17/01 do not mention the 8.0 Addendum 4 and Appendix E as the changes for the 8.01 IMA EDI Release. The Disclosure documentation describes the Addendum 4 as 8.0 with no correlation to 8.01. Where can HP find the notification that ties the Addendum 4 and Appendix E to the 8.01 IMA EDI Release?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #2 of the Final SATE Summary Evaluation Report.
13	Process	Open	Where are the Qwest and	**12/20/01 - HP 'Closed-**

Candidate Sequence Number	Domain	Candidate Issue Statement	Candidate Issue Description	Comments
	Evaluation	Questions, Section 4, #26	Co-Provider functional roles within the SATE process identified and defined (i.e., Qwest Implementation Manager, EDI Tester, Co-Provider Relationship Manager, Test Manager)	**Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13a	Process Evaluation	Open Questions, Section 4, #27	How does a Co-Provider gain an understanding of the specific activities required for implementation and testing in SATE? Related to: Activities clearly defined Responsible parties identified Activity sequence and time frames identified Deliverables described	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13b	Process Evaluation	Open Questions, Section 4, #29	Where is the scheduling of the kickoff call explained, including who schedules the call, scheduling interval, and suggested attendees?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13c	Process Evaluation	Open Questions, Section 4, #34	How can a Co-Provider easily distinguish which activities within the EDI Implementation Guide are unique to SATE implementation and testing?	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13d	Process Evaluation	Open Questions, Section 4, #35	Where does a Co-Provider obtain basic instructions for the completion and use of the various forms, worksheets and other support documents related to SATE implementation and testing? (i.e., TPR worksheet, Connectivity Worksheet, Question Log)	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13e	Process Evaluation	Open Questions, Section 4, #39	How can a Co-Provider clearly identify the criteria/steps required for certification to perform SATE testing? This question also applies to certification for releases.	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.

Candidate Sequence Number	Domain	Candidate Issue Statement	Candidate Issue Description	Comments
13f	Process Evaluation	Open Questions, Section 4, #40	Please explain the "Event Notification" Process for SATE specific transactions and processes. In the event where there is a system, EDI or process issue how will the SATE users be notified. A most recent example is that of the FARR where the EDI enveloping errors caused HP to be unable to receive a response for Facility Availability queries.	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
13g	Process Evaluation	Open Questions, Section 4, #41	Please clarify the timing of updates to SATE for the Release Notifications that are posted for impacts to the IMA EDI environment. HP has noticed that the fixes for FAQ 7.0 and 8.0 were not available in SATE as of 11/09/01. The Release notifications were for 11/06/0.	**12/20/01 - HP 'Closed-Unresolved'.** This issue candidate is closed to HP Recommendation #3 of the Final SATE Summary Evaluation Report.
14	Process Evaluation	Open Questions, Section 4, #36	Where are the Data Document administration procedures defined related to the following? Who receives current data doc and when is it distributed. Change Management Use of Data Request Form Version updates.	**12/20/01 - HP 'Closed'.** This candidate issue is closed to formal issue HPSATEEV2001.

For any 'Closed' or 'Closed-Unresolved' candidate issues, HP has explained above, and in the Internal Issue Tracking Log, the reason for a candidate issue being closed. The reason for the closure may include a closure to an associated Recommendation in Section 2 or an associated issue or event that will allow the candidate issue to be closed.

Qwest's Response to

HP's SATE Recommendations,

ACC Docket No. T-00000A-97-0238,

December 31, 2001

BEFORE THE ARIZONA CORPORATION COMMISSION

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

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996

Docket No. T-00000A-97-0238

QWEST'S RESPONSE TO HP's SATE RECOMMENDATIONS

Qwest Corporation ("Qwest") respectfully submits its responses to Hewlett-Packard's ("HP") SATE[1] recommendations as provided in HP's SATE Summary Evaluation Report for Qwest IMA-EDI SATE, version 2.0, dated December 3, 2001.

I. INTRODUCTION

HP's evaluation of Qwest's SATE concludes that it "is adequate to support Qwest CLEC testing in the State of Arizona, given current levels of CLEC usage".[2]

HP's SATE Summary Evaluation Report detailed nine recommendations for Qwest to consider. HP proposes these recommendations as a method "to ensure SATE's adequacy continues to support CLEC testing".[3]

Qwest fully plans to continue managing and enhancing SATE to support CLEC testing. This is demonstrated by Qwest responses to HP-generated issues during the SATE

[1] SATE is the acronym for Qwest's Stand-Alone Test Environment.
[2] SATE Summary Evaluation Report for Qwest IMA-EDI SATE, external draft, v2.0, (Dec. 3, 2001), section 7.4
[3] SATE Summary Evaluation Report for Qwest IMA-EDI SATE, external draft, v2.0, (Dec. 3, 2001), section 7.4

evaluation; Qwest support of the six CLECs who have utilized/are utilizing SATE to date; ongoing Qwest enhancements such as flow-through and automated post-order processing; and the continuing SATE User Group forum as part of the Qwest Change Management Process (CMP). Notwithstanding these efforts, Qwest submits the following responses to HP's recommendations that further demonstrate ongoing commitment on the part of Qwest to SATE and its ability to support CLEC testing.

II. HP's SATE RECOMMENDATIONS[4] AND QWEST RESPONSES.

A. Recommendation 1: HP recommends that Qwest submit a plan to ensure that it meets CLEC needs for testing of all products available in Arizona, including new technologies.

Qwest currently has forums and processes in place to address this recommendation. As a starting point, SATE was implemented supporting all products and associated transactions for which CLECs are currently certified to use in Qwest IMA EDI.[5]

To address CLEC's future needs, Qwest implemented a process by which CLECs can request the addition of products to SATE. This process states "...additional functionality can be agreed upon and added in later releases. Requests for transactions not currently supported may be requested via CMP".[6] Currently, two CMP CRs are open based on CLEC product requests: Line Splitting and Loop Splitting. Based on the process described above, Qwest will utilize the CMP CR prioritization process to add the new products to SATE.

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[4] SATE Summary Evaluation Report for Qwest IMA-EDI SATE, external draft, v2.0, (Dec. 3, 2001), section 7.4

[5] The list of products can be found in the EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) - http://www.uswest.com/wholesale/ima/edi/document.html

[6] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) - http://www.uswest.com/wholesale/ima/edi/document.html

In addition to the CLEC process, Qwest continues to monitor the products that CLECs express interest in and has proactively added products or created CMP CRs to add products to SATE. Qwest agreed to add Unbundled Distribution Loop and Unbundled Distribution Loop with Number Portability as the products to be added to SATE for HP's new product evaluation, as Qwest anticipated future EDI implementations of these products. Also, Facility Based Directory Listings will be added as an IMA product with the 9.0 release. As a result, Qwest is creating a CR to add Facility Based Directory Listings to SATE.

Qwest believes that its published process meets the needs of the CLEC community and through CLEC input Qwest is committed to continue meeting CLECs' needs.

B. Recommendation 2: HP recommends that Qwest implement a quality assurance process and a release management practice specifically for the SATE documentation.

Qwest follows documentation quality and versioning control processes for all externally published documentation, including SATE. During HP's SATE evaluation, Qwest chose to go outside the standard documentation-publishing schedule and processes in an effort to be responsive to HP's issues. Qwest believes this observation is a result of HP's evaluation requests and not indicative of Qwest's standard processes.

However, Qwest will externally publish the guidelines that detail the release management, version control, and quality assurance processes that Qwest employs for the issuance of SATE documents. These guidelines will be published in the SATE Data Document by January 15, 2002, which will be available on the Qwest Wholesale web site at URL: http://www.uswest.com/wholesale/ima/edi/document.html.

Qwest current documentation processes support the production of documents that enable CLECs to properly utilize SATE.

C. **Recommendation 3: To ensure continued adequacy of the SATE, HP recommends:**

- That Qwest clearly and specifically identify the roles and responsibilities of each individual and organization involved in the SATE. This definition of roles and responsibilities should include goals and objectives and mission statements for each organization and for all personnel. In addition, the job description for each employee should be clearly defined
- That Qwest develop a system of internal controls to ensure accountability for organizations and individuals involved in the SATE process. These controls should use clearly defined goals and objectives and should tie specifically to functional responsibility, such as quality of documentation, accuracy of test account data, mirror image of production, etc. Employees involved in the SATE should be encouraged to accomplish these goals and objectives
- That Qwest develop process flow documentation that accurately reflects actual SATE processes and is a reliable guide to CLECs using the SATE

In response to the first two bullet points of this recommendation, Qwest is developing a staffing plan which details Qwest's CLEC testing organizational structure and the roles and responsibilities of all resources that directly support the organization. Additionally, this documentation will include objectives of the organization and the processes in place to ensure accountability. This plan will be maintained as part of Qwest's IMA EDI Implementation Guidelines,[7] and will be published with version 9.0 of the guide, scheduled for release on January 21, 2002.

For the third bullet point of this recommendation, Qwest is developing the process flow documentation as recommended by HP. This information will be maintained as part of Qwest's

[7] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) - http://www.uswest.com/wholesale/ima/edi/document.html

IMA EDI Implementation Guidelines document[8], and will be published with version 9.0 of the guide, scheduled for release on January 21, 2002.

These documentation process measures will ensure the continued sufficiency of SATE in meeting the stated goals of the test environment.

D. Recommendation 4: HP recommends that Qwest publish a list of variances between SATE and production business edits to ensure that CLECs are fully aware of any such discrepancies so that a CLEC may effectively develop their business processes in this 'simulated' environment. This list should become a permanent part of the SATE documentation library.

Qwest believes this recommendation is specific to the Errors List process for SATE. The Qwest IMA EDI Errors List contains all errors generated by the IMA system. The Business Processing Layer (BPL) used by SATE is the same as the BPL used by IMA. Thus, the IMA Errors List for SATE is the same as the IMA Errors List for IMA. However, this list does not contain errors generated by Qwest's legacy systems. When an error message is produced by a legacy system, the IMA BPL simply passes the error message to the CLEC, which requires no processing to be performed by IMA. SATE includes all errors possibly generated by IMA, as well as commonly triggered legacy system errors.

As only the common legacy system errors are found in SATE, Qwest will create a list of all legacy system error messages coded into SATE. This will allow a CLEC to understand which error messages are available through SATE. A note will be included on this document to explain that additional legacy system errors can be coded into SATE if requested. This request can be made using the data request process.

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[8] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) - http://www.uswest.com/wholesale/ima/edi/document.html

Additionally, Qwest will provide a list of errors from those legacy systems whose errors were returned through Qwest's 8.0 production EDI interface during a 6-month period. Qwest will compare this list to the errors currently contained in SATE and will publish that list and discuss it in the CMP forum. Before putting a process in place to maintain this list ongoing, Qwest will gain input from CLECs through the CMP process and jointly assess the value of maintaining this list ongoing. Based on that joint assessment, a decision will be made on whether to implement an ongoing process.

Since the IMA EDI Errors list is generated from a system query, errors from sections of code that are no longer executable are included in the list. Beginning with IMA EDI release 9.1, Qwest will ensure that these error messages are removed from the code. As a result, these non-executable errors will no longer appear on the IMA EDI Errors list.

With IMA EDI release 9.0, the IMA EDI Errors List will be generated twice per IMA EDI release. The first generation will be coincident with the availability of the new release in SATE, which will occur on January 27, 2002. The second generation will be distributed when the release deploys in production on February 25, 2002. These documents will be published to the CLEC community through the Qwest Release Notification process.

E. **Recommendation 5: HP recommends that Qwest formally incorporate the SATE into the CMP process, and future changes and modifications should be subject to that process and that Qwest develop a permanent, formalized method of obtaining CLEC input and identifying current and future SATE requirements in connection with the CMP process. This process should proactively seek CLEC evaluation of the SATE process, suggestions for improvement, and forecasts for testing requirements. HP also recommends that Qwest obtain input from the CLECS to determine the full suite of products that shall be included in the SATE.**

SATE is formally incorporated into the CMP process. Qwest began the CLEC SATE Users Group in early November 2001, as part of the CMP process. Its Mission Statement best

defines the purpose of the Users Group[9]:

1. Give Qwest the opportunity to communicate current plans for it's testing environments.
2. Give the CLECs the opportunity to communicate their current and future testing needs.
3. Jointly present a list of CRs to CMP to ensure that future enhancements of Qwest environments meet those stated CLECs' needs.

This user group has met five times thus far, beginning with the November 6, 2001, kickoff meeting. Meetings for January, February, and March have been scheduled.

The SATE Users Group is part of the overall CMP process where inputs and recommendations are taken and incorporated into the CMP processes. To date, Qwest has recorded six SATE Change Requests (CRs) based on CLEC requirements. These CRs will be taken to the CMP forum for prioritization in the January 17, 2002, CMP meeting. SATE CRs will be managed by CMP just as IMA CRs are managed today.[10]

To further incorporate SATE into CMP, Qwest will ensure that the monthly CMP agenda includes a standing entry for SATE discussion. This agenda entry will include discussions on the status of SATE enhancements, SATE CRs, and CLEC feedback. This agenda addition will begin with the January 17, 2002, CMP meeting.

The proactive incorporation of SATE into the CMP process is consistent with the support of IMA, which will ensure that SATE remains adequate to meet the needs of Arizona CLECs and their future testing requirements.

[9] SATE Users' Group Meeting Minutes, November 13, 2001.

[10] SATE CRs will be managed by the same process as IMA CRs, but will be prioritized separately from the other OSS CRs – SATE Users' Group Meeting Minutes, December 4, 2001.

F. **Recommendation 6: HP recommends that Qwest develop a formal process by which the SATE will be available for new release testing on an ongoing basis.**

Qwest has a formal process by which the SATE will be available for new release testing on an ongoing basis. This process states "Beginning with release 9.0, new releases of IMA are planned for release on the IMA EDI Stand-Alone Test Environment approximately thirty calendar days prior to their release in production unless that release is deemed to be in 'red testing status'. Red Testing Status indicates that the IMA release's system testing effort has discovered significant issues that place the release in jeopardy".[11]

Based on the process stated above, IMA EDI Release 9.0 will be implemented in SATE on January 27, 2002, and in production on February 25, 2002. Qwest also notes that on October 22, 2001, IMA EDI Release 8.01 was released in SATE 27 days prior to the associated IMA production release. With the deployment of a new release into SATE approximately 30 days prior to production, Qwest has demonstrated that it has an existing formal process by which SATE is available to CLECs for new release testing on an ongoing basis[12]

G. **Recommendation 7: To ensure that the SATE is adequate for full release testing, HP recommends that 9.0 be tested. This release is expected to take place February 2002.**

Qwest does not believe that an additional 3rd party evaluation of SATE 9.0 is necessary to determine that SATE is adequate for full release testing. HP has already conducted the full breadth of regression and progression testing for the entire suite of products in SATE 7.0 and

[11] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) - http://www.uswest.com/wholesale/ima/edi/document.html

[12] IMA EDI Implementation Guide, page 25.

8.0. Furthermore, HP has evaluated a significant point release, 8.01. Therefore, a complete test of 9.0 by HP is not necessary. However, in order to address HP's recommendation, Qwest is willing to file performance information that demonstrates an adequate implementation of 9.0 in the SATE.

Specifically, in order to calculate the recently developed SATE Accuracy PID each month, Qwest exercises every transaction available in SATE. Accordingly, upon the availability of SATE release 9.0, Qwest will execute all of the SATE transactions, capturing the output to perform the PID calculations. Qwest suggests that it submit the inputs (list of transactions submitted), outputs (results from EDI), results, and conclusions from this exercise to the ACC for review. These results should assure the ACC that the successful regression and progression testing experienced by HP during its evaluation have carried forward to release 9.0 and will continue into the future.

Qwest will perform this exercise over a five-day period after the implementation of SATE Release 9.0 on January 27, 2002. Subsequently, Qwest will collate the necessary resulting data and file with the ACC on February 1, 2002.

H. Recommendation 8: HP recommends that a SATE performance standard be developed for Arizona that addresses the need for Qwest to demonstrate that the SATE remains an adequate mirror image of production as OSS systems evolve. In reviewing this standard, the ACC may wish to consider the nature and volume of transactions that are executed in production.

Qwest has already proposed a measurement that is being discussed by the Arizona TAG. The agreement of the parties, once reached, should be used to satisfy this recommendation.

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Qwest has developed a SATE performance measure, PO-19 – Stand-Alone Test Environment (SATE) Accuracy[13]. The language of this measure has been agreed and its purpose is to "evaluate Qwest's ability to provide accurate production-like tests to CLECs for testing both new releases and between releases in the SATE environment".[14]

The AZ SATE PID was developed through consensus with the CLEC's. However, the standard for this measure has not yet been agreed. Discussions are ongoing with the Arizona TAG. Regardless, Qwest will begin reporting on this measure with November 2001 results in the December 2001 reports.

I. Recommendation 9: HP recommends that Qwest file with the ACC an implementation plan for the above recommendations, which includes specific deliverables, milestones, and dates, no later than December 31, 2001.

Qwest respectfully submits this document as the response to this recommendation for filing an implementation plan as presented by HP. As the above responses to the recommendations indicate, Qwest has addressed many of the recommendations already and is committed to ensuring that the remaining recommendations are fully implemented by the end of February 2002.

III. CONCLUSION

In conclusion, Qwest has demonstrated that SATE provides adequate support for CLEC testing and that it continues to be enhanced based on CLEC requests. Additionally, Qwest has shown further commitment by these responses to HP's additional recommendations. The Commission should be confident that Qwest's current SATE functionality, documentation, and processes, as well as its ongoing plans to continue to enhance and support SATE, demonstrate

[13] Service Performance Indicator Definitions (PID) – AZ 271 Working PID Version 7.6

[14] Service Performance Indicator Definitions (PID) – AZ 271 Working PID Version 7.6

Qwest's continual commitment to providing adequate testing opportunities to the CLEC community.

HP Comments on

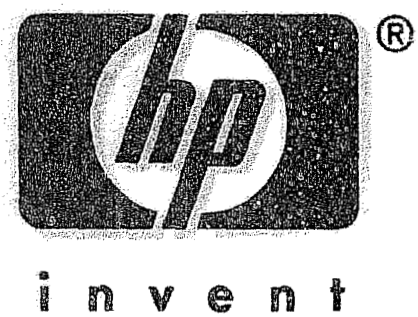
Qwest Response to Recommendations

February 14, 2002

Hewlett-Packard's Comments on Qwest Response to Recommendations for

Qwest IMA-EDI SATE Evaluation

Arizona Corporation Commission - Qwest



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1. Overview

1.1. Summary

In connection with the Arizona 271 testing effort, the Arizona Corporation Commission (ACC) and Qwest commissioned Hewlett-Packard (HP) to evaluate its IMA-EDI Stand Alone Test Environment (SATE). HP issued a report that found the SATE was adequate to support CLEC testing. However, the report contained nine recommendations aimed at ensuring that the SATE would remain adequate. Without complete and full implementation of these recommendations, continued adequacy of the SATE cannot be assured. Therefore, HP will undertake an evaluation of Qwest's implementation of the nine recommendations. This document provides a preliminary review of Qwest's response to the recommendations and details the steps HP will take to ensure that the recommendations are properly implemented and that the SATE remains adequate in the future.

1.2. Background

As an extension to the Arizona 271 testing effort, the Arizona Corporation Commission (ACC) and Qwest commissioned Hewlett-Packard (HP) to evaluate its IMA-EDI Stand Alone Test Environment (SATE). HP's primary objective was to provide the ACC, Qwest and the CLEC community with an evaluation of SATE that was unbiased, factual and representative of the experience that a CLEC would face in using SATE for EDI Certification testing to establish an IMA-EDI interface with Qwest. In addition, HP's objective was to determine whether the SATE provides an adequate means of testing and support to CLECs seeking to compete in the Arizona marketplace.

HP developed a Summary Evaluation Report of that evaluation, including nine recommendations to Qwest, and presented it to the ACC, Qwest and the CLEC members of the Technical Advisory Group (TAG) on December 21, 2001. In accomplishing its objective and developing that report, HP performed the following general steps:

- Met with ACC personnel to understand the regulatory objectives of this engagement
- Solicited feedback of both Qwest and CLEC personnel regarding their experience and opinions of the SATE for EDI development and interoperability testing. This was accomplished utilizing a CLEC Input Questionnaire.
- Reviewed formal comments filed by parties in connection with the SATE.
- Examined Qwest CLEC documentation for adequacy, and used this documentation to establish and test the appropriate EDI interconnection.
- Used Qwest CLEC documentation to develop a suite of transactions to test in the SATE environment.
- Conducted SATE functionality testing using the documentation and processes that would be available to CLECs.
- Communicated issues and questions to Qwest, the ACC and CLECs.
- Conducted re-testing of corrective actions implemented by Qwest in response to issues and questions.

Based on that report, Qwest and the CLEC members of the TAG provided comments. Qwest, as directed in that report, provided responses to HP's nine recommendation for improving the effectiveness of SATE. This document reviews the responses provided by Qwest, and addresses the effectiveness and impact of those responses to the initial recommendations.

1.3. Purpose of the Document

The purpose of the SATE Recommendation Response document is to provide a review of the responses provided by Qwest to HP's nine recommendations described in the SATE Summary Evaluation Report. For each response, HP will provide its opinion of the completeness and applicability to the recommendations proposed by HP. This review will also be used as input to the scope of effort to by executed by HP in the New Release Test for SATE 9.0.

1.4. Scope

The scope of this document includes only the responses to HP's nine recommendations in its Summary Evaluation Report, and HP's opinion as to the completeness and applicability of those responses.

1.5. Audience

This document is intended for use by the ACC, Qwest, and the CLEC members of the TAG to understand HP's evaluation and opinion of the responses provided by Qwest.

1.6. References

The following Qwest documents are referenced throughout this document:

- EDI Implementation Guide - v 9.0 released 1/21/02
- EDI Data Document
  - IMA EDI Data Document version 9.04 – for the Stand Alone Test Environment (SATE). Monday, February 4, 2002 effective in SATE now
  - IMA EDI Data Document version 9.05 – for the Stand Alone Test Environment (SATE). Monday, January 28, 2002 effective in SATE on 2/25/2002
- EDI BPL Edits List - IMA EDI 9.0 Errors List (9.0 Errors List V2.doc) released 1/30/02
- EDI Legacy System Edits List - SATE Legacy System Errors V2 - SATE90ERRORLIST Ver2 released 02/04/02
- Change Management Process (CMP) website: www.qwest.com/wholesale/cmp

6835 Pgs

CONTINUATION # [6]

2. Review of Responses

The following table summarizes the responses provided by Qwest to HP's nine recommendations in its Summary Evaluation Report for SATE.

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
1	HP recommends that Qwest submit a plan to ensure that it meets CLEC needs for testing of all products available in Arizona, including new technologies.	Qwest currently has forums and processes in place to address this recommendation. As a starting point, SATE was implemented supporting all products and associated transactions for which CLECs are currently certified to use in Qwest IMA EDI. To address CLEC's future needs, Qwest implemented a process by which CLECs can request the addition of products to SATE. This process states "...additional functionality can be agreed upon and added in later releases. Requests for transactions not currently supported may be requested via CMP". Currently, two CMP CRs are open based on CLEC product requests: Line Splitting and Loop Splitting. Based on the process described above, Qwest will utilize the CMP CR prioritization process to add the new products to SATE. In addition to the CLEC process, Qwest continues to monitor the products that CLECs express interest in and has proactively added products or created CMP CRs to add products to SATE. Qwest agreed to add Unbundled Distribution Loop and Unbundled Distribution Loop with Number Portability as the products to be added to SATE for HP's new product evaluation, as Qwest anticipated future EDI implementations of these products. Also, Facility Based Directory Listings will be added as	HP examined the Qwest CMP website (www.qwest.com/wholesale/cmp/changerequest/html) to determine if a CLEC could request a change to SATE. Currently, there is no formal process in place for SATE as part of the existing CMP. The CMP location on the Qwest Web site does reference SATE as a part of the CMP Change Request Form, but as an Interface impacted by the change, not the focus of the change itself. The Change Request Form also does not describe how the SATE requests will be cared for under the CMP organization. It is unclear how Qwest makes the decisions as to what is scheduled to be part of SATE and there is allowance for a CLEC to "ASK" for a product update, however, the process steps are not specifically laid out for a SATE Change Request. Qwest also does not clarify what or how they decide what new release updates are made or will be made to the SATE. These updates may include the IMA EDI capability of New Products; however, it is unclear how these updates are

[1] HP SATE Summary Evaluation Report For Qwest IMA-EDI SATE, Arizona Corporation Commission ; Final Release, Version 3.0, Release Date: 12/20/01

[2] IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996, Docket No. T-00000A-97-0238, Qwest's RESPONSE TO HP's SATE RECOMMENDATIONS

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
		an IMA product with the 9.0 release. As a result, Qwest is creating a CR to add Facility Based Directory Listings to SATE. Qwest believes that its published process meets the needs of the CLEC community and through CLEC input Qwest is committed to continue meeting CLECs' needs.	carried over to SATE. HP recommends that these processes have to be clearly defined and identified in both the SATE as well as CMP documentation to ensure a satisfactory testing environment. HP further recommends that Qwest continue to develop the process documentation, based upon standardized process methodology (Qwest standard, if available), which should include: • A stated objective, such as implementation of new products or technologies into the SATE environment, • a description of the inputs/deliverables required by CLECs, • the outputs/deliverables produced by Qwest, • the tasks and activities executed in that process, • the resources (people, technology, documentation) required to support that process, • the constraints, dependencies and trigger points to completing the process. • and the measurements used to ensure the process is meeting the stated objectives. This approach more clearly identifies what is required of CLECs in interacting with Qwest's SATE, what it can expect Qwest to do, and a way to validate that both parties are meeting the objective and results of the process.

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
			Additionally, HP recommends that Qwest pursue an independent evaluation of that process to ensure an unbiased assessment of its compliance to process standards and effectiveness.
2	HP recommends that Qwest implement a quality assurance process and a release management practice specifically for the SATE documentation.	Qwest follows documentation quality and versioning control processes for all externally published documentation, including SATE. During HP's SATE evaluation, Qwest chose to go outside the standard documentation-publishing schedule and processes in an effort to be responsive to HP's issues. Qwest believes this observation is a result of HP's evaluation requests and not indicative of Qwest's standard processes. However, Qwest will externally publish the guidelines that detail the release management, version control, and quality assurance processes that Qwest employs for the issuance of SATE documents. These guidelines will be published in the SATE Data Document by January 15, 2002, which will be available on the Qwest Wholesale web site at URL: http://www.uswest.com/wholesale/ima/edi/document.html. Qwest current documentation processes support the production of documents that enable CLECs to properly utilize SATE.	HP supports Qwest's decision to externally publish the guidelines that detail the release management, version control, and quality assurance processes that Qwest employs for the issuance of SATE documents. HP did an initial review of the updated SATE Data Documents. The Release Management Process and Quality Assurance Plan, as published, consists of two paragraphs of text found in the latest version of the SATE Data Document. These two paragraphs appear to address guidelines, but inadequately address both process definition and quality assurance, as described in Recommendation 1. Recommendation 2 was made to ensure that Qwest has Release Management and Quality Assurance for all IMA-EDI documents that affect the use of SATE such as the Data Document, the IMA-EDI Implementation Guide, Disclosure Documentation, etc. HP did not review Qwest's standard process for document quality, thus can not state whether it has one, or that it was or is followed to produce SATE documentation. HP recommends that the updated documentation and processes be formally evaluated for adequacy and compliance (as specifically

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
			described in the comments for recommendation 1).
3	To ensure continued adequacy of the SATE, HP recommends: • That Qwest clearly and specifically identify the roles and responsibilities of each individual and organization involved in the SATE. This definition of roles and responsibilities should include goals and objectives and mission statements for each organization and for all personnel. In addition, the job description for each employee should be clearly defined • That Qwest develop a system of internal controls to ensure accountability for organizations and individuals involved in the SATE process. These controls should use clearly defined goals and objectives and should tie specifically to functional responsibility, such as quality of documentation, accuracy of test account data, mirror image of production, etc. Employees involved in the	In response to the first two bullet points of this recommendation, Qwest is developing a staffing plan which details Qwest's CLEC testing organizational structure and the roles and responsibilities of all resources that directly support the organization. Additionally, this documentation will include objectives of the organization and the processes in place to ensure accountability. This plan will be maintained as part of Qwest's IMA EDI Implementation Guidelines, and will be published with version 9.0 of the guide, scheduled for release on January 21, 2002. For the third bullet point of this recommendation, Qwest is developing the process flow documentation as recommended by HP. This information will be maintained as part of Qwest's IMA EDI Implementation Guidelines document, and will be published with version 9.0 of the guide, scheduled for release on January 21, 2002. These documentation process measures will ensure the continued sufficiency of SATE in meeting the stated goals of the test environment.	This recommendation focused on the fact that Qwest relies heavily on resources to support CLECs in using SATE documentation to establish connectivity to and use SATE. Thus, HP must ensure that Qwest has a way to continue to staff at that level going forward. HP has reviewed the updated IMA-EDI Disclosure Document, and it is HP's opinion that Qwest has only partially implemented the recommendations related to process and documentation gaps and exceptions. As Qwest was informed, the recommendations were based on the SATE processes and documentation meeting MINIUM STANDARDS for business processes and related documentation. HP acknowledges that in attempting to implement the recommendations, Qwest made some progress at developing the content needed to meet the requirements of the recommendations. HP, however, cannot give Qwest an adequate rating for documentation and process unless the recommendations are implemented to the criteria presented with the recommendations (the criteria is representative of CMM, American Society for Quality and Baldrige process criteria). Qwest does not have to embrace a particular criterion, however, HP believes it does need to meet the basic process and documentation standards that are common to ALL accepted criteria (all standard business

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
	SATE should be encouraged to accomplish these goals and objectives • That Qwest develop process flow documentation that accurately reflects actual SATE processes and is a reliable guide to CLECs using the SATE		process criteria addresses the same basic attributes and includes the same standards). Therefore, HP will conduct an analysis to ensure the accuracy, completeness and effectiveness of the SATE processes and documentation related to: • Organization and Role definitions • Goals and Objectives • Mission statements • Job descriptions • System of internal controls • Process flowcharts and related documentation HP suggests that instead of a separate process and documentation evaluation, HP will address these two aspects of SATE simultaneously. HP is currently developing a plan for this analysis, and currently does not have an anticipated completion date. Additionally, business process evaluation guidelines dictate that when new process documentation is introduced or an existing process is significantly changed, an evaluation should be performed to prevent the introduction of problems that previously did not exist. HP recommends that the updated processes be formally evaluated.
4	HP recommends that Qwest publish a list of variances between SATE and production	Qwest believes this recommendation is specific to the Errors List process for SATE. The Qwest IMA EDI Errors List contains all errors generated by the IMA system. The Business Processing	To clarify, HP's recommendation is aimed at concluding that SATE mirrors the IMA-EDI production environment. To the extent that

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
	business edits to ensure that CLECs are fully aware of any such discrepancies so that a CLEC may effectively develop their business processes in this 'simulated' environment. This list should become a permanent part of the SATE documentation library.	Layer (BPL) used by SATE is the same as the BPL used by IMA. Thus, the IMA Errors List for SATE is the same as the IMA Errors List for IMA. However, this list does not contain errors generated by Qwest's legacy systems. When an error message is produced by a legacy system, the IMA BPL simply passes the error message to the CLEC, which requires no processing to be performed by IMA. SATE includes all errors possibly generated by IMA, as well as commonly triggered legacy system errors. As only the common legacy system errors are found in SATE, Qwest will create a list of all legacy system error messages coded into SATE. This will allow a CLEC to understand which error messages are available through SATE. A note will be included on this document to explain that additional legacy system errors can be coded into SATE if requested. This request can be made using the data request process. Additionally, Qwest will provide a list of errors from those legacy systems whose errors were returned through Qwest's 8.0 production EDI interface during a 6-month period. Qwest will compare this list to the errors currently contained in SATE and will publish that list and discuss in the CMP forum. Before putting a process in place to maintain this list ongoing, Qwest will gain input from CLECs through the CMP process and jointly assess the value of maintaining this list ongoing. Based on that joint assessment, a decision will be made on whether to implement an ongoing process. Since the IMA EDI Errors list is generated from a system query, errors from sections of code that are no longer executable are included in the list. Beginning with the 9.1 release, Qwest will ensure that these error messages are removed from the code. As a result, these non-executable errors will no longer appear on the IMA EDI Errors list. With IMA EDI	SATE is not a replica of the IMA-EDI production environment, Qwest must indicate to the CLECs and third parties developing to the Qwest IMA-EDI interface the differences between the two systems. These potential differences consist of not only Legacy System Error Codes, but also correct Business Process Layer (BPL) Error Codes (excluding errors from non-executable code) and a list of the differences in processing an Local Service Request (LSR) in IMA-EDI production compared to an LSR processed in the SATE. HP' s recommendation is geared towards Qwest publishing a single document that is maintained throughout the life of SATE as the IMA-EDI production and SATE environments are updated. HP recommends that this single document be inclusive of SATE Legacy and BPL Error Codes and Production vs. SATE differences. This document will provide a CLEC with a single location to review the details regarding all error codes and variances that exist between SATE and Production. This list should be published according to the schedule suggested by Qwest of twice per EDI Release at a minimum. HP has identified that Qwest addresses many of the issues HP intended for Qwest to address. However, HP recommends that there should be a clear commitment by Qwest to maintain a Legacy System Errors List going forward. Rather than delaying and defining the process until the

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
		release 9.0, the IMA EDI Errors List will be generated twice per IMA EDI release. The first generation will be coincident with the availability of the new release in SATE, which will occur on January 27, 2002. The second generation will be distributed when the release deploys in production on February 25, 2002. These documents will be published to the CLEC community through the Qwest Release Notification process.	CMP meeting, HP recommends that Qwest define the process for publishing this updated list with each new release of SATE. HP did a preliminary check of the three documents referenced in this recommendation, and has the following opinions: • The Legacy System Edit list is a new for SATE Release 9.0. HP is recommending that this document be formally evaluated, and transactions be submitted to ensure the list accurately represents the edits found in SATE. • Qwest has provided a list of the SATE and Production variances within the EDI Data Document for SATE Release 9.0. This list has not been evaluated for accuracy or completeness. HP recommends that this list be formally evaluated and that transactions be submitted to ensure the list accurately represents the variances between SATE and Production. • The BPL List for SATE 9.0 includes system edits for code that has been removed from IMA and SATE and therefore, the list currently does not accurately represent the edits actually found in IMA and SATE. HP recommends that when Qwest updates this list, it is formally evaluated through EDI transactions to ensure the list accurately represent the edits found in IMA and SATE.

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
5	HP recommends that Qwest formally incorporate the SATE into the CMP process, and future changes and modifications should be subject to that process and that Qwest develop a permanent, formalized method of obtaining CLEC input and identifying current and future SATE requirements in connection with the CMP process. This process should proactively seek CLEC evaluation of the SATE process, suggestions for improvement, and forecasts for testing requirements. HP also recommends that Qwest obtain input from the CLECS to determine the full suite of products that shall be included in the SATE.	1. SATE is formally incorporated into the CMP process. Qwest began the CLEC SATE Users Group in early November 2001, as part of the CMP process. Its Mission Statement best defines the purpose of the Users Group: Give Qwest the opportunity to communicate current plans for it's testing environments. 2. Give the CLECs the opportunity to communicate their current and future testing needs. 3. Jointly present a list of CRs to CMP to ensure that future enhancements of Qwest environments meet those stated CLECs' needs. This user group has met five times thus far, beginning with the November 6, 2001, kickoff meeting. Meetings for January, February, and March have been scheduled. The SATE Users Group is part of the overall CMP process where inputs and recommendations are taken and incorporated into the CMP processes. To date, Qwest has recorded seven SATE Change Requests (CRs) based on CLEC requirements. These CRs will be taken to the CMP forum for prioritization in the January 17, 2002, CMP meeting. SATE CRs will be managed by CMP just as IMA CRs are managed today. To further incorporate SATE into CMP, Qwest will ensure that the monthly CMP agenda includes a standing entry for SATE discussion. This agenda entry will include discussions on the status of SATE enhancements, SATE CRs, and CLEC feedback. This agenda addition will begin with the January 17, 2002, CMP meeting.	HP supports Qwest's initial approach to incorporating the SATE into the CMP. HP has not evaluated the SATE Users Group, or its relationship to CMP. HP recommends that the relationship between the SATE and CMP should be more formally documented as a part of the SATE and CMP (as described in Recommendation 1) so that the prioritization, scheduling, and completion of SATE specific CRs are clearly communicated to the community. Qwest should continue to accept feedback on SATE and CMP to ensure the needs of the community are addressed. HP recommends that Qwest develop and publish this process, with input from the CMP/SATE Users Group. HP recommends that when Qwest publishes this process, it is formally evaluated against the criteria defined in Recommendation 1.

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
		The proactive incorporation of SATE into the CMP process is consistent with the support of IMA, which will ensure that SATE remains adequate to meet the needs of Arizona CLECs and their future testing requirements.	
6	HP recommends that Qwest develop a formal process by which the SATE will be available for new release testing on an ongoing basis.	Qwest has a formal process by which the SATE will be available for new release testing on an ongoing basis. This process states "Beginning with release 9.0, new releases of IMA are planned for release on the IMA EDI Stand-Alone Test Environment approximately thirty calendar days prior to their release in production unless that release is deemed to be in 'red testing status'. Red Testing Status indicates that the IMA release's system testing effort has discovered significant issues that place the release in jeopardy". Based on the process stated above, IMA EDI Release 9.0 will be implemented in SATE on January 27, 2002, and in production on February 25, 2002. Qwest also notes that on October 22, 2001, IMA EDI Release 8.01 was released in SATE 27 days prior to the associated IMA production release. With the deployment of a new release into SATE approximately 30 days prior to production, Qwest has demonstrated that it has an existing formal process by which SATE is available to CLECs for new release testing on an ongoing basis	HP supports Qwest's proposal for a formal New Release process, if documented appropriately. HP would prefer that Qwest made the SATE available 'at least' 30 days prior to the production release, rather than 'approximately' 30 days prior as suggested by Qwest. Also see HP Recommendation 7. HP recommends that the formal process documented by Qwest for New Release Testing be formally evaluated against the documentation standards as identified in the HP Comments for Recommendation #1.
7	To ensure that the SATE is adequate for full release testing, HP recommends that 9.0 be tested. This release is expected to take place February 2002.	Qwest does not believe that an additional 3rd party evaluation of SATE 9.0 is necessary to determine that SATE is adequate for full release testing. HP has already conducted the full breadth of regression and progression testing for the entire suite of products in SATE 7.0 and 8.0. Furthermore, HP has evaluated a significant point release, 8.01. Therefore, a complete test of 9.0 by HP is not necessary. However, in order to address HP's recommendation, Qwest is willing to file performance information that demonstrates an adequate implementation of 9.0 in the SATE.	HP supports Qwest's proposal for the self-testing of SATE. HP recommends, however, that a third party conduct the same breadth of test against 9.0 to ensure that the community receives a fair representation of the SATE self-testing going forward. This test should also include transactions to validate the correct implementation of new business rules into SATE, validate that the Qwest defined processes are adequate to support a CLEC in executing tests

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
		Specifically, in order to calculate the recently developed SATE Accuracy PID each month, Qwest exercises every transaction available in SATE. Accordingly, upon the availability of SATE release 9.0, Qwest will execute all of the SATE transactions, capturing the output to perform the PID calculations. Qwest suggests that it submit the inputs (list of transactions submitted), outputs (results from EDI), results, and conclusions from this exercise to the ACC for review. These results should assure the ACC that the successful regression and progression testing experienced by HP during its evaluation have carried forward to release 9.0 and will continue into the future. Qwest will perform this exercise over a five-day period after the implementation of SATE Release 9.0 on January 27, 2002. Subsequently, Qwest will collate the necessary resulting data and file with the ACC on February 1, 2002.	with a new SATE release, and to validate that the scenarios tested successfully in SATE will also be successful in Qwest's production environment. It is HP's opinion that the results provided by Qwest should be validated against those results found by third-party test as a result of a SATE 9.0 New Release test. The final resulting comparison should provide the community with assurances that Qwest's self-test provides a fair evaluation going forward. It is also HP's opinion that subsequent new releases of SATE should be formally evaluated for quality and accuracy against Qwest's published processes, documentation and performance benchmarks (such as PO-19). Based on HP's interpretation of PO-19, HP recommends, and is currently planning on the following testing activities for New Release Testing on SATE 9.0. Details on HP's approach and association with PO-19 will be included in its New Release Test Approach Document, anticipated to be available by 2/14/02. 1. PID Test: This test will execute each scenario listed in the most currently available 9.0 SATE Data Document. The results received by HP will be compared to the expected Result in the SATE 9.0 Data Document. The deliverable will report the overall accuracy of the transactions executed

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
			in SATE when compared to the documented expected results. Additionally the test scenario summary worksheets and daily comment/activity logs will be provided. This test is currently under way. 2. Business Rules Test: This test will evaluate those business rules that have changed in SATE due to the new IMA-EDI Release 9.0. HP will derive a list of test scenarios based on the Appendix F – Release 9.0 Change Summary and Appendix E updated Additional IMA-EDI edits for 9.0. These scenarios will be executed in SATE to determine if the business rules documented in the most current IMA-EDI Network Disclosure documentation have been implemented successfully into the SATE test bed. The deliverable will report the list of scenarios, the expected outcome, the actual outcome and an overall percentage of accuracy. This test is anticipated to begin on 2/13/02 and conclude on 2/19/02. 3. Re-Test of PID for determination of SATE Environment Stability: This test will be a re-test of all scenarios executed in Phase I. The deliverable will report the overall accuracy of the transactions executed in SATE when compared to the documented expected results in the most current 9.0 Data Document. Additionally the test scenario summary worksheets and daily comment/activity logs will be provided. This test is anticipated to begin on 2/20/02 and

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
			conclude on 2/25/02. 4. Production Mirror Testing: This will be a test of a selected sample of SATE test bed scenarios. This test will execute scenarios in IMA-EDI production that resemble the SATE test bed scenarios. This test will require production test bed be established by Qwest for the scenarios to be executed successfully in production. The expected result of the production transaction is the expected result of the same scenario in the SATE data document. This test is anticipated to begin no earlier than 2/26/02 pending the creation of Qwest Production test bed and HP Pseudo-CLEC certification of appropriate products.
8	HP recommends that a SATE performance standard be developed for Arizona that addresses the need for Qwest to demonstrate that the SATE remains an adequate mirror image of production as OSS systems evolve. In reviewing this standard, the ACC may wish to consider the nature and volume of transactions that are executed in production.	Qwest has already proposed a measurement that is being discussed by the Arizona TAG. The agreement of the parties, once reached, should be used to satisfy this recommendation. Qwest has developed a SATE performance measure, PO-19 – Stand-Alone Test Environment (SATE) Accuracy. The language of this measure has been agreed and its purpose is to "evaluate Qwest's ability to provide accurate production-like tests to CLECs for testing both new releases and between releases in the SATE environment". The AZ SATE PID was developed through consensus with the CLEC's. However, the standard for this measure has not yet been agreed. Discussions are ongoing with the Arizona TAG. Regardless, Qwest will begin reporting on this measure with November 2001 results in the December 2001 reports.	PO-19 is currently under discussion by the parties. HP will provide further input if requested by the ACC.
9	HP recommends that Qwest file	Qwest respectfully submits this document as the response to this	Qwest filed the Implementation Plan with the

Rec. #	HP Recommendation[1]	Qwest Response[2]	HP Comments
	with the ACC an implementation plan for the above recommendations, which includes specific deliverables, milestones, and dates, no later than December 31, 2001.	recommendation for filing an implementation plan as presented by HP. As the above responses to the recommendations indicate, Qwest has addressed many of the recommendations already and is committed to ensuring that the remaining recommendations are fully implemented by the end of February 2002.	ACC on December 28,2001. This document reflects HP's evaluation of that implementation plan.

CONTINUATION

[8]

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TI 908
OBSERVATION 3108 – SECOND RESPONSE
Qwest OSS Evaluation

Initial Release Date: May 13, 2002
First Response Date: May 18, 2002
Second Response Date: May 22, 2002

OBSERVATION REPORT

An observation has been identified as a result of the evaluation of the Performance Indicator Definitions (PIDs) PO-9 (timely jeopardy notices).

Observation:

No decision could be reached as to whether Qwest is in parity with respect to the PID PO-9 for Resale and UNE-P.

Background:

For PO-9, Qwest is required to provide parity service in terms of its percentage of timely jeopardy notices. KPMG Consulting measured these PIDs, by region, for Resale and UNE-P. In accordance with the Qwest OSS Evaluation Project Master Test Plan, Appendix G, KPMG Consulting measured compliance with this PID using the Dual Hypothesis Test ("Dual Test"). In the Dual Test, two hypotheses are tested. The first hypothesis assumes Qwest is meeting the parity standard, and the second hypothesis assumes Qwest is not meeting the parity standard.
The data collected for this analysis consists of P-CLEC observations collected from May 2001 through April 2002. However, the only Resale and UNE-P delayed orders, and thus the only Resale and UNE-P opportunities for jeopardies, occurred in the May through August 2001 timeframe. Thus, the retail comparative used is May through August 2001.

Issue:

The Dual Test produced a conflicting result for each region for both Resale and UNE-P products. The following table summarizes the results of the test and shows the retail comparatives for each product and region:

PO-9 Results by Region for Resale and UNE-P

Product	Region	Test Average	Retail Average	Test Sample Size	Retail Sample Size	p-value test 1	p-value test 2	Pass/Fail Decision	Dual test Hypothesis Retail Average
Resale	Eastern	0%	17%	4	9,867	0.4694	1.0000	No Decision	7%
Resale	Central	0%	24%	4	17,592	0.3263	1.0000	No Decision	12%
Resale	Western	0%	14%	1	10,683	0.8572	1.0000	No Decision	5%
UNE-P	Eastern	0%	17%	1	9,867	0.8277	1.0000	No Decision	7%
UNE-P	Central	0%	24%	6	17,592	0.1864	1.0000	No Decision	12%
UNE-P	Western	0%	14%	4	10,683	0.5398	1.0000	No Decision	5%
Total		**0%**	**20%**	**20**	**38,142**				

Impact:

The conflicting result of the Dual Hypothesis for PO-9 indicates that not enough information is available to determine whether Qwest is meeting the parity standard.

Qwest's Response (05/16/02):

Qwest has reviewed the 20 orders for UNE-P and Resale products between May and August, 2001 that KPMG provided as confidential information. Qwest's research, documented in a confidential spreadsheet, indicates that 14 of the orders are not eligible to be counted as PO-9 misses. Five orders were cancelled, three had due dates changed at subscriber request and six orders were not delayed. The remaining six orders did miss their due date and should be counted in PO-9. Qwest requests that KPMG review the confidential spreadsheet to determine if additional information is required.

KPMG Consulting's First Response (05/18/02):

KPMG Consulting reviewed the 14 orders where Qwest indicated in its reply comments that they didn't agree with KPMG Consulting. In Qwest's opinion these 14 orders were not misses and therefore should not count against Qwest when measuring the PO-9 PID. KPMG Consulting's review of the data shows that we are in complete agreement on one of these 14 orders in question. This order had a customer initiated SUPP to change the due date and it therefore should not count against Qwest when measuring this PID. In addition, there is one other order that may have been included incorrectly by KPMG Consulting. A discussion of this order with Qwest is needed to determine whether it should be excluded or not. However, KPMG Consulting completely disagrees with Qwest on the other 12 orders that they indicated should be excluded. KPMG Consulting's review of the data shows that these orders were Qwest missed due date commitments without jeopardy notices and should count against Qwest when measuring the PO-9 PID as it is currently defined.

For the purposes of Monday's discussion on the dual test "no decision" outcome for the PO-9 PID, reducing the number of due date misses from 20 to 18 (note:Qwest only contended 14 of the original 20 misses associated with this observation) does not change the status of this observation following the discussion at the VTC. To recap, when measuring the PID as designed for this test which is to disaggregate it by product/by region, the results are a "no decision". When combining the regions, but keeping the product disaggregation it remains a "no decision" for each of the two products involved (resale and UNE-P). However, when combining the results with no disaggregation at all the results of the dual test are a fail.

KPMG Consulting recommends that this observation remain open.

Qwest's Supplemental Response (05/19/02):

In order to facilitate closure of this observation to be discussed on the scheduled May 20th, focused O/E call, Qwest provides the following supplemental information supporting the conclusion that "not enough information is available" to determine that Qwest is *not* providing parity due to low PO-9 volumes and it is not appropriate to attempt to achieve statistically significant conclusions. Additionally low volumes of jeopardy notices available during the May to August 2001 timeframe for the timeliness of notifications assessed in PO-9 are highly correlated to high commitments met as measured in OP-3. Similarly, more recent information resulting from a significant volume of retest Resale and UNE-P LSRs provides virtually no information for use in calculating the PO-9 PID and should not be ignored. Qwest notes that the regional OP-3 results for the kinds of orders captured in this observation were 99.3% for Resale Non-designed and 99.2% for UNE-P (POTS) – extremely good by any standard.[1] As a result, with so few orders as candidates for receiving jeopardy notices and due to such high commitments met results, there is no ability for data from test transactions to achieve an accurate result nor is there a need for the test to give further attention to PO-9. As such, even though there appears to be some remaining disagreement on order details,[2] no further work should be performed on this observation, and it should be closed, because those disagreements do not affect this overarching conclusion.

Given the PID-defined rules for the order types included in various measurements, it was clearly understood – and, therefore, did not need to be spelled out as such in the MTP – as to which measurements would ***capture the full volumes*** defined in the MTP to be statistically significant, which measurements would ***capture only a predictable subset of the full volumes*** (e.g., due to inclusion/exclusion rules), which measurements would ***capture only incidental volumes*** (e.g., due to performance factors affecting volumes), and which measurements would ***not capture any*** test transactions. PO-9 fits into the third category, namely, those that would capture only volumes incident to performance factors (in this case, incident to performance problems). This, in fact, has proven out in the test with the low PO-9 volumes observed.

Hence, it is clear that, for measurements like PO-9, no statistically-significant conclusions are required – particularly where, as in this case, low volumes are desirable, because they represent good performance in commitments met. In other words, in addition to "pass" or "fail" alternatives as outcomes of this observation, if sufficient data existed to support such conclusions, it is also possible and permissible to have a conclusion of "not enough information" from the test, where sufficient information does not exist. The MTP does not require KPMG to try to achieve sufficient levels of jeopardy notices. Therefore, appropriately, the test does not expect KPMG to apply

[1] Based on 4-month averages for May – Aug 2001. Results for the most recent four months are even better, by about 0.1%.

[2] Coming from old orders (approaching a year old), some of which are complicated by the "disorderly order" issues that already have been identified, re-tested, and successfully resolved.

statistical analysis and any particular mix of order types that would otherwise be required to insure "apples to apples" comparisons in planning test transactions.

The reason the order mix is important is that, otherwise, the test could cause false "misses" by including a disproportionate number of orders that typically do not or cannot receive jeopardy notifications. PO-9 jeopardy percentages from commercial volumes are typically less than 20 percent, both for CLECs and for retail. The reason is not necessarily poor performance, but rather, normal circumstances which adversely affect the ability to provide jeopardy notices and are beyond Qwest's control.[3] Orders with no facility issues and short intervals provide virtually no opportunity for advance jeopardy notifications that would count as a "met" under PO-9 – particularly order types with a standard interval of zero or one day(s). With zero day intervals, there is *no* opportunity available or expected, at all, to meet PO-9 if the commitment is missed. With other short intervals, and with no facility issues involved, there is no pre-check possible (as there might be, for example, when facility issues are involved) to determine whether an order will be in jeopardy. The reason is that non-facility misses come from situations that typically cannot be known until the due date. If a disproportionate number of such orders are included in the test transactions, the reason for a PO-9 miss will be due to that fact, rather than Qwest's performance. Nevertheless, again, the MTP does not call for PO-9 to be evaluated in this manner.

It follows that, because the MTP does not require statistical significance for PO-9, the dual test is not required, strictly speaking, and no statistically-significant conclusions are required. The dual test was originally created in the context of establishing statistical significance to indicate (1) whether the volumes of 140 did, indeed, achieve the level statistical significance desired, or (2) if 140 was not achievable, whether the null and alternative hypotheses still agreed. Thus, for measurements not designated for statistically-significant volumes, there is no requirement for the dual test. Nevertheless, a dual test has been run, and its unsurprisingly-conflicting results confirm that there is not enough information to make a conclusion. More recently, in the combined dual test results, which KPMG provided during third vendor technical conference on 15 May 02, the results continue to indicate "not enough information," except when the product reporting for non-designed and UNE-P(POTS) is rolled together into a combined regional result. In this latter instance, since the PID does not call for the products to be rolled up in this manner, it is not appropriate for that result to be considered in test evaluations and, in any event, doing so could compound the order-mix problem discussed above.

However, even if the dual tests had no conflicting indications as to a "pass" or a "fail," again, the test design was not required to include consideration of the proper mix of order types that would be required for a correct, apples-to-apples, comparison with retail

[3] Some time ago, Qwest discussed in workshops and with the TAG the possibility of pursuing a way to avoid this problem, by having the PID focus only on orders with facilities reasons for missing commitments. However, receiving no support for this, the proposal was not pursued. As a result, the PO-9 PID depends on the presumption that volumes of short-interval orders in wholesale and retail results are similar. In a test, however, that is not true unless designed into the test.

results. As the MTP does not require a conclusion for PO-9, all that is required is to make note of what has been observed and state what conclusions can be made, if any. In this case, where the test transactions in the observation are nearly a year old (May-Aug 01) – some of which are complicated by the "disorderly order" issues that have already been identified, re-tested, and successfully resolved – the only conclusion that can be made is that there is not enough of the right kind of information to say whether Qwest is, or is not, providing advance notice of jeopardies at parity. Moreover, in the context that the low volumes are accompanied by extremely good OP-3 results, there is no need for the test to pursue this matter further.

KPMG Consulting's Second Response (05/22/02):

The result of the 5/20/02 focus call to discuss this observation was an impasse with AT&T suggesting that there was enough evidence to indicate that Qwest was leaning toward a failure on this PID. Qwest's position was that there was not enough information to make a determination and therefore the outcome should be an unable to determine in the final report for the resale and UNE-P PO-9 results.

In its regularly scheduled meeting on May 20th, the Steering Committee addressed this impasse. The Steering Committee voted by a margin of 7-3 to declare the resale/UNE-P PO-9 PID as a fail outcome for the purposes of the ROC OSS test.

Therefore, KPMG Consulting recommends closing Observation 3108 as Closed/Unresolved.

ROC_TI616_EXP3061_KPMG Disposition Report_03_14_02.doc

Initial Release Date: October 9, 2001
First Release Date: November 28, 2001
Second Release Date: February 6, 2002
Third Release Date: February 19, 2002
Disposition Release Date: March 14, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Qwest provisioned Firm Order Confirmations (FOCs) for Resale PBX orders in a timeframe that was not in compliance with PID PO-5B[1].

Summary of Exception:

The Qwest Service Performance Indicator Definition (PID) PO-5B established the benchmark for the receipt of FOCs on Non-Flow-Through Resale PBX orders. The benchmark for this PID indicates that, for at least 90% of these orders, Qwest is to provide FOCs within 48 hours of order submission, whenever the orders are for 24 trunks or less.

In its Initial Release on October 9, 2001, the P-CLEC received 39 Non-Flow-Through Resale PBX orders. For 28 of those orders (72%), Qwest provided FOCs within 48 hours of order submission. For the remaining 11 (28%), Qwest provided FOCs in a time period greater than 48 hours after the orders had been submitted.

During the first retest, Qwest provided 3 FOCs. Two of these confirmations where provided in a time period greater than 48 hours after the orders had been submitted.

During the last retest KPMG Consulting received 13 FOCs where only 11 were returned within the 48-hour commitment. This equate to an 85% FOCs on time performance.

Summary of Qwest Responses:

Qwest has investigated the LSRs referenced in the first release of this exception and on the various responses. The following were identified as causes for the delay in providing FOCs:

1. LSRs routed to the incorrect work group for processing;
2. LSR routed to the correct center, however, Qwest missed the 48-hour FOC commitment; and
3. LSR was a cancel supplement request and the cancellation notice was sent late.

[1] *Qwest Service Performance Indicator Definitions*, ROC 271 Working PID, Version 3.0, May 31, 2001.

Qwest reviewed the P-CLEC's responses for the last retest and concluded the following:

1. The PO-5B measure is disaggregated between LSRs submitted via IMA GUI and via IMA EDI. At a product level, PO-5B is further divided by a) Resale services and UNE-P POTS, b) Unbundled Loops and specified Unbundled Network Elements, and c) LNP. Resale PBX trunks are included in the first product category, Resale Services and UNEP POTS. Therefore, Qwest did not believe it was appropriate to further subdivide the measure.

2. Qwest met PO-5B-1a in every month since July 2001. Qwest met PO-5B-2a from June through November. Qwest did miss PO-5B-2a in December with a result of 88.37%. Qwest believes that would demonstrate consistent performance on these measures.

3. At an aggregated CLEC level, Qwest has not missed either of the PO-5B Resale PID measures (PO-5B-1a and PO-5b-2a) since July 2001 when one state was missed with a result of 89.28% against a 90% benchmark. Therefore, Qwest believed that the aggregate CLEC results also indicate satisfactory and consistent performance on these measures.

Qwest believes that achieving an 85% on the PO-5B for PBX against a benchmark of 90% does not constitute an "impediment" to the CLEC's ability to compete. Qwest will rely on commercial results to show its ability to provide timely FOCs and requested that KPMG close this exception as "Closed/Unresolved".

KPMG Consulting's Responses (03/14/02):

KPMG Consulting reviewed Qwest's response for this exception and acknowledges that PID PO-5B includes both Resale PBX, and Resale & UNE-POTS. However, Non-flow through Firm Order Confirmations (FOCs) for Resale POTS has a benchmark of 24 hours while Non-flow through Firm Order Confirmations (FOCs) for PBX services has a benchmark of 48 hours.

KPMG Consulting's experience with the receipt of Firm Order Confirmations (FOCs) during the last retest indicates that existing Qwest systems and procedures do not provide Firm Order Confirmation within the requirements of PID PO-5B.

KPMG Consulting understands that Qwest will rely on commercial results to demonstrate its ability to provide timely FOCs for resold PBX services. KPMG Consulting acknowledges Qwest's request to close this exception as unresolved.

Based on Qwest's formal response, subsequent focus call discussions, and Qwest's request, KPMG Consulting recommends Exception 3061 be closed as Unresolved.

ROC_TI616_EXP3061_Qwest Response to KPMG 2nd Supp Rec_03_05_02.doc

Test Vendor ID:	EXP 3061
Qwest Internal Tracking ID:	TI 616
Observation/Exception Title:	Non-Compliant Timeframe - FOCs for Resale PBX
Test Type/Domain:	Test 12 – POP Functionality
Date Qwest Received:	10/09/2001
Initial Response Date:	10/16/2001
Supplemental Response Date:	12/06/2001
2nd Supplemental Response Date:	02/13/2002
3rd Supplemental Response Date:	03/05/2002

Test Incident Summary:

An Observation has been identified as a result of P-CLEC activities related to Test 12, Evaluation of POP Functionality and Performance Versus Parity Standards and Benchmarks.

Exception:

Qwest provisioned Firm Order Confirmations (FOCs) for Resale PBX orders in a timeframe that was not in compliance with PID PO-5B.

Background:

The Qwest Service Performance Indicator Definition (PID) PO-5B established the benchmark for the receipt of FOCs on Non-Flow-Through Resale PBX orders. The benchmark for this PID indicates that, for at least 90% of these orders, Qwest is to provide FOCs within 48 hours of order submission, whenever the orders are for 24 trunks or less[1].

To date, the P-CLEC has submitted 39 Non-Flow-Through Resale PBX orders. For 28 of those orders (72%), Qwest provided FOCs within 48 hours of order submission. For the remaining 11 (28%), Qwest provided FOCs in a time period greater than 48 hours after the orders had been submitted.

KPMG Consulting has provided examples of the orders receiving FOCs in a timeframe that is greater than 48 hours after the orders have been submitted in a separate confidential document.

Issue:

Receiving FOCs in a time period greater than 48 hours after orders have been submitted could delay a CLEC from providing timely service to a customer. This could decrease a customer's level of satisfaction for a CLEC, and could increase operating costs because of the additional resources required to investigate the issue.

[1] Qwest Service Performance Indicator Definitions, ROC 271 Working PID, Version 3.0, May 31, 2001.

Qwest Formal Response:

Qwest has investigated the 11 LSRs referenced in this exception. Qwest has determined that these LSRs were initially routed to the incorrect work group for processing. Once the LSRs were received in the appropriate work group the provisioning process continued. However, due to the incorrect routing and the time that it takes to process complex LSRs, the SDCs were unable to meet the defined FOC timeline.

Qwest identified an issue with incorrect routing at the end of July, and implemented a daily call starting August 6, 2001, with the Interconnect Service Centers (ISCs) to prevent this problem from recurring. During the daily call, the ISCs analyze all the routing situations and use that data to train ISC personnel on the proper routing of the requests. Proper routing is required because complex orders require specialized handling. Re-routing is not allowed to occur until a coach has been contacted to validate that the routing is appropriate and accurate.

KPMG Comments (11/28/2001):

KPMG Consulting has reviewed Qwest's 10/16 response, where Qwest mentioned that it had implemented a daily call starting August 6, 2001, with the Interconnect Service Centers (ISCs) to prevent Qwest from missing the FOC timeline for Resale PBX Orders.

KPMG Consulting conducted a retest regarding Resale PBX orders, and observed that Qwest returned late Firm Order Confirmations (FOCs) for these orders. KPMG Consulting has provided examples of these orders in a separate confidential document.

KPMG Consulting recommends that Exception 3061 remain open.

Qwest Response KPMG Comments (12/06/2001):

Qwest reviewed the confidential attachment and found the following:

- The first LSR was routed to the correct center and met the 48-hour FOC commitment.
- The second LSR was routed to the correct center, however Qwest still missed the 48 hour FOC commitment. While Qwest missed the benchmark for this particular LSR Qwest has consistently exceeded the benchmark for timely FOC transmittal for Aggregate Resale Products. Between the periods of August through October Qwest timely provided FOC's on 97% of submitted service requests, as defined by the PO-5B PID. Qwest submits that it is in compliance with PO-5B.
- The last LSR was a cancel supplement request, therefore a cancellation notice was sent, not a FOC as indicated in KPMG's confidential attachment. The cancellation notice was sent late because the SDC did not understand that a cancellation notice was required in addition to processing the cancellation request. When it was discovered that the cancellation notice was not sent the SDC was coached on the correct process and the cancellation notice was sent.

Detailed LSR information is provided in the confidential attachment.

KPMG Supplemental Recommendation (02/06/2002):

Based on Qwest's 12/06 reply, KPMG Consulting conducted retest activity on Resale PBX trunks and observed that Qwest is still not meeting the 90% FOCs delivered within 48 hours benchmark requirement.

of the PO5B PID. During this retest 13 PBX trunk orders were submitted. Of these 13 orders only 11 returned FOCs within the 48-hour commitment. This equate to an 85% FOCs on time performance. KPMG Consulting has provided the details of these orders in a separate confidential document.

KPMG Consulting recommends that Exception 3061 remain open pending Qwest review.

Qwest Response to KPMG Supplemental Recommendation (02/13/2002):

Qwest has reviewed the information provided by KPMG. While the average interval for providing responses for the 13 LSRs was less than 38 hours, Qwest does not dispute that two LSRs were processed in greater than the 48-hour standard for PBX orders.

The PO-5B measure is disaggregated between LSRs submitted via IMA GUI and via IMA EDI. At a product level, PO-5B is further divided by a) Resale services and UNE-P POTS, b) Unbundled Loops and specified Unbundled Network Elements, and c) LNP. Resale PBX trunks are included in the first product category, Resale Services and UNEP POTS. Therefore, Qwest does not believe it is appropriate to further subdivide the measure.

However, Qwest did review the results specific to the Pseudo-CLEC. Qwest met PO-5B-1a in every month since July. Qwest met PO-5B-2a from June through November. Qwest did miss PO-5B-2a in December with a result of 88.37%. Qwest believes this demonstrates consistent performance on these measures.

At an aggregated CLEC level, Qwest has not missed either of the PO-5B Resale PID measures (PO-5B-1a and PO-5b-2a) since July 2001 when one state was missed with a result of 89.28% against a 90% benchmark. Therefore, Qwest believes the aggregate CLEC results also indicate satisfactory and consistent performance on these measures.

KPMG 2nd Supplemental Recommendation (02/20/2002):

KPMG Consulting reviewed Qwest's February 13, 2002, response and acknowledges that the PO-5B PID includes both Resale services & UNE-P POTS disaggregated by interface type. However, KPMG Consulting does not agree with Qwest's assertion that further subdivision of the measure is inappropriate. Based on the PID definitions for the PO5B PID the only way to properly measure Qwest's performance on this PID is to further disaggregate the measure for resale services by the product that is being ordered. This further subdivision is necessary because the benchmark for resold POTS service is 24 hours whereas the benchmark for resold PBX services is 48 hours. Without taking a product specific view of the results there is no way that KPMG Consulting can measure Qwest's performance on this PID.

KPMG Consulting agrees with Qwest that the P-CLEC results for the PO-5B PID are being met. However, the benchmark that is being met is for POTS services only. Qwest has failed to meet the 48-hour benchmark for PBX trunks in the initial test and in the two subsequent retests that were conducted as a result of Qwest's replies to this exception.

Based on Qwest's failure to meet the PO-5B benchmark for PBX trunks KPMG Consulting recommends that Exception 3061 remain open.

Qwest Response to KPMG 2nd Supplemental Recommendation (03/05/2002):

Qwest has reviewed the information provided by KPMG. During this retest only 13 PBX trunk orders were submitted. Of these 13 orders, 11 returned FOCs within the 48-hour commitment. This equates to an 85% FOCs on time performance, compared to the 90% Benchmark.

The PO-5B measure is disaggregated between LSRs submitted via IMA GUI and via IMA EDI. At a product level, PO-5B is further divided by a) Resale services and UNE-P POTS, b) Unbundled Loops and specified Unbundled Network Elements, and c) LNP. Resale PBX trunks are included in the first product category, Resale Services and UNEP POTS. Qwest does not believe it is appropriate to further subdivide the measure beyond the definition in the PID.

KPMG asserts that "further subdivision is necessary because the benchmark for resold POTS service is 24 hours whereas the benchmark for resold PBX services is 48 hours. Without taking a product specific view of the results there is no way that KPMG Consulting can measure Qwest's performance on this PID." Qwest disagrees with this position. The PID is a percentage of FOCs returned on time not a calculation of the average interval. Therefore, each LSR is compared with the appropriate interval and either meets that interval or misses that interval and subdivision by product is not required to measure Qwest's performance on PO-5B.

In commercial results, reported at an aggregated CLEC level, Qwest has not missed either of the PO-5B Resale PID measures (PO-5B-1a and PO-5b-2a) since July 2001, when one state was missed by less than 1%. The aggregate CLEC results indicate satisfactory and consistent performance on these measures.

Qwest also reviewed the results specific to the Pseudo-CLEC. Qwest met PO-5B-1a in every month since July. Qwest met PO-5B-2a from June through November. Qwest did miss PO-5B-2a in December with a result of 88.37%. Qwest believes these P-CLEC Test results demonstrate consistent performance on these measures.

Qwest believes that achieving an 85% on the PO-5B for PBX against a benchmark of 90% does not constitute an "impediment" to the CLEC's ability to compete. Qwest will rely on commercial results to show our ability to provide timely FOCs and requests KPMG close this exception as "Closed/Unresolved".

Attachment(s): None

ROC_TI423_EXP3010_KPMG Disposition Report_02_20_02.doc

Initial Release Date: July 13, 2001
First Response Date: August 9, 2001
Second Response Date: August 31, 2001
Third Response Date: December 6, 2001
Disposition Report Date: February 20, 2002

EXCEPTION DISPOSITION REPORT

KPMG Consulting has identified an exception as a result of the testing activities associated with Provisioning Verification and Validation, MTP Test 14.

Exception:

Qwest did not populate Dark Fiber installation test results in Work Force Administration (WFA) logs as mandated by the Unbundled Dark Fiber Customer Communication Technician- Implementer (CCT-I) Job Aid (Unbundled Dark Fiber Methods and Procedures, Designed Services DS 98-0001-H).

Summary of Exception:

KPMG Consulting performed a review of Qwest's Unbundled Dark Fiber (UDF) installations to verify that the CCT-I populated the WFA logs as required the Dark Fiber Method and Procedure document.[1] The document instructs the CCT-I to populate the WFA logs with the core test results (continuity testing, light loss and interoffice fiber parameters) for each Dark Fiber installation. The CCT-I is responsible for recording these test results as benchmarks on the OSSCN. The CCT-I is also responsible for providing his own contact information, and the contact information for the central office technician, as well as the date and time by which the installation was completed.

KPMG Consulting examined the WFA logs provided by Qwest for commercial orders observed and found that the data was incomplete, WFA logs were missing, and results were not recorded as specified in the UDF Methods and Procedures. Failure to adhere to documented Methods and Procedures could result in unnecessary delays to provision the fiber to the CLEC, could increase a CLEC's operating costs due to the added time required to properly provision the fiber, and could decrease the CLEC's customer satisfaction due to the delays.

Summary of Qwest's Initial and Supplementary Responses:

Qwest initially responded with clarification for some of the CLO numbers requested. Eighteen (18) orders had been archived and were provided to KPMG Consulting through a supplemental data request. Following the receipt of additional comments from KPMG Consulting, Qwest stated that its documentation was not clear as to the specific tests that

[1] Designed Services DS 98-0001-H Unbundled Dark Fiber (UDF) Methods and Procedures CCT-I Job Aid, pg. 5 Provisioning Step 4.

Qwest is obligated to run on UDF prior to turn-up with the CLEC. Qwest updated and clarified its UDF document, which KPMG Consulting received on September 6, 2001.

KPMG Consulting's Disposition Report (02/20/02):

Summary of KPMG Consulting's Retest Activities

KPMG Consulting observed 10 additional Unbundled Dark Fiber orders between September 6, 2001 and January 18, 2002. On January 17, 2002, the TAG agreed to suspend UDF observations due to the low volume of commercial activity. KPMG Consulting requested and reviewed the WFA OSSCN logs for the orders observed prior to the retest suspension to determine if Qwest technicians performed the provisioning tasks outlined in Qwest's Unbundled Dark Fiber method and procedure documentation.

Summary of KPMG Consulting's Retest Results:

During the retest, KPMG Consulting found that Qwest completed 32 of 50 (64%) work steps correctly, which is below the 95% performance benchmark established by KPMG Consulting. However, only 10 UDF orders were available for observation during the retest period and this small number does not meet the minimum of 35 required for statistical testing. KPMG Consulting is unable to validate that the issues initially identified have been resolved.

KPMG Consulting recommends closing Exception 3010 as inconclusive. The inconclusive finding is due to insufficient volume of data from which to draw a conclusion.

ROC_TI423_EXP3010_KPMG 2nd Supp Rec_RETEST_12_06_01.doc

Date: December 6, 2001

EXCEPTION REPORT

An exception has been identified as a result of the test activities associated with MTP Test 14, Provisioning.

Exception:

Qwest did not populate Dark Fiber installation test results in Work Force Administration (WFA) logs as mandated by the Unbundled Dark Fiber Customer Communication Technician- Implementer (CCT-I) Job Aid (Unbundled Dark Fiber Methods and Procedures, Designed Services DS 98-0001-H).

Background:

KPMG Consulting performed a review of Qwest's Unbundled Dark Fiber installations as required in Appendix K of the MTP (Test 14). The Dark Fiber Method and Procedure document[1] instructs the CCT-I to populate the WFA logs with the core test results (continuity testing, light loss and interoffice fiber parameters) for each Dark Fiber installation. The CCT-I is responsible for recording these test results as benchmarks on the OSSCN. The CCT-I is also responsible for providing his own contact information, and the contact information for the central office technician, as well as the date and time by which the installation was completed.

Issue:

KPMG Consulting examined the WFA logs provided by Qwest and found:

- Data in the WFA logs was incomplete.
- WFA logs were missing for 18 of the 23 orders KPMG Consulting expected to review (either the order contained no screen, WFA log was incomplete, or contained no results).
- Of the 5 WFA logs Qwest provided to KPMG Consulting, none included the results as stated in the UDF Methods and Procedures.

Table 1 provides the summary of the Dark Fiber June Report Summary.

Table 1: Dark Fiber June Report Summary

Test Instance	State	Order Number	Status	Comments
1	CO	Unavailable	Completed	Did not receive OSSCN WFA log.

[1] Designed Services DS 98-0001-H Unbundled Dark Fiber (UDF) Methods and Procedures CCT-I Job Aid, pg. 5 Provisioning Step 4.

Test Instance	State	Order Number	Status	Comments
2	CO	COC321490001	Completed	Received OSSCN WFA logs, however Incomplete, or Not Satisfied.
3	CO	COC321475001	Completed	Not Closed out in WFA/C.
4	CO	C0C321504001	Completed	No OSSCN WFA log.
5	CO	C0C318983001	Completed	Order not found.
6	CO	C0C321462001	Completed	Order not found.
7	CO	C0C321506001	Completed	No OSSCN WFA log.
8	CO	C0C321345001	Completed	Order not found.
9	CO	C0C321426001	Completed	Received OSSCN WFA logs, however, Incomplete or Not Satisfied.
10	CO	C0C321437001	Completed	Received OSSCN WFA logs, however, Incomplete or Not Satisfied.
11	CO	COC321504001	Completed	No OSSCN WFA log.
12	CO	C0C321641001	Completed	No OSSCN WFA log.
13	OR	S0C074369001	Completed	No OSSCN WFA log.
14	OR	SOC074374001	Completed	Order not found.
15	MN	MNC174121001	Completed	Order not found.
16	MN	MNC174122001	Completed	Order not found.
17	MN	MNC176849001	Completed	Order not found.
18	MN	MNC174125001	Completed	Order not found.
19	MN	MNC174139001	Completed	Order not found.
20	MN	MNC174140001	Completed	Order not found.
21	MN	MNC174151001	Completed	Received OSSCN WFA logs, however, Incomplete or Not Satisfied.
22	MN	MNC174152001	Completed	Received OSSCN WFA logs, however, Incomplete or Not Satisfied.
23	WA	S0C077764001	In progress	Not Closed out in WFA/C.

Impact:

Failure to adhere to Unbundled Dark Fiber Method and Procedures could result in unnecessary delays to provision the fiber to the CLEC. The delays could result from either of the following: (i) unnecessary and/or redundant testing on the fiber (ii) inability to conduct educated troubleshooting should problems arise with the fiber in the future, (iii) provisioning inferior fiber to the CLEC that couldn't support the intended service offering. These delays could increase a CLEC's operating costs as a result of the added time required to ensure proper provisioning of the fiber, and could decrease its customers' satisfaction because of the possible delays.

Qwest Response Summary:

The information supplied by KPMG included Circuit Level Order (CLO) numbers, which represent identification numbers for Circuits. The CLO numbers are not individual job numbers. The original Data Request, R-151, through which the information was supplied to KPMG was not complete. 18 of the 23 requested CLO numbers with Order Not Found status were archived, and have been requested by Qwest for a supplemental Data Request. Additional information will be provided by July 20, 2001, in the Data Request supplemental Response #R-151-S.

Test Instance 1 did not have a CLO number. The Job ID number is unknown at this time.
Test Instance 2 and 9 are for job number B12D047
Test Instance 3 is for B12D108
Test Instance 4 and 11 are duplicate CLO numbers B12D097
Test Instance 5 is for job number B12D144
Test Instance 7 is for B12D117
Test Instance 10 is for B12D048
Test Instance 12 is for B12D116
Test Instance 13 not known at this time
Test Instance 14 is for B1RD015
Test Instance 15 is for B1MD006
Test Instance 16 is for B1MD007
Test Instance 17 is for B1MD008
Test Instance 18 is for B1MD009
Test Instance 19 and 20 are for B1MD011
Test Instance 21 and 22 are for B1MD012
Test Instance 23 is not known at this time

Test Instance 6 and 8 were not found to be Dark Fiber jobs. One was another type of job, and one did not exist at all. We believe the proper CLO numbers may be COC32162001 and COC32165001

According to the Wholesale Interconnection Operations Tab 21, Unbundled Dark Fiber- Interoffice (IOF) and Loop 02/21/01 documentation, Test and turn-up only includes continuity testing. The process mentioned by KPMG is correct. The WFA OSSCN log should have information that light was passed, and at what dB (Decible) loss. The beginning and ending locations are also listed on the log.

KPMG provided 5 OSSCN logs for Qwest to investigate the lack of test documentation.

Job number C12D048, CLO number COC321437001, did not document any appropriate test information. As indicated on the log, the Tester was no longer available to provide information on this incident. Qwest records indicate that the test did occur, and the fiber tested OK. However, both the Technician and the Test Implementer closed out the job without documenting the necessary information in the log. Qwest research determines that in this incident, the appropriate process was not followed by the Test Implementer.

The other four logs provided had the proper information in the notes section of the OSSCN log. The four logs are for two job numbers: B12D047 and B1MD012. Both of the log screens available for B12D047 (CLO numbers COC321490001 and COC321426001) indicate that light passed unimpeded through the fibers. The dB (Decible) loss along the line was–13dB. Transmit and receive were both –3 dB. The line was tested from DNVERCODC to ENDOVV.

The information available for CLO numbers MNC174151001 and MNC174152001, job number B1MD012, also indicates that the continuity test completed at –9.6 dB and –12 dB transmit and receive. The location was MPLSMN07 to NWBTMNCL.

The other information referenced by KPMG, specifically the names and phone numbers of the Technicians, have been redacted from the logs. Date and time are available throughout the WFA logs. Only the OSSCN log was requested in the Data Request, however other WFA screens may contain information helpful to KPMG's inquiry.

Qwest has determined that one of the five examples provided by KPMG lacked proper documentation that should have been entered by the tester. The supplemental Data Request will provide WFA logs for the remaining CLO numbers which were not provided in the original request.

KPMG Comments (08/10/2001):

On July 23, 2001, Qwest provided KPMG Consulting with a supplemental response to data request R-151. KPMG Consulting reviewed all documents received from Qwest:

- *KPMG R151S1 Confidential C.pdf,*
- *KPMG JUNE R151S1 Con Att B.doc,*
- *KPMG JUNE R151S1 Con ATT D.doc.*

The table that follows on pages 5 and 6 details KPMG Consulting's analysis of the Qwest supplemental data, and Qwest's adherence to the required provisioning tasks for Unbundled Dark Fiber installations as documented in *Designed Services DS 98-0001-H – Unbundled Dark Fiber (UDF) Methods and Procedures – CCT-I Job Aid*. On page 5 of this document, listed under "Step 4" of the "Provisioning" table, are listed the following tasks that are to be completed by the CCT-I (note: KPMG Consulting has summarized the information listed on page 5 into the following bullet points):

- Post the Due Date complete in WFA-C.
- Make sure to note the *OSSCN* with the same information given to the "Project Lead". The note also indicates, "The CCT-I is responsible for recording test results as benchmarks on the *OSSCN*, and sending an email message to the Project Lead via the mailbox".

The CCT-I is responsible for providing the following to the Project Lead:

- CCT-I's name and telephone number.
- The appropriate test results.
- COTs name and telephone number, date and time completed.

Our analysis of the supplemental Qwest data reveals that this information still does not meet the requirements listed in the Job Aid. Failure to adhere to Unbundled Dark Fiber

Method and Procedures could result in unnecessary delays to provision the fiber to the CLEC. The delays could result in any of the following:

(i) Unnecessary and/or redundant testing on the fiber.
(ii) Inability to conduct educated troubleshooting should problems arise with the fiber in the future,
(iii) Provisioning inferior fiber to the CLEC that couldn't support the intended service offering. These delays could increase a CLEC's operating costs as a result of the added time required to ensure proper provisioning of the fiber, and could decrease its customers' satisfaction because of the possible delays.

Further, the required tests and corresponding results were designed to "establish a benchmark value for future reference." These records should remain available until the service is disconnected. The additional data provided by Qwest does not resolve this exception.

Key:
S—Satisfied. Qwest documentation has satisfied the required fields and the required fields were populated in OSSCN.
NS—Not Satisfied. The additional Qwest documentation is not populated with the required fields in OSSCN.
NO—Not Observed. KPMG did not observe the order in OSSCN.
NA—Not Applicable. The populated fields are not applicable to this order in OSSCN.

Table 2—Summary of KPMG Consulting's Analysis of Qwest's Supplemental Data

Ord Num	CCIT NM/NUM	1310nm LOSS A/Z	1310nm LOSS Z/A	1550nm LOSS A/Z	1550nm LOSS Z/A	COT/A NM/NUM	COT/Z NM/NUM	DT/TM COMP	Comments
Unavailable									
OC321490001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321475001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321504001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC318983001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321462001	NA	NA	NA	NA	NA	NA	NA	NA	Required entries were absent in OSS(
OC321506001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321345001	NO	NO	NO	NO	NO	NO	NO	NO	OSSCN not provided as requested "COC321 Could not be found in TIRKS, WFA or Ever This may be a reservation order in TIRKS t have been cancelled"
OC321426001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321437001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321504001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC321641001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC074369001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC074374001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC174121001	S	NS	NS	NS	NS	S	S	NS	Required entries were absent in OSS(
NC174122001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC176849001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC174125001	S	NS	NS	NS	NS	S	S	NS	Required entries were absent in OSS(
NC174139001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC174140001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC174151001	S	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
NC174152001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(
OC077764001	NS	NS	NS	NS	NS	NS	NS	NS	Required entries were absent in OSS(

Qwest Response to KPMG Comments (08/17/2001):

Upon investigation of the instances in the matrix sent by KPMG under separate cover, Qwest has determined that the specific tests KPMG is expecting to be added into the OSSCN screen are contract specific, and not uniform for all CLECs. This information was not clear in the documentation provided to KPMG, and that documentation will be amended. In addition, Qwest determined that the CLEC contact name and number was also an appropriate addition to the OSSCN screen, and the process will be updated to include that field as well. The test specific internal document will be available on August 24, 2001, with all applicable updates concluded by August 31, 2001. The documentation will be provided to KPMG through the Data Request process.

Qwest Supplemental Response to KPMG Comments (08/22/2001):

Qwest would like to advise KPMG that all document updates and changes will be provided on August 24, 2001 through the Data Request process.

Qwest 2nd Supplemental Response to KPMG Comments (08/24/2001):

Qwest is providing the updated unbundled dark fiber process through the DR process. This documentation clarifies that continuity testing is the fundamental test, but other tests may be included in specific CLEC contracts. Only those CLECs with the specific test parameters would have those tests updated on the OSSCN screen. In addition, Qwest has added the requirement of the Customer Contact name and number as well as the specific tests. No further documentation updates will be provided on 8/31/01.

The document provided in the Data Request is:

Designed Services DS 98-0001-H Unbundled Dark Fiber (UDF) Methods and Procedures CCT-I Job Aid

KPMG Supplemental Recommendation (09/04/2001):

KPMG Consulting reviewed the document, *Designed Services DS 98-0001-H Unbundled Dark Fiber (UDF) Methods and Procedures CCT-I Job Aid*, referenced by Qwest on August 24, 2001 in its second supplemental response to Exception 3010. KPMG Consulting's assessment consisted of a comparison between the current and previous version of this document, and a content review of the latest document. KPMG Consulting has concerns regarding the contents of this document and has identified the following issues and differences (between the current and past version of this document):

1) KPMG Consulting notes that whereas Qwest previously used the term, "Co-provider", it has now replaced all occurrences of it with the word, "CLEC". *(difference)*

2) On page 1 of the document under the, "Product Description" section, the sentence, "*UDF will be available to CLEC's as a pair(s) of unlit interoffice optical fibers (i.e., one fiber or two fibers) on*

which no terminating electronic equipment is provided by Qwest...", there is an inconsistency in the usage of the terms "...pair(s) of unlit..." and "...one fiber or two fibers...". A pair of unlit optical fibers should consist of two fiber strands, not one fiber. *(difference)*

3) On page 2 of the document under the, "Terms and Conditions" section, the ninth bullet, "*CLEC's will provide*" is an incomplete statement. *(issue)*

4) KPMG Consulting notes that on page 3 of the document under the, "Major Assumptions" section, the first bullet item, "*One or two fiber(s) will be required for a fiber optic system. Fiber(s) for transmit and receive working system.*" is new to this version of the document. Furthermore, this point requires further clarification since it does not clearly convey its intent. *(issue)*

5) KPMG Consulting notes that on page 3 of the document under the, "Major Assumptions" section, the fourth bullet item, "*Continuity testing will be completed jointly with the CLEC providing the light source on the Dark Fiber. The Tester will build a handoff and send it to the CORAC to inform them of the coordinated testing that needs to be performed. (ALL LIGHT SOURCES NECESSARY WILL BE PROVIDED BY THE CO-PROVIDER)*" is new to this document version. Previously, there was no indication that the CLEC was required to provide the light source in a continuity test. *(difference)*

6) On page 3 of the document under the, "Fiber Parameters and Losses" section, no parameters are provided. In the previous version of the document, these parameters were included. *(issue)*

7) KPMG Consulting notes that on page 7 of the document under the, "Testing Requirements – Unbundled Dark Fiber Test Parameters and Limits" section, the table has changed. Specifically, no parameters or limits are stated even though the section title would indicate such information would be present. Moreover, in the table under the "Limit" column, Qwest references, "*See Central Office Process.*" But KPMG Consulting was unable to find any documentation to support the "Central Office Process". *(issue)*

8) Finally, the document has been published as a DRAFT version dated August 3, 2001. A draft version document is not considered an officially released, operational, and functional document. Consequently, KPMG Consulting cannot consider this document to be part of Qwest's real world operational policy for the provisioning of dark fiber. Without supporting information to indicate new policies are in effect, KPMG Consulting presumes that Qwest personnel are still adhering to dark fiber provisioning processes and procedures prior to the publication of this document. *(issue)*

Because of the issues described above, Exception 3010 remains open.

Qwest Response to KPMG Supplemental Recommendation (09/07/2001):

Item Numbers 2, 3, and 7 all contain wording about changes that "will be" made to process documentation. All process and document changes noted in the supplemental response dated 09/06/01 have been made and provided as a Data Request associated with this Exception. There are no further document updates or changes to be provided to KPMG at this time.

Attachment(s): None

KPMG Response (December 6, 2001):

KPMG has received and reviewed the documents provided by Qwest and has not identified any additional issues at this time.

KPMG Consulting will continue to collect schedules from Qwest and will validate Dark Fiber as they complete. As agreed with the ROC TAG, observations of Dark Fiber orders will continue until a sample of 35 orders has been successfully tested or until all other testing ends.

KPMG Consulting recommends that Exception 3010 remain open pending successful retest results.

ROC_TI789_EXP3104_KPMG Disposition Report_02_26_02.doc

Initial Release Date: December 26, 2001
First Response Date: January 15, 2002
Disposition Report Date: February 26, 2002

EXCEPTION DISPOSITION REPORT

An exception has been identified as a result of the test activities associated with Provisioning Test 14.

Exception:

Qwest personnel did not adhere to DS1 Enhanced Extended Loop (EEL) circuit provisioning methods and procedures.

Summary of Exception:

KPMG Consulting observed eleven (11) high capacity DS1 EEL orders from November 8, 2001 to December 18, 2001. Qwest's methods and procedures documentation and task compliance rate was calculated to be 87%, which is below KPMG Consulting's applied benchmark of 95%. Qwest provided KPMG Consulting with multiple documents at the time observations were conducted that describe the methods and procedures Qwest personnel undergo to provision DS1 EEL circuits. All observations were analyzed to ascertain whether Qwest personnel adhered to the provisioning tasks as defined in the documentation provided.

Summary of Qwest's Initial and Supplementary Response:

All Qwest Implementors in the Centers were retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002. On January 30, 2001, Qwest provided KPMG Consulting with 15 revised methods and procedures documents. All Central Office and Field Technicians were provided with the revised methods and procedures documentation by February 1, 2002 and the materials were made available on Qwest's internal web site.

KPMG Consulting's Disposition Report (2/26/02):

Summary of KPMG Retest Activities:

KPMG Consulting began retesting activities on 1/15/02 and observed two (2) Test Bed EEL orders. KPMG Consulting requested and reviewed the WFA OSSCN logs for the Test Bed orders observed to determine if Qwest technicians performed the provisioning tasks outlined in Qwest's EEL method and procedure documentation. On January 17, 2002, the TAG agreed to suspend EEL observations due to the low volume of commercial activity.

Summary of KPMG Consulting's Retest Results:

Only two EEL DS1 Test Bed orders were available for observation during the retest period and this small number does not meet the minimum of 35 required for statistical testing. KPMG Consulting is unable to validate that the issues initially identified have been resolved.

KPMG Consulting recommends closing Exception 3104 as inconclusive. The inconclusive finding is due to insufficient volume of data from which to draw a conclusion.

ROC_TI789_EXP3104_Qwest_Supp_Response_02_19_02.doc

Test Vendor ID:	EXP 3104
Qwest Internal Tracking ID:	TI 789
Observation/Exception Title:	DS1 Enhanced Extended Loop (EEL) circuit
Test Type/Domain:	Test 14 - POP Provisioning
Date Qwest Received:	12/27/2001
Initial Response Date:	01/04/2002
Supplemental Response Date:	01/15/2002
2nd Supplemental Response Date:	01/30/2002
3rd Supplemental Response Date:	01/31/2002
4th Supplemental Response Date:	02/04/2002

Test Incident Summary:

An exception has been identified as a result of the test activities associated with Provisioning Test 14.

Exception:

Qwest personnel did not adhere to DS1 Enhanced Extended Loop (EEL) circuit provisioning methods and procedures.

Background:

An EEL is a combination of the Unbundled Local Loop and Unbundled Dedicated Interoffice Transport (UDIT) and/or Extended-Unbundled Dedicated Interoffice Transport. The EEL enables the CLEC to access end users not located in the same Qwest serving wire center collocated by the CLEC.

An EEL is similar to a DS1, DS3, and various DS0/voice access services. Access services are those services designed to connect an end user to a carrier. In this application, the EEL is designed to connect the end user to the CLEC but the EEL contains a limited subset of features and options available with the full access service product. Those features and options included are the ones available with the Unbundled Loop and Unbundled Dedicated Interoffice Transport Unbundled Network Elements. The EEL is available in two configurations: a) point-to-point EEL, and b) multiplexed EEL.

The provisioning of DS1 EEL services should mirror existing DS1 provisioning processes.

Qwest provided KPMG Consulting with multiple documents at the time observations were conducted that describe the methods and procedures (M&Ps) Qwest personnel undergo to provision DS1 EEL circuits.

KPMG Consulting applies a 95% benchmark against methods and procedure compliance[1]. All observations were analyzed to ascertain whether Qwest personnel adhered to the provisioning tasks as defined in the aforementioned documents.

[1] This standard is based on KPMG Consulting's professional judgment.

Issue:

KPMG Consulting observed eleven (11) high capacity DS1 EEL orders from November 8, 2001 to December 18, 2001. Qwest's methods and procedures documentation and task compliance rate was calculated to be 87%, which is below KPMG Consulting's applied benchmark value of 95%.

KPMG Consulting has provided Qwest with specific order information for each observation in a separate confidential document.

KPMG Consulting recognizes that Qwest has continually provided updated and additional documents as testing activities have progressed, especially with regards to Observation 3054 and Exception 3082. Where applicable and when made available, these new documents have been used. KPMG Consulting wishes to note that any data it gathers during testing activities are compared to the latest versions of documents in our possession at that time.

Impact:

Failure to provision high capacity DS1 EEL circuits in a manner consistent with documented methods and procedures may lead to the inconsistent delivery of products to CLECs. This could increase a CLEC's operating costs as a result of increased resources required to investigate the issue. A CLEC's customers may experience decreased levels of satisfaction if unnecessary delays occur.

Qwest Formal Response:

Qwest researched eight of the eleven observations, which were provided by KPMG on a Confidential Attachment. Three of the observations were satisfactory on all measures based on the data provided by KPMG. The observations will be referred to by Item No. as reflected on the Confidential Attachment. The results of the analysis are summarized below:

Item 1: 3 violations

The order was identified as NS in three fields. 1)M&P Doc. Violation, 2)QRSS, and 3)All Zero's HSTS Test Pattern.
1)Per Qwest research on the M&P violation, the Implementor had *DS1 Enhanced Extended Loop (EEL-P) DS1 EEL Provisioning, Issue 3, Issue Date August, 2001*, available. The Implementors had been trained on the above documentation on November 7-9, 2001. Although the Implementor had the correct document, he did not provide it to the auditor.
2 and 3)Qwest research indicates the Implementor performed the QRSS Test and the All Zero's Test, but the specific duration was not recorded within the OSSLOG or OSSCN. The OSSCN lists the break down of the 100.00% completion of the QRS, All 0s, 1/8 and All Ones testing with zero bit errors found. The Implementor should have referred to the internal process document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. A copy of this internal process document will be provided as a Confidential Data Request associated with this Exception. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 2: 1 violation
The order was identified as NS in the All One's Test Pattern Observation. Per Qwest research, the Technician did perform the All One's Test for one minute instead of five minutes. This was done in human error. All Qwest documentation states that the All Ones Test should be completed for five minutes with zero error seconds found. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 3: 1 violation
The order was identified as NS in the M&P observation. Qwest research indicates that the technician did provide the appropriate documentation. The technician had the internal process document, *Designed Services DS 98-001-C Unbundled Loop-CFA Version Methods and Procedures CCT-I Job Aid, Issue Date March 27, 2001*, which was the current document at the time the order was completed, November 12, 2001. This document has since been retired and replaced with *Network Complex Services Unbundled Loop – Basic Methods and Procedures IMPLEMENTORS Job Aid Effective Date 01-98, Issue 28, Revision Date December 14, 2001*. The current document was provided to KPMG, along with a revised process index, on December 21, 2001 as a Confidential Data Request associated with Observation 3054.

Item 4: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 5: 1 violation
The order was identified as NS in the dB Loss Observation. Qwest believes that the auditor expected to see a 0 dB level. The allowable variance appropriate for an end-user network interface is +/- 0.5dB. This information can be found in the *DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001*, which will be provided as a Confidential Data Request associated with this Exception.

Item 6: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 7: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 8: 1 violation
The order was identified as NS in the M&P Doc. Violation Observation field. Qwest research indicates that the auditor requested the parameters for dB loss. The Implementor should have referred to the process document, *T1 Checklist Coordinator Implementor, Version 2, Issue Date October 30, 2001*, for the test requirements, and then to the document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. The aforementioned internal process documents were provided to KPMG, along with a revised process document index, on December 21, 2001, as a Confidential Data Request associated with Observation 3054. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 9: 2 violations
The order was identified as NS in two Observation fields, 1)Demarcation Tagged and 2)All Zero's B8ZS Test Pattern.
1)Per Qwest research, the technician did tag the demarc and properly provided the information to the implementor. It is listed on the OSSCN as "RJ48C TAGGED," which will be provided as a Data Request associated to this response.
2)Qwest also performed the All Zero's Test, but no detail as to duration was documented. The Implementer should have referred to process document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 10: 1 violation
The order was identified as NS in the All One's Test Pattern Observation. Qwest research in the WFADO database indicates that the All One's Test Pattern was run for five minutes, and successfully completed. This is noted on the OSSLOG screen, which will be sent to KPMG as a Data Request associated with this Exception.

Item 11: 1 violation
The order was identified as NS in the All Zero's (B8ZS) Test Pattern Observation. The OSSCN notes that all tests were completed, but no details were provided. The technician should have followed the process document *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97,* for detail on logging the results on the OSSCN page. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Qwest Formal Response:

In conclusion, Qwest's research indicates that of the 11 violations, 4 of the violations were "S" Satisfied.

Item 3 was classified as NS for M&P. Qwest research indicates the technician had the correct documentation.

Item 5 was classified as NS for dB Loss Parameters. Qwest research indicates the reading was within the parameters for the dB test.

Item 9, violation 1, was classified as NS for Demarcation Tagged. Qwest documentation indicates the Demarcation was noted in the record.

Item 10 was classified as NS for All Ones Test Pattern. Qwest documentation indicates that All Ones Test Pattern run for the proper duration.

The other 7 violations were NS due to human errors. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

The following documents will be provided as a Confidential Data Request associated with this Exception:

1) 6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97

2) OSSCN Logs for Items 9 and 10.

3) DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001

Qwest Supplemental Response (01/15/2002):

Qwest committed to the following action items in the 1/4/02 response:

> *"All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.*
>
> *The following documents will be provided as a Confidential Data Request associated with this Exception:*
>
> *1) 6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*

2) *OSSCN Logs for Items 9 and 10.*
3) *DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001"*

Qwest completed retraining for provisioning DS1 EEL circuits on 1/15/02. Also, Qwest issued the confidential data request (DR # TI-789 - EXP 3104) on 1/4/02.

KPMG Comments (01/15/2002):

KPMG has reviewed the response from Qwest and has the following comments.

Item 1:

KPMG has received and reviewed the document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97.* In addition, KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 2:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 3:

KPMG disagrees with Qwest's findings. At the time of the observation, Qwest staff was unable to produce the necessary document KPMG expected. Furthermore, per KPMG's observation records, the Qwest staff provided the KPMG representative with hand written notes, which was not consistent with KPMG's documentation expectations. As a result, this task remains not satisfied.

Item 5:

At the time of this particular observation (12/04/01), Qwest did not provide KPMG with the document, *DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001.* Furthermore, the creation of this document was after the observation occurred. Consequently, KPMG cannot apply these new standards after the fact. KPMG expects Qwest to provide all the necessary documentation prior to KPMG personnel observing any service orders.

KPMG has reviewed the document DS1 Fundamentals, Testing the T1 Span, and requests that Qwest clarify the application of this document. KPMG would like to understand:

1. Who are the users of this document?
2. How is it released and distributed?
3. What type of document is this? i.e., Is this a training document, bulletin, methods and procedure, etc.?
4. Are all Qwest personnel provisioning DS1 EEL-P circuits expected to possess this document?
5. Should KPMG personnel expect Qwest personnel to posses this document and be conversant on its contents?

This violation remains not satisfied.

Item 8:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 9:

KPMG has reviewed the OSSCN log for this service order and agrees with Qwest's finding. The demarcation was tagged and properly identified. KPMG will change this task to Satisfied.

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 10:

KPMG has reviewed the OSSCN log for this service order and disagrees with Qwest's finding. KPMG noted the Qwest tester executed the All One's test pattern for only 3 minutes, which is not within the documented requirements KPMG possessed at the time of the observation. This task remains not satisfied.

Item 11:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

KPMG Summary of Violations:

The Item 3 violation remains Not Satisfied.

The Item 5 violation remains Not Satisfied.

The Item 9 demarc task will be changed to Satisfied.

The Item 10 violation remains Not Satisfied.

Based on the KPMG's reanalysis, Qwest's methods and procedures documentation and task compliance rate is 88.5%, which is below KPMG's applied benchmark value of 95%.

KPMG requests this Exception remain open. KPMG will continue testing activities after January 15, 2002.

Qwest Response to KPMG Comments (01/30/2002):

Qwest disagrees that items 3and 10 should be classified as "Not Satisfied." Qwest personnel correctly followed DS1 Enhanced Extended Loop (EEL) circuit provisioning methods and procedures during these 2 observations, as detailed below.

Item 3:

KPMG states that Qwest staff was unable to produce the necessary documents that KPMG expected to see. Qwest disagrees, as the Qwest technician and KPMG representative viewed the EEL process documents on the Network Complex Services (NCS) home page, and the Qwest technician printed hard copies of the EEL documents for the KPMG representative.

Item 5:

At the time of this particular observation (12/04/01), Qwest did not provide KPMG with the document, DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001. Furthermore, the creation of this document was after the observation occurred. Consequently, KPMG cannot apply these new standards after the fact. KPMG expects Qwest to provide all the necessary documentation prior to KPMG personnel observing any service orders.

Qwest initial research on Item 5 found that the technician had access to internal training documentation in addition to the M&Ps. The technician relied on the training documentation to support accepting the circuit with +0.3 dB, which was outside of the

-16.5 to 0 dB stated in the M&P. The training documentation, which referenced an acceptable +/- 2 dB loss variance in the test set, consisted of course material for a class delivered by Qwest's Network Training and Development Organization. Qwest sent the training documentation, DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001, to KPMG in a DR associated with Exception 3104 on January 7, 2002. Qwest notes that this documentation was not created after the date of the observation, as KPMG suggests. The documentation was created on January 1, 2001. KPMG's observation took place on December 4, 2001, 11 months after this document was created.

While the dB loss variance parameters set forth in the training documentation are appropriate, based on the manufacturer specifications for the test sets, this information should have been included in Qwest's formal M&Ps. All Qwest M&P documents for provisioning DS1 circuits will be revised to include the +/- 2 dB loss variance in the test sets, as specified by the manufacturer specifications. The manufacturer specifications for the test sets will be sent as an attachment to this Exception. The revised M&P documents will also be provided to KPMG through a Data Request associated with this Exception. The revised M&Ps were distributed and made available in the Designed Services Centers on January 30, 2002. The revised M&Ps will be distributed and made available to all Central Office and Field Technicians by February 1, 2002.

KPMG has reviewed the document DS1 Fundamentals, Testing the T1 Span, and requests that Qwest clarify the application of this document. KPMG would like to understand:

1. Who are the users of this document?
   The document DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001, is used by Qwest students participating in instructor-led classes provided by the Network Training and Development Organization.

2. How is it released and distributed?
   Technicians obtain the document by attending the class. This document is not for publication or external distribution.

3. What type of document is this? I.e., Is this a training document, bulletin, methods and procedure, etc.?
   This document is classroom training material provided by the Network Training and Development Organization to students during instructor-led classroom training.

4. Are all Qwest personnel in provisioning DS1 EEL-P circuits expected to possess this document?
   Qwest personnel provisioning DS1 EEL-P circuits are not expected to possess this document or use it as a reference guide in provisioning DS1 EEL-P circuits. The document is intended for use during the classroom training. Qwest technicians are expected to reference the DS1 M&P documents in provisioning DS1 EEL-P circuits, which will be updated to include the +/- 2 dB loss variance in the test sets that is referenced in the training document.

5. Should KPMG personnel expect Qwest personnel to posses this document and be conversant on its contents?
   KPMG personnel should not expect Qwest personnel to possess this document and be conversant with its contents. The document is designed to be used in classroom training. Qwest technicians are expected to reference the DS1 M&P documents in provisioning DS1 EEL-P circuits as noted above.

Item 10:

Qwest re-validated the OSSLOG provided with this Exception on January 7, 2002, and specifically refers KPMG to the entry dated December 10, 2001. The All 1's test was run for 5 minutes, in accordance with test parameters provided in Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – DS1 EEL Provisioning

Effective Date: August, 2001 Revision Date/Number: January 9, 2002, #5. The All 1's test result is documented in the last entry for December 10, 2001 on the OSSLOG screen.

Summary:

The following Qwest internal process documents were updated to include the +/- 2 dB loss variance in the test sets per manufacture specifications. The documents will be provided to KPMG through a DR associated with this Exception:

DOCUMENT	Revision Date	Issue No.
Local Network Operations Unbundled Digital Signal Level 1 (DS1) Capable Loop Field Technician Checklist	01/29/02	3
Local Network Operations Enhanced Extended Loop (EEL) – Version 4.0Field Technician Checklist	01/29/02	4
Local Network Operations Field Technician Checklist DS1 HDSL Technology	01/29/02	6
Local Network Operations Field Technician Checklist for DS1 Repeated T1 Technology	01/29/02	5
Designed Services DS 98-0001-C –Version 3.0 Unbundled Loop Methods and Procedures Unbundled Loop—DS I&M Methods and Procedures	01/29/02	
Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – Implementation DS1 EEL Provisioning DS1 Enhanced Extended Loop (EEL_P) DS1 EEL – Provisioning CUSTOMER COMMUNICATIONS TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN-UP TECHNICIANS)	01/30/02	6
T1 Checklist Coordinator/Implementor	01/29/02	2.1
Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist	01/29/02	1.4
Network Complex Services Unbundled Loop-QCCC Methods and Procedure Coordinators/Implementors Job Aid	01/29/02	40
Network Complex Services Unbundled Loop-Core Test Requirements Unbundled Loop Field DD Test Requirements Core Tests to be performed on all Unbundled Loops	01/29/02	6
BGS/CXR/ICS Service Delivery and Service Assurance Process Bulletin Unbundled Loop Pre-survey PB 00126-6	08/15/00	6
Network Complex Services Unbundled Loop-Basic Methods and Procedures Implementors Job Aid	01/29/02	31
Central Office (CO) Job Aid Doc No. CO-CL-09-0002	01/29/02	3
6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C	01/29/02	

Qwest Supplemental Response (01/31/2002):

The following table of documents was revised to add the M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, Issue No. 1.3, Revision Date 01/29/2002*, that was not included in the original table. In addition, the revised M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, ADSL CCT-I Coordination Checklist, Issue No. 1.4, Revised Date 01/29/2002*, replaces the M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, Issue No. 1.4, Revised Date 01/29/2002*. All documents listed on the original and revised tables were provided to KPMG through a DR associated with this Exception on January 30, 2002. The revised M&P, as previously noted, will be sent as a DR associated with this Exception.

DOCUMENT	Revision Date	Issue No.
Local Network Operations Unbundled Digital Signal Level 1 (DS1) Capable Loop Field Technician Checklist	01/29/02	3
Local Network Operations Enhanced Extended Loop (EEL) – Version 4.0Field Technician Checklist	01/29/02	4
Local Network Operations Field Technician Checklist DS1 HDSL Technology	01/29/02	6
Local Network Operations Field Technician Checklist for DS1 Repeated T1 Technology	01/29/02	5
Designed Services DS 98-0001-C –Version 3.0 Unbundled Loop Methods and Procedures Unbundled Loop—DS I&M Methods and Procedures	01/29/02	
Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – Implementation DS1 EEL Provisioning DS1 Enhanced Extended Loop (EEL_P) DS1 EEL – Provisioning CUSTOMER COMMUNICATIONS TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN-UP TECHNICIANS)	01/30/02	6
T1 Checklist Coordinator/Implementor	01/29/02	2.1
(Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist) **Revised M&P Title** (to be resent on 01/31/02) Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist ADSL CCT-I Coordinated Checklist	01/29/02	1.4
Network Complex Services Unbundled Loop-QCCC Methods and Procedure Coordinators/Implementors Job Aid	01/29/02	40
Network Complex Services Unbundled Loop-Core Test Requirements Unbundled Loop Field DD Test Requirements Core Tests to be performed on all Unbundled Loops	01/29/02	6
BGS/CXR/ICS Service Delivery and Service Assurance Process Bulletin Unbundled Loop Pre-survey PB 00126-6	08/15/00	6
Network Complex Services Unbundled Loop-Basic Methods and Procedures Implementors Job Aid	01/29/02	31

Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist	01/29/02	1.3
Central Office (CO) Job Aid Doc No. CO-CL-09-0002	01/29/02	3
6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C	01/29/02	

Qwest Supplemental Response (02/04/2002):

Qwest indicated in the 1/31/02 response that the document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, ADSL CCT-I Coordination Checklist, Issue No. 1.4, Revised Date 01/29/2002*, would be provided to via the data request process. The document was issued on 1/31/02 via data request # TI -789S2 (EXP3104).

Additionally, Qwest committed in the 1/30/02 response to provide the revised M&Ps to all Central Office and Field Technicians by February 1, 2002. As of 2/1/02, the documents are available to all Central Office and Field Technicians on Qwest's internal web site.

Qwest Supplemental Response (02/19/2002):

Qwest is providing clarification for the following documents.

Network Complex Services
Unbundled Loop – Basic Methods and Procedures
IMPLEMENTORS Job Aid
Effective Date 01-98
Revision Date & Number: 01-29-02, #31

Network Complex Services
Unbundled Loop – QCCC Methods and Procedure
Coordinators/Implementors Job Aid
Effective Date: 04-01
Revision Date & Number: 01-29-02, #40

Designed Services DS 98-0001-C – Version 3.0
Unbundled Loop Methods and Procedures
UNBUNDLED LOOP - DS I&M METHODS AND PROCEDURES
Revised January 29, 2002

T1 Checklist
Coordinator/Implementor
Revised: January 29, 2002; Version 2.1

Local Network Operations
Field Technician Checklist for DS1
Repeated T1 Technology
Revised 01/29/02 Issue 5

Local Network Operations
Field Technician Checklist for DS1
HDSL Technology
Revised 1/29/02, Issue 6

Network Complex/Designed Services
DS1 Enhanced Extended Loop (EEL-P) Job Aid
Customer Communication Technician – Implementation
DS1 EEL Provisioning
Effective Date: August 2001
Revision Date/Number: January 30, 2002, #6.
DS1 ENHANCED EXTENDED LOOP (EEL-P),
DS1 EEL – PROVISIONING, CUSTOMER COMMUNICATION TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN UP TECHNICIANS)

Local Network Operations
Enhanced Extended Loop (EEL) – Version 4.0
Field Technician Checklist
Revised date: 1/29/02

Local Network Operations
Unbundled Digital Signal Level 1 (DS1) Capable Loop
Field Technician Checklist
Revised date: 01/29/02 Issue 3

Qwest CLEC Coordination Center
QCCC Coordinated Installation Checklist
ADSL CCT-1 Coordinated Checklist
Revised: January 29, 2002 Version 1.4

Network Complex Services
Unbundled Loop-Core Test Requirements
Effective Date: 01-02
Revision Date & Number: 01-29-02, #6
Unbundled Loop Field DD Test Requirements
Core Tests to be performed on all Unbundled Loops

BGS/CXR/ICS
Service Delivery and Service Assurance
Process Bulletin
Unbundled Loop Pre-survey
Tracking No. PB 00126-6
Effective Date: August 15, 2000
-6 update 1-29-02

Qwest CLEC Coordination Center
QCCC Coordinated Installation Checklist
Revised: January 29, 2002 Version 1.3

Central Office (CO) Job Aid Doc No. CO-CL-09-0002
CORE TESTS TO BE PERFORMED ON ALL UNBUNDLED LOOPS
Document No. / Rev. CO-CL-09-0002/Rev 3
Effective Date: 01/31/2002 Revision Date: 01/29/2002

6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C
Created 06/26/97 Modified 01/29/2002

Attachment(s):

ROC_TI739_EXP3086_KPMG 2nd Disposition Report_04_22_02.doc

TI 739
EXCEPTION 3086—DISPOSITION REPORT
Qwest OSS Evaluation

Initial Release Date: November 26, 2001
First Response Date: March 7, 2002
Second Response Date: March 25, 2002
Disposition Report Release Date: April 5, 2002 (rescinded)
Third Supplemental Response Date: April 12, 2002
Fourth Supplemental Response Date: April 12, 2002
Disposition Report: April 22, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Qwest did not install non-dispatch orders for the P-CLEC within a time period that is in parity with Qwest's retail operations, as measured by the PID OP-4C.

Summary of Exception:

For the PID OP-4C, Qwest did not achieve the expected results for the Dual Test for Residential POTS and UNE-P in all three regions, and for Business POTS in the Eastern and Western region.

The following table shows the average installation interval for the P-CLEC and for the Qwest retail comparative.

Average Installation Interval for Failing Products and Regions

Product	Region	P-CLEC Average Days	Qwest Retail Comparative Days
Residential POTS	Eastern	4.4	1.5
Residential POTS	Central	2.5	1.9
Residential POTS	Western	2.8	1.7
Business POTS	Eastern	3.8	1.5
Business POTS	Western	2.7	1.6
UNE-P	Eastern	4.9	1.5
UNE-P	Central	2.8	1.9
UNE-P	Western	3.3	1.7

As shown by the table and confirmed by the Dual Test, Qwest did not provide the required parity service for this PID.

Summary of Qwest's First Response:

Qwest understands that KPMG has begun retesting this Exception in accordance with the Executive Committee's decision on 12/21/01 which supports using the 3.0 PID to

evaluate results of testing to date and that re-testing should be measured by the most recent PID changes approved by the TAG at the time the re-testing starts.

When the April 2000 Version 3.0 PID was approved, Qwest did not have the measurement capability to allow the comparison of like services. Therefore it was commonly understood that as that capability became available, Qwest would enhance their systems and measurements to allow the comparison of like services.

The use of PID 4.0 for retesting should, in itself, improve the results of OP-4C for the three products subject to this Exception. However, there is a possibility of negative results for OP-4C in one or more regions for one or more of these products, due only to the way OP-4C results are calculated and not due to non-discriminatory actions by Qwest. Qwest has made proposals to the TAG to improve OP-4C calculations, and those proposals are still under discussion with the TAG.

KPMG Consulting's Retest Results:

As a result of this exception, a retest was performed for Resale Residence, Resale Business and UNE-P in all regions where Qwest failed the original test. The retest results indicate that Qwest is now passing OP-4 for Resale Residence in all regions, and for Resale Business in the Western Region, but failing for Resale Business in the Eastern Region, and failing UNE-P for all three regions. The results are summarized in the table below. Note that the analysis was performed using January retail data, and that February retail data is required to complete the analysis. After obtaining February retail data from Qwest, KPMG Consulting will re-analyze the data, and will document any changes in the results that may occur.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests.

OP-4 Retest Results

Product	Region	Overall Result	First Dual Test p-value	Second Dual Test p-value	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	Pass	0.3921	0.0000	2.4	2.3	150	20,465	1.9
Business POTS	Eastern	Fail	0.0000	0.9888	2.2	1.3	145	670	1.7
UNE-P	Eastern	Fail	0.0070	0.6281	2.8	2.3	145	21,135	2.3
Residence POTS	Central	Pass	0.9567	0.0000	2.3	2.4	137	33,785	1.8
Business POTS	Central	Not retested							
UNE-P	Central	Fail	0.0239	0.0600	2.6	2.4	140	33,785	2.2
Residence POTS	Western	Pass	0.9971	0.0000	2.4	2.6	143	34,739	1.9
Business POTS	Western	Pass	0.0824	0.0067	2.5	2.2	160	1,225	1.8
UNE-P	Western	Fail	0.0058	0.5586	2.9	2.6	141	35,964	2.6

Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	2.6	145	0.0712	0.0031	Pass	37,976	2.3
UNE-P	Central	2.6	2.9	140	0.9939	0.0000	Pass	83,705	2.2
UNE-P	Western	2.9	2.8	141	0.2062	0.0002	Pass	57,408	2.4

This fresh look at the PID performance using the corrected data shows that the overall results for this PID have not changed. Qwest is passing the OP-4 requirement for all products except Resale Business in the Eastern Region.

KPMG Consulting acknowledges Qwest's reply comments explaining the cause of the data anomalies and the re-audit of the revised data by Liberty Consulting. KPMG Consulting has opened Exception 3120 to address this and other data integrity issues originally addressed in Observations 3089 and 3099.

This Disposition report was rescinded on 4/12/02 at the direction of the TAG.

Summary of KPMG Consulting's Fourth Response:

The results shown in KPMG Consulting's 4/5/02 Disposition Report were the subject of a lengthy discussion during the 4/11/02 TAG call. There was a concern that the results shown for UNE-P were not a true parity comparison with retail results because of the manner in which the weekends were treated in the retail data as compared to the P-CLEC data. For the retail residential analog, Saturdays were counted as part of the interval. However, for UNE-P, Saturdays were not counted when these orders were issued, per the published Qwest Standard Interval Guide. To adjust for this mismatch and make the comparison more like-for-like, the TAG instructed KPMG Consulting to revisit its analysis using only retail Business POTS data as the analog for UNE-P results. The outcome of this fresh look at the results are shown on the table below:

OP-4 Retest Results Reflecting Second Recast of Retail Data and Using Business POTS as the UNE-P Analog

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	1.5	145	0.0000	1.0000	Fail	1,270	2.2
UNE-P	Central	2.6	2.1	140	0.0058	0.5471	Fail	3,247	2.1

UNE-P	Western	2.9	2.2	141	0.0021	0.6430	Fail	2,410	2.3

Summary of Qwest's Fourth Response:

Although KPMG's recast OP-4C data indicates that UNE-P failed the dual test analysis, Qwest believes that its commercial results for OP-4C beginning with March 2002 data will validate that the average installation interval for non-dispatch wholesale orders is in parity with Qwest's retail comparative.

Qwest requests KPMG to close this exception as "closed/unresolved" for Eastern Region Resale Business POTS and for UNE-P in all three regions.

Disposition Report (04/22/02):

Based on Qwest's April 19 response, KPMG Consulting recommends that Exception 3086 be "closed/unresolved."

ROC_TI739_EXP3086_Qwest Response to KPMG 3rd Supp Rec_04_19_02.doc

Test Vendor ID:	EXP 3086
Qwest Internal Tracking ID:	TI 739
Observation/Exception Title:	Evaluation of PID OP-4C
Test Type/Domain:	Test 14
Date Qwest Received:	11/27/2001
Initial Response Date:	12/31/2001
Supplemental Response Date:	03/19/2002
2nd Supplemental Response Date:	03/21/2002
3rd Supplemental Response Date:	04/02/2002
4th Supplemental Response Date:	04/19/2002

Test Incident Summary:

An exception has been identified as a result of the evaluation of the Performance Indicator Definition (PID) OP-4C.

Exception:

Qwest did not install non-dispatch orders for the P-CLEC within a time period that is in parity with Qwest's retail operations, as measured by the PID OP-4C.

Background:

According to the PID OP-4C[1], Qwest is required to provide parity service in terms of its average installation interval for non-dispatch orders. This means that in order for Qwest to provide for a competitive environment, the average installation interval for the CLECs should be in parity with the appropriate retail comparative. KPMG Consulting measured this PID by region, for Residential Plain Old Telephone Service (POTS), Business POTS, and Unbundled Network Element-Platform (UNE-P) services.

In accordance with the Qwest OSS Evaluation Project Master Test Plan[2] -- Appendix G, KPMG Consulting measured compliance with this PID using the Dual Hypothesis Test ("Dual Test"). In the Dual Test, two hypotheses are tested. The first hypothesis assumes Qwest is meeting the parity standard, and the second hypothesis assumes Qwest is not meeting the parity standard. Qwest fails the Dual Test if the first hypothesis is rejected and the second hypothesis is not rejected.

The data collected for this analysis consists of P-CLEC information for the period beginning April 13, 2001 and ending November 13, 2001, and Qwest retail data for the period beginning May 2001 and ending September 2001.

Issue:

[1] Service Performance Indicator Definition, ROC 271 Working PID, Version 4.0; October 22, 2001.
[2] The Regional Oversight Committee (ROC) Third Party Test, Qwest OSS Evaluation Project Master Test Plan, Final Release; Version 3.1; November 17, 2000.

For the PID OP-4C, Qwest did not achieve the expected results for the Dual Test for Residential POTS and UNE-P in all three regions, and for Business POTS in the Eastern and Western region.

The following table shows the average installation interval for the P-CLEC and for the Qwest retail comparative.

Average Installation Interval for Failing Products and Regions

Product	Region	P-CLEC Average Days	Qwest Retail Comparative Days
Residential POTS	Eastern	4.4	1.5
Residential POTS	Central	2.5	1.9
Residential POTS	Western	2.8	1.7
Business POTS	Eastern	3.8	1.5
Business POTS	Western	2.7	1.6
UNE-P	Eastern	4.9	1.5
UNE-P	Central	2.8	1.9
UNE-P	Western	3.3	1.7

As shown by the table and confirmed by the Dual Test, Qwest did not provide the required parity service for this PID.

Impact:

If Qwest does not provide service to CLECs in parity to that of its retail operations, CLECs could experience an increase in costs because of the additional resources required to investigate why commitments were not met. Also, CLECs' customers could experience a decrease in satisfaction if commitments are not met when expected.

Qwest Formal Response:

Qwest understands that KPMG has begun retesting this Exception in accordance with the Executive Committee's decision on 12/21/01 which supports using the 3.0 PID to evaluate results of testing to date and that re-testing should be measured by the most recent PID changes approved by the TAG at the time the re-testing starts.

When the April 2000 Version 3.0 PID was approved, Qwest did not have the measurement capability to allow the comparison of like services. Therefore it was commonly understood that as that capability became available, Qwest would enhance their systems and measurements to allow the comparison of like services .

The use of PID 4.0 for retesting should, in itself, improve the results of OP-4C for the three products subject to this Exception. However, there is a possibility of negative results for OP-4C in one or more regions for one or more of these products, due only to the way OP-4C results are calculated and not due to non-discriminatory actions by Qwest. Qwest has made proposals to the TAG to improve OP-4C calculations, and those proposals are still under discussion with the TAG.

KPMG Comments (03/08/2002):

As a result of this exception, a retest was performed for Resale Residence, Resale Business and UNE-P in all regions where Qwest failed the original test. The retest results indicate that Qwest is now passing OP-4 for Resale Residence in all regions, and for Resale Business in the Western Region, but failing for Resale Business in the Eastern Region, and failing UNE-P for all three regions. The results are summarized in the table below. Note that the analysis was performed using January retail data, and that February retail data is required to complete the analysis. After obtaining February retail data from Qwest, KPMG Consulting will re-analyze the data, and will document any changes in the results that may occur.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests.

OP-4 Retest Results

Product	Region	Overall Result	First Dual Test p-value	Second Dual Test p-value	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	Pass	0.3921	0.0000	2.4	2.3	150	20,465	1.9
Business POTS	Eastern	Fail	0.0000	0.9888	2.2	1.3	145	670	1.7
UNE-P	Eastern	Fail	0.0070	0.6281	2.8	2.3	145	21,135	2.3
Residence POTS	Central	Pass	0.9567	0.0000	2.3	2.4	137	33,785	1.8
Business POTS	Central	Not retested							
UNE-P	Central	Fail	0.0239	0.0600	2.6	2.4	140	33,785	2.2
Residence POTS	Western	Pass	0.9971	0.0000	2.4	2.6	143	34,739	1.9
Business POTS	Western	Pass	0.0824	0.0067	2.5	2.2	160	1,225	1.8
UNE-P	Western	Fail	0.0058	0.5586	2.9	2.6	141	35,964	2.6

Based on the failing results of the OP4 PID retest KPMG Consulting recommends that exception 3086 remain open.

Qwest Response to KPMG Comments (03/19/2002):

As a result of this exception, Qwest identified a reporting anomaly with respect to the calculation of the retail and Residence Resale results for the OP 4C PID. Qwest has corrected the data problem and has recast the December and January results with the production of the February results for this PID. Qwest believes the reporting anomaly caused the disparate results. Qwest requests KPMG review and analyze the revised results associated with this exception.

Idaho Staff Comments (03/20/2002):

Idaho Staff requests that Qwest identify the specifics of the "reporting anomaly" that Qwest corrected. It is also our understanding that Qwests modification of the data collection and reporting procedures may require a re-audit of OP-4C by Liberty.

Qwest Response to Idaho Staff Comments (03/21/2002):

In response to Observation 2080 in the Functionality Test, Qwest implemented additional code to count Saturday as a regular Business Day for non dispatch Residence Retail and Resale due date interval calculations. The minor code change was implemented with 2/02 data and rerun against 12/01 and 01/02 results. It counts Saturday in the interval calculations for these products rather than just counting it if the order completed on a Saturday.

Qwest offers Saturday due dates and counts Saturday in the interval calculation during the ordering and provisioning of these non dispatch orders; the PID results now reflect that business practice.

KPMG Supplemental Recommendation (03/25/2002):

KPMG Consulting has received February data and an update for January, with major changes to the retail intervals. KPMG Consulting has not audited these changes, but is using them in the re-analysis shown here as requested by Qwest in its reply comments of 3/19/01.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests. Based on these results, Qwest is still failing Business POTs in the Eastern Region, but is now passing UNE-P as well as the other products in all regions.

OP-4 Retest Results Using Recast Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.7	150	0.9999	0.0000	Pass	38,726	1.9
Residence POTS	Central	2.3	2.8	137	1.0000	0.0000	Pass	62,240	1.9
Residence POTS	Western	2.4	3.1	143	1.0000	0.0000	Pass	67,006	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8315	Fail	1,110	1.3
Business POTS	Central						Not retested	2,427	
Business POTS	Western	2.5	2.2	160	0.0913	0.0041	Pass	2,338	1.8
UNE-P	Eastern	2.8	2.7	145	0.2467	0.0000	Pass	39,836	2.3
UNE-P	Central	2.6	2.8	140	0.9618	0.0000	Pass	64,667	2.2
UNE-P	Western	2.9	3.1	141	0.8357	0.0000	Pass	69,344	2.4

KPMG Consulting requests that Qwest provide more specifics about the nature of the reporting anomaly and the associated correction that produced these revised results. Additionally, KPMG Consulting would like to know if the new reporting process and results have been or will be audited by Liberty Consulting.

Based on the failure of the OP4 PID for resale business POTS services in the Eastern Region and on Qwest's reply to KPMG Consulting's request for additional information regarding the recast data, KPMG Consulting recommends that this exception remain open.

Qwest Response to KPMG Supplemental Recommendation (04/02/2002):

The reporting anomaly Qwest described in its 3/18/02 response affected the reporting of non-dispatch residential resale and retail orders for which the installation interval included a Saturday. Saturday was being counted as a business day for these types of orders, and included in the installation interval calculation, only if the due date fell on Saturday.

In addition, subsequent to 3/18/02, Qwest identified a calculation error that affected reporting for wholesale and retail orders with a Saturday or Sunday APP date. For these orders, regulatory reporting for OP-4 was including one additional business day in the interval calculation. In the recast data, the calculation has been corrected accordingly for these orders except where orders should count Saturday as a business day (non-dispatch residential resale and retail orders) as described in the first paragraph of this response.

Qwest provided KPMG a recast OP-4 data set for January and February on 4/01/02. While Qwest understands that KPMG will need to analyze the recast data set, Qwest believes that the revised results demonstrate that Qwest is meeting all OP-4 PID sub-measurements, with the exception of Eastern Region Resale Business POTs . Qwest requests that KPMG not retest for Eastern Region Resale Business POTs, as Qwest will rely upon its commercial results to prove parity for this product in its filings for the Eastern Region States. Accordingly, Qwest requests that KPMG Consulting close this exception as "closed/unresolved" for Eastern Region Resale Business POTs.

Pursuant to KPMG's 3/25/02 response, Qwest also requested that Liberty review and analyze the revised results associated with the recast data set. Liberty indicated that it would complete this review no later than 4/10/02.

KPMG Disposition Report (04/05/2002):

The results of KPMG Consulting's reanalysis of the OP-4 results using the second recast of the Qwest retail data are shown in the table below.

OP-4 Retest Results Using Second Recast of Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	2.6	145	0.0712	0.0031	Pass	37,976	2.3
UNE-P	Central	2.6	2.9	140	0.9939	0.0000	Pass	83,705	2.2
UNE-P	Western	2.9	2.8	141	0.2062	0.0002	Pass	57,408	2.4

This fresh look at the PID performance using the corrected data shows that the overall results for this PID have not changed. Qwest is passing the OP-4 requirement for all products except Resale Business in the Eastern Region.

START

OF

RETAKE

Issue:

KPMG Consulting observed eleven (11) high capacity DS1 EEL orders from November 8, 2001 to December 18, 2001. Qwest's methods and procedures documentation and task compliance rate was calculated to be 87%, which is below KPMG Consulting's applied benchmark value of 95%.

KPMG Consulting has provided Qwest with specific order information for each observation in a separate confidential document.

KPMG Consulting recognizes that Qwest has continually provided updated and additional documents as testing activities have progressed, especially with regards to Observation 3054 and Exception 3082. Where applicable and when made available, these new documents have been used. KPMG Consulting wishes to note that any data it gathers during testing activities are compared to the latest versions of documents in our possession at that time.

Impact:

Failure to provision high capacity DS1 EEL circuits in a manner consistent with documented methods and procedures may lead to the inconsistent delivery of products to CLECs. This could increase a CLEC's operating costs as a result of increased resources required to investigate the issue. A CLEC's customers may experience decreased levels of satisfaction if unnecessary delays occur.

Qwest Formal Response:

Qwest researched eight of the eleven observations, which were provided by KPMG on a Confidential Attachment. Three of the observations were satisfactory on all measures based on the data provided by KPMG. The observations will be referred to by Item No. as reflected on the Confidential Attachment. The results of the analysis are summarized below:

Item 1: 3 violations

The order was identified as NS in three fields, 1)M&P Doc. Violation, 2)QRSS, and 3)All Zero's B8ZS Test Pattern.
1)Per Qwest research on the M&P violation, the Implementor had *DS1 Enhanced Extended Loop (EEL-P) DS1 EEL Provisioning, Issue 3, Issue Date August, 2001*, available. The Implementors had been trained on the above documentation on November 7-9, 2001. Although the Implementor had the correct document, he did not provide it to the auditor.
2 and 3)Qwest research indicates the Implementor performed the QRSS Test and the All Zero's Test, but the specific duration was not recorded within the OSSLOG or OSSCN. The OSSCN lists the break down of the 100.00% completion of the QRS, All 0s, 1/8 and All Ones testing with zero bit errors found. The Implementor should have referred to the internal process document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. A copy of this internal process document will be provided as a Confidential Data Request associated with this Exception. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 2: 1 violation
The order was identified as NS in the All One's Test Pattern Observation. Per Qwest research, the Technician did perform the All One's Test for one minute instead of five minutes. This was done in human error. All Qwest documentation states that the All Ones Test should be completed for five minutes with zero error seconds found. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 3: 1 violation
The order was identified as NS in the M&P observation. Qwest research indicates that the technician did provide the appropriate documentation. The technician had the internal process document, *Designed Services DS 98-001-C Unbundled Loop-CFA Version Methods and Procedures CCT-I Job Aid, Issue Date March 27, 2001*, which was the current document at the time the order was completed, November 12, 2001. This document has since been retired and replaced with *Network Complex Services Unbundled Loop – Basic Methods and Procedures IMPLEMENTORS Job Aid Effective Date 01-98, Issue 28, Revision Date December 14, 2001*. The current document was provided to KPMG, along with a revised process index, on December 21, 2001 as a Confidential Data Request associated with Observation 3054.

Item 4: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 5: 1 violation
The order was identified as NS in the dB Loss Observation. Qwest believes that the auditor expected to see a 0 dB level. The allowable variance appropriate for an end-user network interface is +/- 0.5dB. This information can be found in the *DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001*, which will be provided as a Confidential Data Request associated with this Exception.

Item 6: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 7: Satisfactory
According to KPMG's confidential attachment, this order was completed properly demonstrating all of KPMG's observable testing steps.

Item 8: 1 violation
The order was identified as NS in the M&P Doc. Violation Observation field. Qwest research indicates that the auditor requested the parameters for dB loss. The Implementor should have referred to the process document, *T1 Checklist Coordinator Implementor, Version 2, Issue Date October 30, 2001*, for the test requirements, and then to the document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. The aforementioned internal process documents were provided to KPMG, along with a revised process document index, on December 21, 2001, as a Confidential Data Request associated with Observation 3054. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 9: 2 violations
The order was identified as NS in two Observation fields, 1)Demarcation Tagged and 2)All Zero's B8ZS Test Pattern.
1)Per Qwest research, the technician did tag the demarc and properly provided the information to the implementor. It is listed on the OSSCN as "RJ48C TAGGED," which will be provided as a Data Request associated to this response.
2)Qwest also performed the All Zero's Test, but no detail as to duration was documented. The Implementor should have referred to process document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*, for detail on logging the results on the OSSCN page. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Item 10: 1 violation
The order was identified as NS in the All One's Test Pattern Observation. Qwest research in the WFADO database indicates that the All One's Test Pattern was run for five minutes, and successfully completed. This is noted on the OSSLOG screen, which will be sent to KPMG as a Data Request associated with this Exception.

Item 11: 1 violation
The order was identified as NS in the All Zero's (B8ZS) Test Pattern Observation. The OSSCN notes that all tests were completed, but no details were provided. The technician should have followed the process document *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97,* for detail on logging the results on the OSSCN page. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

Qwest Formal Response:

In conclusion, Qwest's research indicates that of the 11 violations, 4 of the violations were "S" Satisfied.

Item 3 was classified as NS for M&P. Qwest research indicates the technician had the correct documentation.

Item 5 was classified as NS for dB Loss Parameters. Qwest research indicates the reading was within the parameters for the dB test.

Item 9, violation 1, was classified as NS for Demarcation Tagged. Qwest documentation indicates the Demarcation was noted in the record.

Item 10 was classified as NS for All Ones Test Pattern. Qwest documentation indicates that All Ones Test Pattern run for the proper duration.

The other 7 violations were NS due to human errors. All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.

The following documents will be provided as a Confidential Data Request associated with this Exception:

1) 6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97

2) OSSCN Logs for Items 9 and 10.

3) DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001

Qwest Supplemental Response (01/15/2002):

Qwest committed to the following action items in the 1/4/02 response:

> *"All Implementors in the Centers will be retrained and provided with the most current documentation for provisioning DS1 EEL circuits by January 15, 2002.*
>
> *The following documents will be provided as a Confidential Data Request associated with this Exception:*
>
> *1) 6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97*

2) *OSSCN Logs for Items 9 and 10.*
3) *DS1 Fundamentals, Testing the T1 Span Issue Date January 1, 2001"*

Qwest completed retraining for provisioning DS1 EEL circuits on 1/15/02. Also, Qwest issued the confidential data request (DR # TI-789 - EXP 3104) on 1/4/02.

KPMG Comments (01/15/2002):

KPMG has reviewed the response from Qwest and has the following comments.

Item 1:

KPMG has received and reviewed the document, *6.0 PTD EVENT DATE, 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C, created on 6/26/97.* In addition, KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 2:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 3:

KPMG disagrees with Qwest's findings. At the time of the observation, Qwest staff was unable to produce the necessary document KPMG expected. Furthermore, per KPMG's observation records, the Qwest staff provided the KPMG representative with hand written notes, which was not consistent with KPMG's documentation expectations. As a result, this task remains not satisfied.

Item 5:

At the time of this particular observation (12/04/01), Qwest did not provide KPMG with the document, *DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001.* Furthermore, the creation of this document was after the observation occurred. Consequently, KPMG cannot apply these new standards after the fact. KPMG expects Qwest to provide all the necessary documentation prior to KPMG personnel observing any service orders.

KPMG has reviewed the document DS1 Fundamentals, Testing the T1 Span, and requests that Qwest clarify the application of this document. KPMG would like to understand:

1. Who are the users of this document?
2. How is it released and distributed?
3. What type of document is this? i.e., Is this a training document, bulletin, methods and procedure, etc.?
4. Are all Qwest personnel provisioning DS1 EEL-P circuits expected to possess this document?
5. Should KPMG personnel expect Qwest personnel to posses this document and be conversant on its contents?

This violation remains not satisfied.

Item 8:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 9:

KPMG has reviewed the OSSCN log for this service order and agrees with Qwest's finding. The demarcation was tagged and properly identified. KPMG will change this task to Satisfied.

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

Item 10:

KPMG has reviewed the OSSCN log for this service order and disagrees with Qwest's finding. KPMG noted the Qwest tester executed the All One's test pattern for only 3 minutes, which is not within the documented requirements KPMG possessed at the time of the observation. This task remains not satisfied.

Item 11:

KPMG will resume testing activities after January 15, 2002 to accommodate Qwest's training schedule.

KPMG Summary of Violations:

The Item 3 violation remains Not Satisfied.

The Item 5 violation remains Not Satisfied.

The Item 9 demarc task will be changed to Satisfied.

The Item 10 violation remains Not Satisfied.

Based on the KPMG's reanalysis, Qwest's methods and procedures documentation and task compliance rate is 88.5%, which is below KPMG's applied benchmark value of 95%.

KPMG requests this Exception remain open. KPMG will continue testing activities after January 15, 2002.

Qwest Response to KPMG Comments (01/30/2002):

Qwest disagrees that items 3and 10 should be classified as "Not Satisfied." Qwest personnel correctly followed DS1 Enhanced Extended Loop (EEL) circuit provisioning methods and procedures during these 2 observations, as detailed below.

Item 3:

KPMG states that Qwest staff was unable to produce the necessary documents that KPMG expected to see. Qwest disagrees, as the Qwest technician and KPMG representative viewed the EEL process documents on the Network Complex Services (NCS) home page, and the Qwest technician printed hard copies of the EEL documents for the KPMG representative.

Item 5:

At the time of this particular observation (12/04/01), Qwest did not provide KPMG with the document, DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001. Furthermore, the creation of this document was after the observation occurred. Consequently, KPMG cannot apply these new standards after the fact. KPMG expects Qwest to provide all the necessary documentation prior to KPMG personnel observing any service orders.

Qwest initial research on Item 5 found that the technician had access to internal training documentation in addition to the M&Ps. The technician relied on the training documentation to support accepting the circuit with +0.3 dB, which was outside of the

-16.5 to 0 dB stated in the M&P. The training documentation, which referenced an acceptable +/- 2 dB loss variance in the test set, consisted of course material for a class delivered by Qwest's Network Training and Development Organization. Qwest sent the training documentation, DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001, to KPMG in a DR associated with Exception 3104 on January 7, 2002. Qwest notes that this documentation was not created after the date of the observation, as KPMG suggests. The documentation was created on January 1, 2001. KPMG's observation took place on December 4, 2001, 11 months after this document was created.

While the dB loss variance parameters set forth in the training documentation are appropriate, based on the manufacturer specifications for the test sets, this information should have been included in Qwest's formal M&Ps. All Qwest M&P documents for provisioning DS1 circuits will be revised to include the +/- 2 dB loss variance in the test sets, as specified by the manufacturer specifications. The manufacturer specifications for the test sets will be sent as an attachment to this Exception. The revised M&P documents will also be provided to KPMG through a Data Request associated with this Exception. The revised M&Ps were distributed and made available in the Designed Services Centers on January 30, 2002. The revised M&Ps will be distributed and made available to all Central Office and Field Technicians by February 1, 2002.

KPMG has reviewed the document DS1 Fundamentals, Testing the T1 Span, and requests that Qwest clarify the application of this document. KPMG would like to understand:

1. Who are the users of this document?
   The document DS1 Fundamentals, Testing the T1 Span, Issue Date January 1, 2001, is used by Qwest students participating in instructor-led classes provided by the Network Training and Development Organization.

2. How is it released and distributed?
   Technicians obtain the document by attending the class. This document is not for publication or external distribution.

3. What type of document is this? I.e., Is this a training document, bulletin, methods and procedure, etc.?
   This document is classroom training material provided by the Network Training and Development Organization to students during instructor-led classroom training.

4. Are all Qwest personnel in provisioning DS1 EEL-P circuits expected to possess this document?
   Qwest personnel provisioning DS1 EEL-P circuits are not expected to possess this document or use it as a reference guide in provisioning DS1 EEL-P circuits. The document is intended for use during the classroom training. Qwest technicians are expected to reference the DS1 M&P documents in provisioning DS1 EEL-P circuits, which will be updated to include the +/- 2 dB loss variance in the test sets that is referenced in the training document.

5. Should KPMG personnel expect Qwest personnel to posses this document and be conversant on its contents?
   KPMG personnel should not expect Qwest personnel to possess this document and be conversant with its contents. The document is designed to be used in classroom training. Qwest technicians are expected to reference the DS1 M&P documents in provisioning DS1 EEL-P circuits as noted above.

Item 10:

Qwest re-validated the OSSLOG provided with this Exception on January 7, 2002, and specifically refers KPMG to the entry dated December 10, 2001. The All 1's test was run for 5 minutes, in accordance with test parameters provided in Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – DS1 EEL Provisioning

Effective Date: August, 2001 Revision Date/Number: January 9, 2002, #5. The All 1's test result is documented in the last entry for December 10, 2001 on the OSSLOG screen.

Summary:

The following Qwest internal process documents were updated to include the +/- 2 dB loss variance in the test sets per manufacture specifications. The documents will be provided to KPMG through a DR associated with this Exception:

DOCUMENT	Revision Date	Issue No.
Local Network Operations Unbundled Digital Signal Level 1 (DS1) Capable Loop Field Technician Checklist	01/29/02	3
Local Network Operations Enhanced Extended Loop (EEL) – Version 4.0Field Technician Checklist	01/29/02	4
Local Network Operations Field Technician Checklist DS1 HDSL Technology	01/29/02	6
Local Network Operations Field Technician Checklist for DS1 Repeated T1 Technology	01/29/02	5
Designed Services DS 98-0001-C –Version 3.0 Unbundled Loop Methods and Procedures Unbundled Loop—DS I&M Methods and Procedures	01/29/02	
Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – Implementation DS1 EEL Provisioning DS1 Enhanced Extended Loop (EEL_P) DS1 EEL – Provisioning CUSTOMER COMMUNICATIONS TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN-UP TECHNICIANS)	01/30/02	6
T1 Checklist Coordinator/Implementor	01/29/02	2.1
Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist	01/29/02	1.4
Network Complex Services Unbundled Loop-QCCC Methods and Procedure Coordinators/Implementors Job Aid	01/29/02	40
Network Complex Services Unbundled Loop-Core Test Requirements Unbundled Loop Field DD Test Requirements Core Tests to be performed on all Unbundled Loops	01/29/02	6
BGS/CXR/ICS Service Delivery and Service Assurance Process Bulletin Unbundled Loop Pre-survey PB 00126-6	08/15/00	6
Network Complex Services Unbundled Loop-Basic Methods and Procedures Implementors Job Aid	01/29/02	31
Central Office (CO) Job Aid Doc No. CO-CL-09-0002	01/29/02	3
6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C	01/29/02	

Qwest Supplemental Response (01/31/2002):

The following table of documents was revised to add the M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, Issue No. 1.3, Revision Date 01/29/2002*, that was not included in the original table. In addition, the revised M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, ADSL CCT-I Coordination Checklist, Issue No. 1.4, Revised Date 01/29/2002*, replaces the M&P document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, Issue No. 1.4, Revised Date 01/29/2002*. All documents listed on the original and revised tables were provided to KPMG through a DR associated with this Exception on January 30, 2002. The revised M&P, as previously noted, will be sent as a DR associated with this Exception.

DOCUMENT	Revision Date	Issue No.
Local Network Operations Unbundled Digital Signal Level 1 (DS1) Capable Loop Field Technician Checklist	01/29/02	3
Local Network Operations Enhanced Extended Loop (EEL) – Version 4.0Field Technician Checklist	01/29/02	4
Local Network Operations Field Technician Checklist DS1 HDSL Technology	01/29/02	6
Local Network Operations Field Technician Checklist for DS1 Repeated T1 Technology	01/29/02	5
Designed Services DS 98-0001-C –Version 3.0 Unbundled Loop Methods and Procedures Unbundled Loop—DS I&M Methods and Procedures	01/29/02	
Network Complex/Designed Services DS1 Enhanced Extended Loop (EEL-P) Job Aid Customer Communication Technician – Implementation DS1 EEL Provisioning DS1 Enhanced Extended Loop (EEL_P) DS1 EEL – Provisioning CUSTOMER COMMUNICATIONS TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN-UP TECHNICIANS)	01/30/02	6
T1 Checklist Coordinator/Implementor	01/29/02	2.1
(Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist) **Revised M&P Title** (to be resent on 01/31/02) Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist ADSL CCT-I Coordinated Checklist	01/29/02	1.4
Network Complex Services Unbundled Loop-QCCC Methods and Procedure Coordinators/Implementors Job Aid	01/29/02	40
Network Complex Services Unbundled Loop-Core Test Requirements Unbundled Loop Field DD Test Requirements Core Tests to be performed on all Unbundled Loops	01/29/02	6
BGS/CXR/ICS Service Delivery and Service Assurance Process Bulletin Unbundled Loop Pre-survey PB 00126-6	08/15/00	6
Network Complex Services Unbundled Loop-Basic Methods and Procedures Implementors Job Aid	01/29/02	21

Qwest CLEC Coordination Center QCCC Coordinated Installation Checklist	01/29/02	1.3
Central Office (CO) Job Aid Doc No. CO-CL-09-0002	01/29/02	5
6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Notes) in WFA/C	01/29/02	

Qwest Supplemental Response (02/04/2002):

Qwest indicated in the 1/31/02 response that the document, *Qwest CLEC Coordination Center, QCCC Coordinated Installation Checklist, ADSL CCT-I Coordination Checklist, Issue No. 1.4, Revised Date 01/29/2002*, would be provided to via the data request process. The document was issued on 1/31/02 via data request # TI -789S2 (EXP3104).

Additionally, Qwest committed in the 1/30/02 response to provide the revised M&Ps to all Central Office and Field Technicians by February 1, 2002. As of 2/1/02, the documents are available to all Central Office and Field Technicians on Qwest's internal web site.

Qwest Supplemental Response (02/19/2002):

Qwest is providing clarification for the following documents.

Network Complex Services
Unbundled Loop – Basic Methods and Procedures
IMPLEMENTORS Job Aid
Effective Date 01-98
Revision Date & Number: 01-29-02, #31

Network Complex Services
Unbundled Loop – QCCC Methods and Procedure
Coordinators/Implementors Job Aid
Effective Date: 04-01
Revision Date & Number: 01-29-02, #40

Designed Services DS 98-0001-C – Version 3.0
Unbundled Loop Methods and Procedures
UNBUNDLED LOOP - DS I&M METHODS AND PROCEDURES
Revised January 29, 2002

T1 Checklist
Coordinator/Implementor
Revised: January 29, 2002; Version 2.1

Local Network Operations
Field Technician Checklist for DS1
Repeated T1 Technology
Revised 01/29/02 Issue 5

Local Network Operations
Field Technician Checklist for DS1
HDSL Technology
Revised 1/29/02, Issue 6

Network Complex/Designed Services
DS1 Enhanced Extended Loop (EEL-P) Job Aid
Customer Communication Technician – Implementation
DS1 EEL Provisioning
Effective Date: August 2001
Revision Date/Number: January 30, 2002, #6.
DS1 ENHANCED EXTENDED LOOP (EEL-P).
DS1 EEL – PROVISIONING, CUSTOMER COMMUNICATION TECHNICIAN – IMPLEMENTATION GROUP (TEST AND TURN UP TECHNICIANS)

Local Network Operations
Enhanced Extended Loop (EEL) – Version 4.0
Field Technician Checklist
Revised date: 1/29/02

Local Network Operations
Unbundled Digital Signal Level 1 (DS1) Capable Loop
Field Technician Checklist
Revised date: 01/29/02 Issue 3

Qwest CLEC Coordination Center
QCCC Coordinated Installation Checklist
ADSL CCT-I Coordinated Checklist
Revised: January 29, 2002 Version 1.4

Network Complex Services
Unbundled Loop-Core Test Requirements
Effective Date: 01-02
Revision Date & Number: 01-29-02, #6
Unbundled Loop Field DD Test Requirements
Core Tests to be performed on all Unbundled Loops

BGS/CXR/ICS
Service Delivery and Service Assurance
Process Bulletin
Unbundled Loop Pre-survey
Tracking No. PB 00126-6
Effective Date: August 15, 2000
-6 update 1-29-02

Qwest CLEC Coordination Center
QCCC Coordinated Installation Checklist
Revised: January 29, 2002 Version 1.3

Central Office (CO) Job Aid Doc No. CO-CL-09-0002
CORE TESTS TO BE PERFORMED ON ALL UNBUNDLED LOOPS
Document No. / Rev. CO-CL-09-0002/Rev 3
Effective Date: 01/31/2002 Revision Date: 01/29/2002

6.0 PTD Event Date 6.03 Document Test Results in WFA/C, OSSCN (Circuit Noise) in WFA/C
Created 06/26/97 Modified 01/29/2002

Attachment(s):

ROC_TI739_EXP3086_KPMG 2nd Disposition Report_04_22_02.doc

Initial Release Date: November 26, 2001
First Response Date: March 7, 2002
Second Response Date: March 25, 2002
Disposition Report Release Date: April 5, 2002 (rescinded)
Third Supplemental Response Date: April 12, 2002
Fourth Supplemental Response Date: April 12, 2002
Disposition Report: April 22, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Qwest did not install non-dispatch orders for the P-CLEC within a time period that is in parity with Qwest's retail operations, as measured by the PID OP-4C.

Summary of Exception:

For the PID OP-4C, Qwest did not achieve the expected results for the Dual Test for Residential POTS and UNE-P in all three regions, and for Business POTS in the Eastern and Western region.

The following table shows the average installation interval for the P-CLEC and for the Qwest retail comparative.

Average Installation Interval for Failing Products and Regions

Product	Region	P-CLEC Average Days	Qwest Retail Comparative Days
Residential POTS	Eastern	4.4	1.5
Residential POTS	Central	2.5	1.9
Residential POTS	Western	2.8	1.7
Business POTS	Eastern	3.8	1.5
Business POTS	Western	2.7	1.6
UNE-P	Eastern	4.9	1.5
UNE-P	Central	2.8	1.9
UNE-P	Western	3.3	1.7

As shown by the table and confirmed by the Dual Test, Qwest did not provide the required parity service for this PID.

Summary of Qwest's First Response:

Qwest understands that KPMG has begun retesting this Exception in accordance with the Executive Committee's decision on 12/21/01 which supports using the 3.0 PID to

evaluate results of testing to date and that re-testing should be measured by the most recent PID changes approved by the TAG at the time the re-testing starts.

When the April 2000 Version 3.0 PID was approved, Qwest did not have the measurement capability to allow the comparison of like services. Therefore it was commonly understood that as that capability became available, Qwest would enhance their systems and measurements to allow the comparison of like services.

The use of PID 4.0 for retesting should, in itself, improve the results of OP-4C for the three products subject to this Exception. However, there is a possibility of negative results for OP-4C in one or more regions for one or more of these products, due only to the way OP-4C results are calculated and not due to non-discriminatory actions by Qwest. Qwest has made proposals to the TAG to improve OP-4C calculations, and those proposals are still under discussion with the TAG.

KPMG Consulting's Retest Results:

As a result of this exception, a retest was performed for Resale Residence, Resale Business and UNE-P in all regions where Qwest failed the original test. The retest results indicate that Qwest is now passing OP-4 for Resale Residence in all regions, and for Resale Business in the Western Region, but failing for Resale Business in the Eastern Region, and failing UNE-P for all three regions. The results are summarized in the table below. Note that the analysis was performed using January retail data, and that February retail data is required to complete the analysis. After obtaining February retail data from Qwest, KPMG Consulting will re-analyze the data, and will document any changes in the results that may occur.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests.

OP-4 Retest Results

Product	Region	Overall Result	First Dual Test p-value	Second Dual Test p-value	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	Pass	0.3921	0.0000	2.4	2.3	150	20,465	1.9
Business POTS	Eastern	Fail	0.0000	0.9888	2.2	1.3	145	670	1.7
UNE-P	Eastern	Fail	0.0070	0.6281	2.8	2.3	145	21,135	2.3
Residence POTS	Central	Pass	0.9567	0.0000	2.3	2.4	137	33,785	1.8
Business POTS	Central	Not retested							
UNE-P	Central	Fail	0.0239	0.0600	2.6	2.4	140	33,785	2.2
Residence POTS	Western	Pass	0.9971	0.0000	2.4	2.6	143	34,739	1.9
Business POTS	Western	Pass	0.0824	0.0067	2.5	2.2	160	1,225	1.8
UNE-P	Western	Fail	0.0058	0.5586	2.9	2.6	141	35,964	2.6

Summary of Qwest's Second Response:

As a result of this exception, Qwest identified a reporting anomaly with respect to the calculation of the retail and Residence Resale results for the OP 4C PID. Qwest has corrected the data problem and has recast the December and January results with the production of the February results for this PID. Qwest believes the reporting anomaly caused the disparate results. Qwest requests KPMG review and analyze the revised results associated with this exception.

Summary of KPMG Consulting's PID Recalculation Results:

KPMG Consulting has received February data and an update for January, with major changes to the retail intervals. KPMG Consulting has not audited these changes, but is using them in the re-analysis shown here as requested by Qwest in its reply comments of 3/19/01.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests. Based on these results, Qwest is still failing Business POTs in the Eastern Region, but is now passing UNE-P as well as the other products in all regions.

OP-4 Retest Results Using Recast Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.7	150	0.9999	0.0000	Pass	38,726	1.9
Residence POTS	Central	2.3	2.8	137	1.0000	0.0000	Pass	62,240	1.9
Residence POTS	Western	2.4	3.1	143	1.0000	0.0000	Pass	67,006	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8315	Fail	1,110	1.7
Business POTS	Central						Not retested	2,427	
Business POTS	Western	2.5	2.2	160	0.0913	0.0041	Pass	2,338	1.8
UNE-P	Eastern	2.8	2.7	145	0.2467	0.0000	Pass	39,936	2.3
UNE-P	Central	2.6	2.8	140	0.9518	0.0000	Pass	64,667	2.2
UNE-P	Western	2.9	3.1	141	0.8357	0.0000	Pass	69,344	2.4

KPMG Consulting requests that Qwest provide more specifics about the nature of the reporting anomaly and the associated correction that produced these revised results.

Additionally, KPMG Consulting would like to know if the new reporting process and results have been or will be audited by Liberty Consulting.

Summary of Qwest's Third Response:

The reporting anomaly Qwest described in its 3/18/02 response affected the reporting of non-dispatch residential resale and retail orders for which the installation interval included a Saturday. Saturday was being counted as a business day for these types of orders, and included in the installation interval calculation, only if the due date fell on Saturday.

In addition, subsequent to 3/18/02, Qwest identified a calculation error that affected reporting for wholesale and retail orders with a Saturday or Sunday APP date. For these orders, regulatory reporting for OP-4 was including one additional business day in the interval calculation. In the recast data, the calculation has been corrected accordingly for these orders except where orders should count Saturday as a business day (non-dispatch residential resale and retail orders) as described in the first paragraph of this response.

Qwest provided KPMG a recast OP-4 data set for January and February on 4/01/02. While Qwest understands that KPMG will need to analyze the recast data set, Qwest believes that the revised results demonstrate that Qwest is meeting all OP-4 PID sub-measurements, with the exception of Eastern Region Resale Business POTs . Qwest requests that KPMG not retest for Eastern Region Resale Business POTs, as Qwest will rely upon its commercial results to prove parity for this product in its filings for the Eastern Region States. Accordingly, Qwest requests that KPMG Consulting close this exception as "closed/unresolved" for Eastern Region Resale Business POTs. Pursuant to KPMG's 3/25/02 response, Qwest also requested that Liberty review and analyze the revised results associated with the recast data set. Liberty indicated that it would complete this review no later than 4/10/02.

KPMG Consulting's 04/05/02 Disposition Report:

The results of KPMG Consulting's reanalysis of the OP-4 results using the second recast of the Qwest retail data are shown in the table below.

OP-4 Retest Results Using Second Recast of Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7

Business POTS	Central						Not re
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pa
UNE-P	Eastern	2.8	2.6	145	0.0712	0.0031	Pa
UNE-P	Central	2.6	2.9	140	0.9939	0.0000	Pa
UNE-P	Western	2.9	2.8	141	0.2062	0.0002	Pa

This fresh look at the PID performance using the corrected data shows that the overall results for this PID have not changed. Qwest is passing the OP-4 requirement for all products except Resale Business in the Eastern Region.

KPMG Consulting acknowledges Qwest's reply comments explaining the cause of the data anomalies and the re-audit of the revised data by Liberty Consulting. KPMG Consulting has opened Exception 3120 to address this and other data integrity issues originally addressed in Observations 3089 and 3099.

This Disposition report was rescinded on 4/12/02 at the direction of the TAG.

Summary of KPMG Consulting's Fourth Response:

The results shown in KPMG Consulting's 4/5/02 Disposition Report were the subject of a lengthy discussion during the 4/11/02 TAG call. There was a concern that the results shown for UNE-P were not a true parity comparison with retail results because of the manner in which the weekends were treated in the retail data as compared to the P-CLEC data. For the retail residential analog, Saturdays were counted as part of the interval. However, for UNE-P, Saturdays were not counted when these orders were issued, per the published Qwest Standard Interval Guide. To adjust for this mismatch and make the comparison more like-for-like, the TAG instructed KPMG Consulting to revisit its analysis using only retail Business POTS data as the analog for UNE-P results. The outcome of this fresh look at the results are shown on the table below:

OP-4 Retest Results Reflecting Second Recast of Retail Data and Using Business POTS as the UNE-P Analog

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	1.5	145	0.0000	1.0000	Fail	1,270	2.2
UNE-P	Central	2.6	2.1	140	0.0058	0.5471	Fail	3,247	2.1

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Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	2.6	145	0.0712	0.0031	Pass	37,976	2.3
UNE-P	Central	2.6	2.9	140	0.9939	0.0000	Pass	83,705	2.2
UNE-P	Western	2.9	2.8	141	0.2062	0.0002	Pass	57,408	2.4

This fresh look at the PID performance using the corrected data shows that the overall results for this PID have not changed. Qwest is passing the OP-4 requirement for all products except Resale Business in the Eastern Region.

KPMG Consulting acknowledges Qwest's reply comments explaining the cause of the data anomalies and the re-audit of the revised data by Liberty Consulting. KPMG Consulting has opened Exception 3120 to address this and other data integrity issues originally addressed in Observations 3089 and 3099.

This Disposition report was rescinded on 4/12/02 at the direction of the TAG.

Summary of KPMG Consulting's Fourth Response:

The results shown in KPMG Consulting's 4/5/02 Disposition Report were the subject of a lengthy discussion during the 4/11/02 TAG call. There was a concern that the results shown for UNE-P were not a true parity comparison with retail results because of the manner in which the weekends were treated in the retail data as compared to the P-CLEC data. For the retail residential analog, Saturdays were counted as part of the interval. However, for UNE-P, Saturdays were not counted when these orders were issued, per the published Qwest Standard Interval Guide. To adjust for this mismatch and make the comparison more like-for-like, the TAG instructed KPMG Consulting to revisit its analysis using only retail Business POTS data as the analog for UNE-P results. The outcome of this fresh look at the results are shown on the table below:

OP-4 Retest Results Reflecting Second Recast of Retail Data and Using Business POTS as the UNE-P Analog

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	1.5	145	0.0000	1.0000	Fail	1,270	2.2
UNE-P	Central	2.6	2.1	140	0.0058	0.5471	Fail	3,247	2.1

UNE-P	Western	2.9	2.2	141	0.0021	0.6430	Fail	2,410	2.3

Summary of Qwest's Fourth Response:

Although KPMG's recast OP-4C data indicates that UNE-P failed the dual test analysis, Qwest believes that its commercial results for OP-4C beginning with March 2002 data will validate that the average installation interval for non-dispatch wholesale orders is in parity with Qwest's retail comparative.

Qwest requests KPMG to close this exception as "closed/unresolved" for Eastern Region Resale Business POTS and for UNE-P in all three regions.

Disposition Report (04/22/02):

Based on Qwest's April 19 response, KPMG Consulting recommends that Exception 3086 be "closed/unresolved."

ROC_TI739_EXP3086_Qwest Response to KPMG 3rd Supp Rec_04_19_02.doc

Test Vendor ID:	EXP 3086
Qwest Internal Tracking ID:	TI 739
Observation/Exception Title:	Evaluation of PID OP-4C
Test Type/Domain:	Test 14
Date Qwest Received:	11/27/2001
Initial Response Date:	12/31/2001
Supplemental Response Date:	03/19/2002
2nd Supplemental Response Date:	03/21/2002
3rd Supplemental Response Date:	04/02/2002
4th Supplemental Response Date:	04/19/2002

Test Incident Summary:

An exception has been identified as a result of the evaluation of the Performance Indicator Definition (PID) OP-4C.

Exception:

Qwest did not install non-dispatch orders for the P-CLEC within a time period that is in parity with Qwest's retail operations, as measured by the PID OP-4C.

Background:

According to the PID OP-4C[1], Qwest is required to provide parity service in terms of its average installation interval for non-dispatch orders. This means that in order for Qwest to provide for a competitive environment, the average installation interval for the CLECs should be in parity with the appropriate retail comparative. KPMG Consulting measured this PID by region, for Residential Plain Old Telephone Service (POTS), Business POTS, and Unbundled Network Element-Platform (UNE-P) services.

In accordance with the Qwest OSS Evaluation Project Master Test Plan[2] -- Appendix G, KPMG Consulting measured compliance with this PID using the Dual Hypothesis Test ("Dual Test"). In the Dual Test, two hypotheses are tested. The first hypothesis assumes Qwest is meeting the parity standard, and the second hypothesis assumes Qwest is not meeting the parity standard. Qwest fails the Dual Test if the first hypothesis is rejected and the second hypothesis is not rejected.

The data collected for this analysis consists of P-CLEC information for the period beginning April 13, 2001 and ending November 13, 2001, and Qwest retail data for the period beginning May 2001 and ending September 2001.

Issue:

[1] Service Performance Indicator Definition, ROC 271 Working PID, Version 4.0; October 22, 2001.
[2] The Regional Oversight Committee (ROC) Third Party Test, Qwest OSS Evaluation Project Master Test Plan, Final Release; Version 3.1; November 17, 2000.

For the PID OP-4C, Qwest did not achieve the expected results for the Dual Test for Residential POTS and UNE-P in all three regions, and for Business POTS in the Eastern and Western region.

The following table shows the average installation interval for the P-CLEC and for the Qwest retail comparative.

Average Installation Interval for Failing Products and Regions

Product	Region	P-CLEC Average Days	Qwest Retail Comparative Days
Residential POTS	Eastern	4.4	1.5
Residential POTS	Central	2.5	1.9
Residential POTS	Western	2.8	1.7
Business POTS	Eastern	3.8	1.5
Business POTS	Western	2.7	1.6
UNE-P	Eastern	4.9	1.5
UNE-P	Central	2.8	1.9
UNE-P	Western	3.3	1.7

As shown by the table and confirmed by the Dual Test, Qwest did not provide the required parity service for this PID.

Impact:

If Qwest does not provide service to CLECs in parity to that of its retail operations, CLECs could experience an increase in costs because of the additional resources required to investigate why commitments were not met. Also, CLECs' customers could experience a decrease in satisfaction if commitments are not met when expected.

Qwest Formal Response:

Qwest understands that KPMG has begun retesting this Exception in accordance with the Executive Committee's decision on 12/21/01 which supports using the 3.0 PID to evaluate results of testing to date and that re-testing should be measured by the most recent PID changes approved by the TAG at the time the re-testing starts.

When the April 2000 Version 3.0 PID was approved, Qwest did not have the measurement capability to allow the comparison of like services. Therefore it was commonly understood that as that capability became available, Qwest would enhance their systems and measurements to allow the comparison of like services .

The use of PID 4.0 for retesting should, in itself, improve the results of OP-4C for the three products subject to this Exception. However, there is a possibility of negative results for OP-4C in one or more regions for one or more of these products, due only to the way OP-4C results are calculated and not due to non-discriminatory actions by Qwest. Qwest has made proposals to the TAG to improve OP-4C calculations, and those proposals are still under discussion with the TAG.

KPMG Comments (03/08/2002):

As a result of this exception, a retest was performed for Resale Residence, Resale Business and UNE-P in all regions where Qwest failed the original test. The retest results indicate that Qwest is now passing OP-4 for Resale Residence in all regions, and for Resale Business in the Western Region, but failing for Resale Business in the Eastern Region, and failing UNE-P for all three regions. The results are summarized in the table below. Note that the analysis was performed using January retail data, and that February retail data is required to complete the analysis. After obtaining February retail data from Qwest, KPMG Consulting will re-analyze the data, and will document any changes in the results that may occur.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests.

OP-4 Retest Results

Product	Region	Overall Result	First Dual Test p-value	Second Dual Test p-value	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	Pass	0.3921	0.0000	2.4	2.3	150	20,465	1.9
Business POTS	Eastern	Fail	0.0000	0.9888	2.2	1.3	145	670	1.7
UNE-P	Eastern	Fail	0.0070	0.6281	2.8	2.3	145	21,135	2.3
Residence POTS	Central	Pass	0.9567	0.0000	2.3	2.4	137	33,785	1.8
Business POTS	Central	Not retested							
UNE-P	Central	Fail	0.0239	0.0600	2.6	2.4	140	33,785	2.2
Residence POTS	Western	Pass	0.9971	0.0000	2.4	2.6	143	34,739	1.9
Business POTS	Western	Pass	0.0824	0.0067	2.5	2.2	160	1,225	1.8
UNE-P	Western	Fail	0.0058	0.5586	2.9	2.6	141	35,964	2.6

Based on the failing results of the OP4 PID retest KPMG Consulting recommends that exception 3086 remain open.

Qwest Response to KPMG Comments (03/19/2002):

As a result of this exception, Qwest identified a reporting anomaly with respect to the calculation of the retail and Residence Resale results for the OP 4C PID. Qwest has corrected the data problem and has recast the December and January results with the production of the February results for this PID. Qwest believes the reporting anomaly caused the disparate results. Qwest requests KPMG review and analyze the revised results associated with this exception.

Idaho Staff Comments (03/20/2002):

Idaho Staff requests that Qwest identify the specifics of the "reporting anomaly" that Qwest corrected. It is also our understanding that Qwests modification of the data collection and reporting procedures may require a re-audit of OP-4C by Liberty.

Qwest Response to Idaho Staff Comments (03/21/2002):

In response to Observation 2080 in the Functionality Test, Qwest implemented additional code to count Saturday as a regular Business Day for non dispatch Residence Retail and Resale due date interval calculations. The minor code change was implemented with 2/02 data and rerun against 12/01 and 01/02 results. It counts Saturday in the interval calculations for these products rather than just counting it if the order completed on a Saturday.

Qwest offers Saturday due dates and counts Saturday in the interval calculation during the ordering and provisioning of these non dispatch orders; the PID results now reflect that business practice.

KPMG Supplemental Recommendation (03/25/2002):

KPMG Consulting has received February data and an update for January, with major changes to the retail intervals. KPMG Consulting has not audited these changes, but is using them in the re-analysis shown here as requested by Qwest in its reply comments of 3/19/01.

In the table below, the test result is given, along with the P-CLEC and retail averages and counts. In addition, the Dual Test Hypothesis Test Mean is given. This is the value compared against in the second of the Dual Tests. Based on these results, Qwest is still failing Business POTs in the Eastern Region, but is now passing UNE-P as well as the other products in all regions.

OP-4 Retest Results Using Recast Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.7	150	0.9999	0.0000	Pass	38,726	1.9
Residence POTS	Central	2.3	2.8	137	1.0000	0.0000	Pass	62,240	1.9
Residence POTS	Western	2.4	3.1	143	1.0000	0.0000	Pass	67,006	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8315	Fail	1,110	1.7
Business POTS	Central						Not retested	2,427	
Business POTS	Western	2.5	2.2	160	0.0913	0.0041	Pass	2,338	1.8
UNE-P	Eastern	2.8	2.7	145	0.2467	0.0000	Pass	39,836	2.3
UNE-P	Central	2.6	2.8	140	0.9618	0.0000	Pass	64,667	2.2
UNE-P	Western	2.9	3.1	141	0.8357	0.0000	Pass	69,344	2.4

KPMG Consulting requests that Qwest provide more specifics about the nature of the reporting anomaly and the associated correction that produced these revised results. Additionally, KPMG Consulting would like to know if the new reporting process and results have been or will be audited by Liberty Consulting.

Based on the failure of the OP4 PID for resale business POTS services in the Eastern Region and on Qwest's reply to KPMG Consulting's request for additional information regarding the recast data, KPMG Consulting recommends that this exception remain open.

Qwest Response to KPMG Supplemental Recommendation (04/02/2002):

The reporting anomaly Qwest described in its 3/18/02 response affected the reporting of non-dispatch residential resale and retail orders for which the installation interval included a Saturday. Saturday was being counted as a business day for these types of orders, and included in the installation interval calculation, only if the due date fell on Saturday.

In addition, subsequent to 3/18/02, Qwest identified a calculation error that affected reporting for wholesale and retail orders with a Saturday or Sunday APP date. For these orders, regulatory reporting for OP-4 was including one additional business day in the interval calculation. In the recast data, the calculation has been corrected accordingly for these orders except where orders should count Saturday as a business day (non-dispatch residential resale and retail orders) as described in the first paragraph of this response.

Qwest provided KPMG a recast OP-4 data set for January and February on 4/01/02. While Qwest understands that KPMG will need to analyze the recast data set, Qwest believes that the revised results demonstrate that Qwest is meeting all OP-4 PID sub-measurements, with the exception of Eastern Region Resale Business POTs . Qwest requests that KPMG not retest for Eastern Region Resale Business POTs, as Qwest will rely upon its commercial results to prove parity for this product in its filings for the Eastern Region States. Accordingly, Qwest requests that KPMG Consulting close this exception as "closed/unresolved" for Eastern Region Resale Business POTs.

Pursuant to KPMG's 3/25/02 response, Qwest also requested that Liberty review and analyze the revised results associated with the recast data set. Liberty indicated that it would complete this review no later than 4/10/02.

KPMG Disposition Report (04/05/2002):

The results of KPMG Consulting's reanalysis of the OP-4 results using the second recast of the Qwest retail data are shown in the table below.

OP-4 Retest Results Using Second Recast of Retail Data

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days (January 2002)	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	2.6	145	0.0712	0.0031	Pass	37,976	2.3
UNE-P	Central	2.6	2.9	140	0.9939	0.0000	Pass	83,705	2.2
UNE-P	Western	2.9	2.8	141	0.2062	0.0002	Pass	57,408	2.4

This fresh look at the PID performance using the corrected data shows that the overall results for this PID have not changed. Qwest is passing the OP-4 requirement for all products except Resale Business in the Eastern Region.

END

OF

RETAKE

KPMG Consulting acknowledges Qwest's reply comments explaining the cause of the data anomalies and the re-audit of the revised data by Liberty Consulting. KPMG Consulting has opened Exception 3120 to address this and other data integrity issues originally addressed in Observations 3089 and 3099.

Based on Qwest's reply comments that address the data integrity questions and the scheduled audit of the recast data, KPMG Consulting recommends that Exception 3086 be closed/unresolved for Business POTS Service OP-4 results in the Eastern Region.

KPMG 2nd Supplemental Recommendation (04/12/2002):

Due to pending reconsideration of the PID definition and any subsequent reevaluation of the data, KPMG Consulting requests that the Disposition Report issued on 04/05/02 be rescinded.

KPMG Consulting recommends that this exception remain open.

KPMG 3rd Supplemental Recommendation (04/12/2002):

The results shown in KPMG Consulting's 4/5/02 Disposition Report were the subject of a lengthy discussion during the 4/11/02 TAG call. There was a concern that the results shown for UNE-P were not a true parity comparison with retail results because of the manner in which the weekends were treated in the retail data as compared to the P-CLEC data. For the retail residential analog, Saturdays were counted as part of the interval. However, for UNE-P, Saturdays were not counted when these orders were issued, per the published Qwest Standard Interval Guide. To adjust for this mismatch and make the comparison more like-for-like, the TAG instructed KPMG Consulting to revisit its analysis using only retail Business POTS data as the analog for UNE-P results. The outcome of this fresh look at the results are shown on the table below:

OP-4 Retest Results Reflecting Second Recast of Retail Data and Using Business POTS as the UNE-P Analog

OP-4

Product	Region	P-CLEC Average Days	Retail Average Days	P-CLEC Count	First Dual Test p-value	Second Dual Test p-value	Overall Result	Retail Count	Dual Test Hypothesis Test Mean
Residence POTS	Eastern	2.4	2.6	150	0.9941	0.0000	Pass	36,706	1.9
Residence POTS	Central	2.3	2.9	137	1.0000	0.0000	Pass	80,458	1.9
Residence POTS	Western	2.4	2.8	143	1.0000	0.0000	Pass	54,998	1.9
Business POTS	Eastern	2.2	1.5	145	0.0001	0.8183	Fail	1,270	1.7
Business POTS	Central						Not retested	3,247	
Business POTS	Western	2.5	2.2	160	0.0727	0.0090	Pass	2,410	1.8
UNE-P	Eastern	2.8	1.5	145	0.0000	1.0000	Fail	1,270	2.2
UNE-P	Central	2.6	2.1	140	0.0058	0.5471	Fail	3,247	2.1
UNE-P	Western	2.9	2.2	141	0.0021	0.6430	Fail	2,410	2.3

Based on the failure of OP-4 for UNE-P in all regions and for Business POTS in the Eastern Region, KPMG Consulting recommends that this exception remain open.

Qwest Response to KPMG 3rd Supplemental Recommendation (04/19/2002):

Although KPMG's recast OP-4C data indicates that UNE-P failed the dual test analysis, Qwest believes that its commercial results for OP-4C beginning with March 2002 data will validate that the average installation interval for non-dispatch wholesale orders is in parity with Qwest's retail comparative.

Qwest requests KPMG to close this exception as "closed/unresolved" for Eastern Region Resale Business POTs and for UNE-P in all three regions.

Attachment(s): None

e3120disposition_report.pdf

CONTINUATION

[9]

Scan ~ ~ # Pgs [ ]

Initial Release Date: April 3, 2002
First Response Date: April 6, 2002
Disposition Report Release Date: May 23, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Based on the PID performance analysis associated with Test 12 and Test 14 of the MTP, KPMG Consulting has identified several data integrity issues involving Qwest's calculation of the PID results.

Summary of Exception:

While analyzing the P-CLEC PID performance data and calculating the PID results for the P-CLEC, KPMG Consulting identified several data integrity issues with Qwest's PID data. In addition to the discrepancies originally identified in Observations 3089 and 3099 (see Exception 3120 details for the history of these two observations), KPMG Consulting identified two additional problems that had to be addressed by Qwest. The first of these problems involved improper exclusions from the calculation of the OP-4 results. The other issue involved the incorrect application of weekends in the OP-4 calculation for both the wholesale and retail results. As a result of these data problems, Qwest was required to conduct two recasts of its recent results to correct for these problems.

Summary of Qwest's First Response:

Qwest provided KPMG a recast OP-4 data set for January and February, 2002 on April 1, 2002. For a detailed explanation of why the data was recast please see Qwest's April 2, 2002 response to Exception 3086.

Summary of KPMG Consulting's First Response:

KPMG Consulting acknowledges and agrees with Qwest's reply comments indicating that the detailed explanation of why the wholesale and retail data needed to be recast was documented in Qwest's reply to Exception 3086.

KPMG Consulting performed an analysis of the recast February data. While performing this analysis we found issues in several areas. While some of the issues are clearly with Qwest's data, others may be a result of our misunderstanding of Qwest's documentation or the improper application of business rules.

The issues fall into three general areas. The first issues concerns exclusions, the second concerns dates and intervals, and the third concerns missing data.

With respect to exclusions, of the 575 retest orders that KPMG Consulting compared to Qwest's data, Qwest had 283 marked as having an interval longer than the standard, as compared to just one for KPMG Consulting. Also, Qwest used the data exception field of '1' for 574 orders and '69' for one order. Qwest has provided KPMG Consulting with an advanced copy of new RSOR documentation that describes this coding of data exceptions. Qwest has indicated that this updated documentation will be generally available to all CLECs by the end of April. According to the new documentation a code of '1' that formally indicated the order should be excluded for no inward activity now indicates the order was a test order (all orders analyzed were test orders). A code of '69' is the new code used to indicate that the order had no inward activity. KPMG Consulting does not believe there were any orders with no inward activity.

With respect to date and interval issues, of the 745 orders used in the comparison, KPMG Consulting's data failed to match Qwest's data on the application date in 345 instances. Additionally, the completion date did not match in 2 instances, and the applicable due date did not match in 4 instances. KPMG Consulting also found 63 cases (out of 745) where the KPMG calculation for the OP-4 interval did not match the Qwest calculation for the OP-4 interval.

KPMG Consulting believes that the primary issue with respect to application dates has to do with whether (and in what circumstances) weekends, particularly Sundays, and holidays are included as application dates. Qwest's documentation with respect to application date is not clear.

Finally, KPMG Consulting's database did not contain 31 of Qwest's records and Qwest's database did not contain 116 of KPMG Consulting's records.

Summary of Qwest's Second Response:

Qwest has reviewed the confidential document provided by KPMG and provides the following information divided into the three KPMG areas: exclusions, dates and intervals, and missing data. Qwest is providing a confidential document that includes a cross-reference to each item identified in the KPMG confidential document.

KPMG issues are included in Italics below.

Exclusions:

1. KPMG issue: Qwest had 283 marked as having an interval longer than the standard, as compared to just one for KPMG Consulting.
Qwest found 284 items in the KPMG confidential document with an interval longer than standard. Qwest analysis on these 284 items is as follows:
Qwest found a coding error in 281 standard interval orders that should have been included in the OP-4 results, but were not, because the Regulatory Reporting code was inappropriately counting Saturday or Sunday. This resulted in an extra day being added to the interval offered data field compared against the standard interval for that product.

Once the additional day was removed, the interval offered was equal to standard and no longer excluded. The Regulatory Reporting code was updated on April 5, 2002. Liberty will audit this coding change as part of their OP-4 measurement review.
On 2 items: 1 request had a standard interval of two days and the customer requested a four-day interval. 1 request had a standard interval of three days and the customer requested a four-day interval.
On the 1 remaining item, Qwest agrees with KPMG that this item was correctly marked as having an interval longer than the standard.

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 284 items, section "Exclusion Issues".

2. KPMG issue: Qwest use of exception field "1" and "69".
In order to comply with new required FCC reporting requirements, Qwest reorganized and standardized the numbering scheme for data exceptions across all data sources. This resulted in no impact to Qwest official 271 results. Qwest provided KPMG with and advanced copy of the official updated chapter of the technical documentation for RSOR that documented the new data exception numbering scheme. This chapter will be included with the entire technical document, which will be available at the end of April 2002.

Dates and Intervals:

3. KPMG issue: KPMG Consulting's data failed to match Qwest's data on the application date in 345 instances.

While KPMG comments indicated 345 instances where the KPMG data failed to match Qwest's data on the application date, Qwest's review of the confidential document shows 380 total orders. Of the 380 orders, 59 were duplicate orders and 6 Qwest orders matched the KPMG application due. This leaves 315 orders where the KPMG data failed to match Qwest's data on the application date and from which Qwest provides details below. The 59 duplicate items have been moved to a new tab "Date and Interval Dups" in the Qwest Confidential document (Attachment 1).

Qwest provides the following information on the 315 application date items that did not match.
266 items are related to orders submitted on Saturday and Sunday that have an effective application date of Monday. In these cases, Qwest RSOR data reflects the actual date submitted by the CLEC (Saturday or Sunday). KPMG is using the effective application date, which is the next business day. This is why the date does not match. In the OP-4 calculation, Qwest uses the effective application date; the effective application date is not always the same date as the date submitted by the CLEC. For instance, an order submitted on Sunday will have an effective application date of Monday or an effective application date of Tuesday if Monday is a holiday. This resulted in Qwest having the same interval as KPMG calculated on the OP-4 interval.

For 33 items, KPMG did not use the correct Application Date:
28 items are related to Non-Dispatch Res. POTS orders submitted on Saturday that have an effective application date of Saturday. As Qwest has discussed in Observation 2080, for those orders received on Saturday, this type of order activity uses Saturday as the effective application date. KPMG incorrectly moved the application date on these orders to Monday.
3 items fell into the 7PM MT cut-off time for application date. KPMG possibly calculated using 3PM MT cut-off.
2 items involved supplemental versions of the LSR. Qwest appropriately applied the application date based on the date and time when the first LSR was received. KPMG appears to have based their application date on their second submission of their version 2 LSR.
11 items are related to orders submitted after business hours. This issue has been addressed in previous Qwest responses to Observations/Exceptions.
5 items are related to errors made by Qwest typists. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 315 items, section "Dates and Interval Issues". 4. KPMG issue: Additionally, the completion date did not match in 2 instances.
Qwest found a typist error in the completion dates on these two items. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.

A cross-reference is provided in "Qwest Confidential Attachment 1, E3120" on these 2 items, section "Dates and Interval Issues".

5. KPMG issue: The applicable due date did not match in 4 instances.
Qwest believes the applicable due date logic is correct for these 4 items. It appears that the discrepancies noted by KPMG are attributable to differences in how Qwest and KPMG accounted for delays as customer-caused versus Qwest-caused.

For 2 of these orders items KPMG provided the correct applicable due date in their confidential attachment. The applicable due date in the Qwest RSOR data differed because of a human input error when coding delayed causes on the service order. Again, the applicable due date logic operated correctly but, the applicable due date generated was incorrect because the inputs were incorrect. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.
For the remaining 2 orders, Qwest believes we provided the correct applicable due date in the RSOR data. The details regarding these 2 orders are detailed in the "Qwest Confidential Attachment 2, Exception 3120".

A cross-reference is provided in "Qwest Confidential Attachment 1, E3120" on these 4 items, section "Dates and Interval Issues".

6. KPMG issue: KPMG Consulting also found 63 cases (out of 745) where the KPMG calculation for the OP-4 interval did not match the Qwest calculation for the OP-4 interval.
Qwest's review of the confidential document actually showed a total of 91 non-duplicate orders where the OP-4 interval did not match. Qwest provides the following information on the 91 items that did not match:

For 37 items, it appears that KPMG did not calculate the OP-4 interval correctly as identified below:
28 items related to KPMG not including Saturday as a Business Day in their OP-4 interval calculation for OP-4 Non-Dispatched Residence POTS. (see KPMG issue # 3 above)
3 items related to apparent KPMG errors in their OP-4 interval logic. Two of these were identified by KPMG as issues involving the applicable due date (See KPMG issue # 5 above). A review of these items is provided in the "Qwest Confidential Attachment 2, Exception 3120."
5 items relate to apparent KPMG application date errors. (see KPMG issue #3 above)
1 item relates to an order that completed on Saturday but KPMG apparently did not count Saturday in their interval calculation.

For 54 items, Qwest did not calculate the OP-4 correctly as identified below:
35 items had a Regulatory Reporting code error related only to Sunday Application dates. The Regulatory Reporting code was updated on April 5, 2002. Liberty will audit this coding change as part of their OP-4 measurement review.
2 items related to Qwest having a different completion date due to Qwest typist error. (See KPMG issue # 4 above).
11 items are related to orders submitted after business hours. (See KPMG issue # 3 above)
5 items related to Qwest application date typist errors. (See KPMG issue # 3 above).
1 item relates to an order with a human input error when coding delayed causes on the service order. (See KPMG issue #5 above).

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 91 items, section "Dates and Interval Issues."

Missing Data:
7. KPMG issue: KPMG Consulting's database did not contain 31 of Qwest's records. All 31 records were properly included in the ad-hoc data sent to KPMG. It should be noted that 28 of the 31 record were excluded (d-excepted) from the OP-4 calculated results. The ad-hoc data provided by Qwest includes orders generated by the CLEC and test orders generated by Qwest. The remaining 3 records should be in KPMG's data.

28 Records were orders generated by Qwest:
Twenty-three (23) orders were related to the reset of the 5.1 DUF test bed.
Three (3) orders were part of a TI response relating to the sending of a DLR.

Two (2) orders shown in the data were issued to correct the bill street address on 2 accounts converting to Resale. The same PON's were used on the orders to correct the bill name as were used on the conversion orders and are listed below. The orders were due the day after the conversion order completed.
3 Records pertain to orders generated by the P-CLEC, as follows:
1 New Resale Business service request (This LSR required manual handling, and the order number communicated on the FOC was incorrect. This is why KPMG has no record of this order. Qwest will conduct a review of the proper handling of service requests with the typist by April 12, 2002.)
1 New Resale Residential service request (Qwest will provide a screen shot of this LSR in Qwest Confidential Attachment 3, E3120)
1 New Unbundled Loop (submitted via IS) (Qwest will provide a screen shot of this LSR in Qwest Confidential Attachment 3, E3120)

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on the 31 items, section "Not Found Records".
8. KPMG issue: Qwest's database did not contain 116 of KPMG Consulting's records. The following is the result of the analysis of the 116 orders that do not reflect a wholesale MCN in the data:

Conversion to Resale - 108 orders. Qwest found a RSOR error that was incorrectly capturing the outward MCN instead of the inward MCN. For these orders, the outward MCN was a Retail MCN, therefore classified as Retail by Qwest and not included in the previous pseudo CLEC data set sent to KPMG. Qwest has corrected this problem and now properly references the inward MCN on all effected orders. The 108 orders are now included in the revised confidential attachment and revised pseudo CLEC ad-hoc data set sent to KPMG. Qwest will incorporate this change in March02 results with a rerun back to Jan02.
Removal of Line Sharing - 6 orders. Line Sharing is unique in that the orders are written on a retail account. Qwest has developed specific steps in order to capture the wholesale activity on these retail accounts. Qwest implemented these steps to capture inward line activity only since that is the defined scope for OP measures.
Retail - 1 order. The LSR that generated this order was treated as a partial conversion. The line converting was the retail billing account number. This specific order number was establishing a new retail billing account number for the retail line remaining. Therefore, this retail activity would not be found in the wholesale data. The wholesale activity is found in the wholesale data under the related order number.
No PON/TN Match - 1 order. Qwest was unable to match TN/PON to order. As a result, research could not be completed on this item.

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on the 116 items, section "Not Found Records."

KPMG Consulting's Retest Results:

KPMG Consulting conducted a retest of the items that Qwest identified as problems it their second reply comments. This retest specifically addressed the following:

- The Western Region MCN issue
- The calculation of the proper "application date" based on orders that were received on the weekend.
- The calculation of the proper "application date" based on the various time-of-day cutoffs.
- The proper calculation of the OP-4 interval based on orders that spanned a weekend.
- The proper calculation of the OP-4 interval for orders that had Saturday due dates.
- OP-4 exclusions based on orders with intervals >than the standard interval.
- The proper calculation of OP-4 for orders that had customer initiated due date changes.

The transactions for this retest were submitted between Friday 4/19 through Wednesday, 4/24. All of the times and dates the orders were submitted and the desired due dates requested on each order were closely coordinated between KPMG Consulting and HPC to insure we would get the test results we were looking for from these transactions.

KPMG Consulting developed its view of the PID results from this retest and compared them to the Qwest calculation of the P-CLEC results. This resulted in problems found on 5 of the 92 retest orders issued. The problems all involved differences in application dates and in calculated intervals.

On May 22, 2002, KPMG Consulting, MTG and Qwest had a focused O&E call to address these differences. The results of this call are as follows:

- For three of the orders KPMG Consulting and Qwest differed on the application date and therefore also differed on the OP-4 interval by one business day. The reason for this difference was that all of these orders, which were issued before 7:00 PM on a Saturday, did not flow through Qwest's systems. Based on Qwest's documented business rules any order received on a Saturday that drops out to manual handling will receive a Monday application date. KPMG Consulting was working under the assumption that because all three of these orders were flow through eligible that they would have had a Saturday application date. Based on this discussion KPMG Consulting is satisfied that Qwest properly calculated the application dates and OP-4 intervals on these three orders. However, Observation 3109 has been filed by KPMG Consulting to address the issue of why six Western Region flow through eligible orders (the three mentioned here plus 3 others associated with this retest) all fell out for manual handling.

- One of the orders also had a difference of one day between the application date and interval reported by Qwest versus what KPMG Consulting expected on the order. In this instance the order was issued on a Saturday with a Tuesday due date (the standard interval for this order was 2 days). The order flowed through on Saturday, yet the application date on the order is Monday. Qwest asserted that a Qwest Service Representative mistakenly changed the application date on the order to Monday's date. Though this order didn't miss the Tuesday due date thereby, having no impact to the OP-3 results, the change in the application date from Saturday to Monday incorrectly gave Qwest the benefit of one day less in its calculation of the OP-4 results. Qwest indicated during the call that they didn't know why one of it's representatives would have changed the application date on an order that didn't appear to require any manual intervention. They were still investigating this issue.
- The final order was also issued on a Saturday with a Saturday due date (the standard interval for this order was zero days). This order did not flow through (this will be included in O 3109) and fell out to manual handling for processing on Monday. There were two problems with the order, both of which Qwest attributes to errors by the Qwest Service Representative. First, the the order contained an incorrect application date of 4/25 (Thursday). Secondly, the the order contained a "miss code" that incorrectly indicated that it was the CLEC who was the cause of the delay rather than Qwest. These errors resulted in Qwest's systems improperly calculating the OP-4 interval for this order as zero days when the interval should have in fact been 3 days. KPMG Consulting is opening Observation 3110 to address the apparent human error problems that have been experienced on this retest.

As a result of the system problems identified by this exception satisfactorily passing the retest KPMG Consulting recommends closing Exception 3120 as Closed/Resolved. KPMG Consulting has opened Observation 3109 to address the flow through issues and Observation 3110 to address the human errors experienced during this retest.

ROC_TI906_EXP3120_Qwest Response to KPMG Comments_04_11_02.doc

Test Vendor ID:	EXP 3120
Qwest Internal Tracking ID:	TI 906
Observation/Exception Title:	PID Performance Analysis
Test Type/Domain:	Test 14 - POP Provisioning
Date Qwest Received:	04/03/2002
Initial Response Date:	04/05/2002
Supplemental Response Date:	04/11/2002

Test Incident Summary:

Exception 3120 was initially released as Observation 3089 and Observation 3099. KPMG Consulting recommended on April 3, 2002 that Observation 3089 and Observation 3099 be closed and moved to Exception 3120. The historical detail of these two observations is presented below for reference.

EXCEPTION REPORT

An exception has been identified as a result of the data evaluation in Test 12 and Test 14 in the MTP.

Exception:

Based on the PID performance analysis associated with Test 12 and Test 14 of the MTP, KPMG Consulting has identified several data integrity issues involving Qwest's calculation of the PID results.

Background:

In accordance with the Qwest OSS Evaluation Project Master Test Plan, KPMG Consulting must "Compare KPMG Consulting-produced HP measures to Qwest-produced HP measures to ensure there is no problem with the data being collected for test reporting purposes."[1]

Issue:

While analyzing the P-CLEC PID performance data and calculating the PID results for the P-CLEC, KPMG Consulting identified several data integrity issues with Qwest's PID data. In addition to the discrepancies originally identified in Observations 3089 and 3099 (see below for the detailed history of these two observations), KPMG Consulting identified two additional problems that had to be addressed by Qwest. The first of these problems involved improper exclusions from the calculation of the OP-4 results. The other issue involved the incorrect application of weekends in the OP-4 calculation for both the wholesale and retail results. As a result of these data problems, Qwest was required to conduct two recasts of its recent results to correct for these problems.

Impact:

Without accurate reporting of PID results, regulatory commissions and CLECs have no way of knowing if Qwest is providing an environment in which CLECs are able to compete. Additionally, assuming eventual

[1] The Regional Oversight Committee (ROC) Third Party Test, Qwest OSS Evaluation Project Master Test Plan, Final Release; Version 4; p. 51.

271 relief is granted to Qwest, accurate PID data will be required by the regulators to insure that there is no backsliding by Qwest once it is allowed to reenter the in-region long distance market

Initial Release Date (as O3089): February 11, 2002
First Response Date (as O3089): March 4, 2002
Second Response Date (as O3089): April 2, 2002

OBSERVATION REPORT

An observation has been identified as a result of the data evaluation in Test 12 and Test 14 in the MTP.

Observation:

In Test 12 and Test 14 of the MTP, KPMG Consulting is required to compare the P-CLEC data KPMG Consulting produces to the P-CLEC data Qwest produces. KPMG Consulting has found several differences between the two datasets.

Background:

In accordance with the Qwest OSS Evaluation Project Master Test Plan, KPMG Consulting must "Compare KPMG Consulting-produced HP measures to Qwest-produced HP measures to ensure there is no problem with the data being collected for test reporting purposes."[2] In order to do this comparison, KPMG Consulting selected several data fields for the months of November and December and compared KPMG Consulting data to Qwest data.

Issue:

For some orders, it appears that KPMG Consulting's data does not match Qwest's data. These data discrepancies will result in differences when comparing KPMG Consulting's view of the P-CLEC's PID performance to Qwest's view of the P-CLECs PID performance. In particular, KPMG Consulting has found a number of instances where the original due date and/or service order completion date do not contain the same values on the KPMG produced database as they do on the Qwest produced database. These fields are critical in the calculation of OP-3, OP-4, and OP-6. These fields are also used in other PID calculations.

KPMG Consulting will supply a separate confidential attachment showing examples of the differences in these two fields.

Question:

It is unclear to KPMG Consulting why there are discrepancies in the data. Can Qwest please review the accompanying confidential material and attempt to explain the differences in the datasets?

Qwest Formal Response:

There were two basic observations, one dealing with differences in due dates and the other with completion dates. As noted in the analysis below, Qwest is using the correct data for due dates and completion dates in the calculation of P-CLEC performance results. Qwest believes the reason for the data discrepancies noted between KPMG and Qwest data is that KPMG is not using the official performance measurement data sources for capturing the due date and completion date data.

[2] The Regional Oversight Committee (ROC) Third Party Test, Qwest OSS Evaluation Project Master Test Plan, Final Release; Version 4; p. 51.

Due Date Observations

Qwest has reviewed the Confidential Documentation provided by KPMG. From this document, it appears KPMG is comparing the column..."KPMG Original Due Date" to "Qwest Original Due Date." Further it appears the column "KPMG Original Due Date" is based on the Desired Due Date (DDD) in the original LSR. Additionally, Qwest is unclear what data source KPMG is using to populate the field "Qwest Original Due Date."

If KPMG is basing their original due date from the LSR DDD, KPMG should not expect the DDD to match the due date returned in the FOC and recorded in Qwest's reporting measures. The DDD in the LSR will often match the Due Date provided in the FOC, but may also fail to match for a variety of reasons. For instance, if the CLEC requests a desired due date that falls on a holiday, or a due date that is less than the standard interval, Qwest will return a different due date in the FOC based on Qwest's published interval guidelines.

When comparing Due Dates for measurement purposes, KPMG should be comparing the latest FOC DD related to CLEC activity with the Applicable Due Date field, "INTREVDD." The Applicable Due Date field, INTREVDD, can be found in the RSOR Ad Hoc File provided to KPMG on the monthly data request.

The FOC DD field and the "INTREVDD" field should match. In the limited instances where these two fields do not match, the mismatch is typically due to a Qwest caused delay such as a lack of available facilities. When Qwest caused delays occur, Qwest reporting mechanisms accurately capture and account for these delays by appropriately adjusting the Applicable Due Date field, "INTERVDD," in the RSOR Ad HOC data file. Data input errors by Qwest typists can also lead to mismatches between the FOC DD and the Applicable Due Date field. For example, the Confidential Document provided by KPMG includes several examples where the LSR submitted by the P-CLEC requested a DDD that was a shorter-than-standard interval. The Qwest typist incorrectly returned the shorter-than-standard DDD in the FOC DD field. The Qwest typist should have adjusted the due date to comport with the standard interval and returned the adjusted due date in the FOC. As described in Observation 3086, Qwest has enhanced its service quality control process to address and minimize these types of errors.

Completion Date Observations

KPMG also provided orders where KPMG states that the completion date shown in KPMG's data does not match the completion date reflected in Qwest's Ad Hoc data. It appears, however, that KPMG may not have been able to match this data because it was comparing the wrong data points on both sides of this equation.

First, it appears that KPMG populated the "service order completion" entries in its confidential spreadsheet (column 3 in the table below) with the date that the IMA completion notice was sent to the CLEC (column 4 in the table below).

It is not the date that the IMA completion notice is sent (column 4 in the table below), but rather, the completion date reflected on the IMA completion notice (column 5 in the table below) that represents the order completion date. It is this data point—the completion date shown on the IMA Completion Notice—that should match the completion date shown in Qwest's Ad Hoc data.

In addition, it also appears that KPMG was not using the correct data point from Qwest's Ad Hoc report to compare against. Qwest is not certain what data point KPMG used to populate the "Qwest Completion Date" (column 6 in the table below) in its confidential information. The appropriate date point is the INTACTDD field from Qwest's Ad Hoc report (column 7 in the table below). As stated in Qwest Technical Documentation, when computing OP-3, OP-4 and OP-6, Qwest uses the value in the INTACTDD field for completion dates. The INTACTDD field (column 7) and the Completion Date on the IMA Notice (column 5) match, as shown in the table below with one exception.

The table does show a single discrepancy in these two columns for PON F5600535904183, due to a data entry error on the completion notice. This data entry error did not impact the correct reporting of this order in OP-3, OP-4 and OP-6.

PON	Qwest Order Number	KPMG Completion Date	IMA Completion Notice Sent	Completion date on IMA Notice	KPMG Stated Qwest Completion Date	INTACTDD (Qwest completion date for PID calculation)
Redacted	***Redacted***	03-Jan-02	1/3/02 1:12pm	3 January 02	14-Dec-01	14-Dec-01
Redacted	***Redacted***	26-Dec-01	12/26/01 2:06pm	26-Dec-01	01-Jan-01	26-Dec-01
Redacted	***Redacted***	26-Dec-01	12/26/01 1:53pm	26-Dec-01	01-Jan-01	26-Dec-01
Redacted	***Redacted***	26-Dec-01	12/26/01 2:13pm	26-Dec-01	01-Jan-01	26-Dec-01
Redacted	***Redacted***	26-Dec-01	12/26/01 1:53pm	26-Dec-01	01-Jan-01	26-Dec-01
Redacted	***Redacted***	19-Nov-01	11/19/01 4:22pm	16-Nov-01	16-Nov-01	16-Nov-01
Redacted	***Redacted***	05-Dec-01	12/5/01 3:23pm	21-Nov-01	21-Nov-01	21-Nov-01

Attachment(s): None

KPMG Consulting's First Response (03/04/02)

Contrary to Qwest's assumption, KPMG Consulting is not using the Desired Due Date (DDD) data to populate the KPMG Original Due Date column. Instead, the original due date is extracted from the DD field in the FOC.

The data in the Qwest Original Due Date is populated from RSOR data using the field SODD, which is provided to KPMG Consulting by Qwest on a monthly basis. According to Qwest's documentation in RRS, this is the original due date.

Qwest refers to fields called "INTREVDD" and "INTERVDD". KPMG Consulting found no field called INTERVDD, and assumes this is a typo on Qwest's part. The field INTREVDD was found in the most recent version of the RRS documentation, and it is labeled as the integrated revised due date. Is SODD no longer used? If so, when did Qwest begin using INTREVDD in lieu of SODD? Additionally, has Qwest updated its documentation to reflect this change in the data sets? RRS refers to an IRD process, but KPMG Consulting has not received any documentation of this process.

Qwest describes the following issue with respect to FOC DD: "Data input errors by Qwest typists can also lead to mismatches between the FOC DD and the Applicable Due Date field. For example, the Confidential Document provided by KPMG includes several examples where the LSR submitted by the P-CLEC requested a DDD that was a shorter-than-standard interval. The Qwest typist incorrectly returned the shorter-than-standard DDD in the FOC DD field." This problem seems to be different from a simple typographical error. In this case the Qwest typist is confirming back to the P-CLEC the due date that the P-CLEC requested regardless of the fact that it may have been a date that is shorter than the standard interval. KPMG Consulting is concerned that this process is manual and is prone to these types of errors. Is there an effort to automate this process?

With respect to completions, KPMG Consulting uses the completion date reflected on the IMA completion notice to populate the completion date field. The date is extracted from the CD field in the SOC.

KPMG Consulting used the data in the SOCD field from the RSOR Ad HOC data to populate the Qwest Completion Date field. The most recent RRS documentation references an INTACTDD field as the integrated completion date. This is a change from the prior version, and is apparently part of the IDR process. Once again, KPMG Consulting has received no documentation concerning this new process, and thus we do not know how to correctly analyze the PIDs using this process. KPMG Consulting needs to know when Qwest began using the INTACTDD field instead of SOCD. Also, it appears there are still three remaining differences between KPMG Consulting and Qwest completion date data. Can Qwest help explain these?

Finally, Qwest has again indicated that the data discrepancies are sometimes caused by "data input errors by Qwest typists". KPMG Consulting will conduct a retest analysis of the January PID retest data to determine if the enhanced service quality control process sited in observation 3086 is addressing these issues. Also, KPMG Consulting requests documentation relating to the IDR process and any other updates to the PID calculation that need to be considered when analyzing January 2002 data.

KPMG Consulting recommends that this observation remain open pending the clarification of the open issues mentioned in its response and pending the results of the January data comparison.

Qwest Response to KPMG Comments (03/21/02):

There are 3 areas of inquiry in KPMG's March 4th Response. Qwest will address each area specifically below:

IRD process and use of the "INTREVDD" and "INTACTDD" fields
KPMG posed several questions about use of different fields in the Qwest Ad HOC dataset for calculating performance as well as IRD process documentation. As Qwest communicated on a Focused O&E call, these processes were implemented with the adoption of PID 4.0. Qwest believes these issues were resolved on the O&E call.

3 remaining discrepancies on Completion Date
KPMG requested Qwest help explain 3 remaining discrepancies. However, Qwest does not believe there are 3 remaining discrepancies. Based on the clarification provided on the Focused O&E call and per our original response, the completion date sent on the IMA notice matched the completion date used in the Ad HOC with the exception of one date entry error on a completion notice. Qwest believes the clarification provided during the Focused O&E also resolves this question.

Discrepancies on FOC Due Date (DD)
KPMG expressed concern about discrepancies attributed to human error. In further research of root causes, Qwest has determined that there are 2 distinct categories of products that must be addressed when discussing the relationship between the FOC DD and the date used to calculate performance results. The first category includes digital loops and LIS trunks (for ease of reference, called "extended FOCs"). The second category includes all remaining products (referred to as "standard FOCs"). Each category is discussed separately below.

Extended FOCs

While it is appropriate to expect the FOC DD to be the measured date for Qwest's performance on these products, there are circumstances that Qwest believes warrant different treatment. Specifically, as a result of the collaborative efforts of Qwest and CLECs to make the FOC more meaningful, Qwest performs certain provisioning tasks before issuing the FOC. The process improvement has caused a slight inconsistency between the intent of the OP measures and the Due Date definition in the Definition of Terms contained within the PID.

If Qwest were to measure on time performance strictly based on the FOC DD, in scenarios where Qwest identifies a facility delay prior to issuing the FOC, that delay would not be captured in OP-6 nor would Qwest report a miss in OP-3. Qwest does not believe this was the intent of the due date definition; but rather an oversight when expanding the PID to accommodate the extended FOC process.

Qwest will propose a clarification to the definition of terms for ROC TAG consideration in order to resolve this conflict. Qwest will continue to report orders that fall into this scenario as misses and count the days delayed even though the FOC DD was met.

Standard FOCs

In the case of standard FOC products, the FOC is not delayed. Qwest determines the due date, based on CLEC DDD, standard interval and outside dispatch appointment scheduling, where appropriate. That due date is entered on the service order and the FOC without delay.

As a result of the process, there is an extremely high correlation between the due date placed on the service order and the due date reported on the FOC. However, human error can and will occur. Although Qwest is investigating possible enhancements to mechanization, Qwest believes the ongoing quality reviews performed by center coaches has resulted in increasing the level of accuracy and reducing human error to a reasonable rate.

Qwest has performed a 50% random sampling of December 2001 and January 2002 OP-3 records for standard FOC products. The sampling compared the service order due date to the FOC due date. The results for December, reflect a 94.9% match. For January the dates matched 97.6% of the time. Further, the service center's staff support organization recently conducted process reviews on orders processed the last 2 weeks in February (for products provisioned using the designed flow) as well as the first full week in March (for products provisioned using the non-designed flow). The results, albeit based on weeks of performance, reflect accuracy at levels consistent with the January study.

In conclusion, Qwest believes the occurrence of human error when reporting the FOC DD has continued to decrease and is within a zone of reasonableness when recognizing not all requests can be processed without human intervention. Therefore, Qwest requests KPMG re-analyze the results using the February data recently made available.

Attachment(s): None

As a result of the data integrity problems that KPMG Consulting has discovered while conduct its PID analysis and Qwest's responses to these problems this observation will be closed. The documentation of the issues addresses in this Observation as well as the issues addressed in Observation 3099 will be addressed in a new exception.

KPMG Consulting recommends closing Observation 3089 and escalating the unresolved issues to Exception 3120.

Initial Release Date (as O3099): February 25, 2002
First Response Date (as O3099): March 13, 2002
Second Response Date (as O3099): April 2, 2002

OBSERVATION REPORT

An Observation has been identified as a result of the evaluation of the RSOR data and the LSRs provided by Qwest in response to Exception 3103, with respect to dispatched UNE-Loop orders in the Central Region.

Observation:

KPMG Consulting has identified issues with the data that was used to calculate the PID OP-4.

Background:

According to the PID OP-4, Qwest is required to provision designed orders in 6 days when the product is ADSL Qualified, Analog, or 2 Wire Non-Loaded Loop. KPMG Consulting evaluated the RSOR data that was used for the calculation of this PID and issued Exception 3103 due to a failure with respect to the 6-day requirement. Qwest responded that 9 orders were incorrectly included in the calculation because they had customer requested intervals that were greater than the standard interval. KPMG Consulting noted that the flags in the RSOR database indicate that those orders should be included in the PID calculation. KPMG Consulting further requested the 240 LSR's related to the calculation of OP-4 for the Central Region for unbundled loops.

Issue:

With respect to the original issue associated with Exception 3103, Qwest's performance was shown to be meeting the benchmark after properly applying the exclusions to the orders. Thus, Exception 3103 was closed. However, in the course of analyzing the data associated with this exception a data issue surfaced that indicated nine orders that should have been excluded were not marked for exclusion by Qwest. KPMG stated in its response in Exception 3103: "KPMG Consulting used the field "NEG_DES" in the RSOR dataset to determine whether the customer negotiated a due date longer than the standard interval for designed services. For the nine orders in question, this field is marked with a '0', indicating the customer did not negotiate a longer due date for the designed services." In Qwest's response, Qwest determined that they had coded 6 of the orders incorrectly. In the other three, Qwest coded one field correctly (called SFSPO) and one field incorrectly (NEG_DES). Qwest, also in response to Exception 3103 stated that it is the SFSPO field in RSOR that determines whether an order should be excluded. Both KPMG Consulting and Liberty Consulting believe that the NEG_DES field is the one that is used for PID inclusion/exclusion.

Liberty Consulting has addressed the coding problem identified above in their Observation number 1032, and therefore, it will not be included as part of this observation. However, the issue of the proper field to use, SFSPO or NEG_DES, to determine the exclusions is still open and needs to be addressed by Qwest.

Additionally, because of these data issues, KPMG Consulting reviewed all 240 orders relevant to the PID for the Central Region to determine if there were further discrepancies with the data.

We found three additional issues:

1. Ten LSR's were not found by Qwest, despite being part of Qwest's RSOR database.
2. KPMG Consulting found two service orders that should have been included in the OP-4 calculations but were excluded.
3. KPMG Consulting found four additional orders that should have been excluded from the OP-4 calculations, but were included.

A separate confidential attachment will be issued that supplies the details for the orders that are discussed above.

Impact:

Out of 240 orders reviewed, 25 were mishandled in the calculation of the OP-4 PID, according to KPMG Consulting's determinations. If these determinations are correct, this issue has an impact on the accurate reporting of PID results.

Attachments: *Confidential Information*

Qwest Formal Response (03/04/02):

Both KPMG Consulting and Liberty Consulting are correct that the NEG_DES field is used for PID inclusion/exclusion of orders for OP-4. However, the NEG_DES field is calculated using other data points. The validity of NEG_DES is better understood in the context of the values contained in other data points as described below.

In the RRS Technical Document on page 13-36, it states:

- **Customer negotiated due date longer than the standard interval for designed services flag (NEG_DES)**
  If the designed services field is flagged yes, (SOADSR = Y), the negotiated due date field (SONDD) contains an X, and position 2 of the service provisioning overall field (SFSPO) contains an 'L', this indicates that the customer has negotiated a due date longer than the standard Qwest interval for designed services products. The NEG_DES field is flagged with a '1' if these conditions are true.

Based upon the criteria above, the NEG_DES field depends on the values of SOADSR, SONDD and SFSPO fields. If any of those fields contains a value different than the values specified above, then NEG_DES will contain zero ('0'). A zero (0) in this field indicates the record will be included in OP-4D or E.

The input errors detected in Observation 3103 occurred in the SFSPO source field, which is why the Qwest response focused on it. Therefore, depending upon the values placed in the SOADSR, SONDD and SFSPO will guide inclusion/exclusion criteria?

Regarding the three addition issues:

Ten LSR's were not found by Qwest, despite being part of Qwest's RSOR database.

1. The ten LSRs that could not be found from the initial request of 240 LSRs were finally located in the CRM archived database and will be provided with this response via the data request process.

KPMG Consulting found two service orders that should have been included in the OP-4 calculations but were excluded.

2. Qwest reviewed the two service orders and determined that one had been correctly excluded from the OP-4 calculation (***Redacted***) based on the criteria explained above, and the other one (***Redacted***) had an incorrect SFSPO due to a human error and should have been included in the OP-4 calculation.

KPMG Consulting found four additional orders that should have been excluded from the OP-4 calculations, but were included.

3. Qwest reviewed the four service orders and determined that two had been correctly included in the OP-4 calculation (***Redacted***) based on the criteria identified above, and the other two (***Redacted***) had incorrect SFSPOs due to human error and should have been excluded from the OP-4 calculation.

Qwest recommends closure of this observation.

Attachment(s): None

KPMG Consulting's First Response (03/13/02) :

Given the human errors acknowledged by Qwest above, KPMG Consulting believes a review of more recent data can help determine whether these problems have been corrected. KPMG Consulting would like to review the most recent data available after the problems were corrected (through training and/or automation). We will await Qwest's direction as to which month to review.

KPMG Consulting recommends Observation 3099 remain open pending further clarification from Qwest.

Qwest Response to KPMG Comments (03/18/02):

Qwest would like KPMG to review February data. Training was conducted in January and internal audits of orders began in January and continues today. Qwest believes human errors have been reduced significantly as we have seen during our internal audits and feel confident the improvements will be observed by KPMG.

Attachment(s): None

KPMG Consulting's Second Response (04/02/02)

As a result of the data integrity problems that KPMG Consulting has discovered while conduct its PID analysis and Qwest's responses to these problems this observation will be closed. The documentation of the issues addresses in this Observation as well as the issues addressed in Observation 3089 will be addressed in a new exception.

KPMG Consulting recommends closing Observation 3099 and escalating the unresolved issues to Exception 3120.

Qwest Formal Response to EXP 3120:

Qwest provided KPMG a recast OP-4 data set for January and February, 2002 on April 1, 2002. For a detailed explanation of why the data was recast please see Qwest's April 2, 2002 response to Exception 3086.

KPMG Comments on EXP 3120 (04/08/2002):

KPMG Consulting acknowledges and agrees with Qwest's reply comments indicating that the detailed explanation of why the wholesale and retail data needed to be recast was documented in Qwest's reply to Exception 3086.

Per Qwest's reply comments to Observations 3089 and 3099, KPMG Consulting performed an analysis of the recast February data. While performing this analysis we found issues in several areas. While some of the issues are clearly with Qwest's data, others may be a result of our misunderstanding of Qwest's documentation or the improper application of business rules. In a confidential attachment, we attach both the KPMG Consulting 'view' of the data and the Qwest 'view' of the data, and ask that Qwest reconcile the discrepancies.

The issues we found fall into three general areas. The first issues concerns exclusions, the second concerns dates and intervals, and the third concerns missing data.

With respect to exclusions, of the 575 retest orders that KPMG Consulting compared to Qwest's data, Qwest had 283 marked as having an interval longer than the standard, as compared to just one for KPMG Consulting. Also, Qwest used the data exception field of '1' for 574 orders and '69' for one order. Qwest has provided KPMG Consulting with an advanced copy of new RSOR documentation that describes this coding of data exceptions. Qwest has indicated that this updated documentation will be generally available to all CLECs by the end of April. According to the new documentation a code of '1' that formally indicated the order should be excluded for no inward activity now indicates the order was a test order (all orders analyzed were test orders). A code of '69' is the new code used to indicate that the order had no inward activity. KPMG Consulting does not believe there were any orders with no inward activity.

With respect to date and interval issues, of the 745 orders used in the comparison, KPMG Consulting's data failed to match Qwest's data on the application date in 345 instances. Additionally, the completion date did not match in 2 instances, and the applicable due date did not match in 4 instances. KPMG Consulting also found 63 cases (out of 745) where the KPMG calculation for the OP-4 interval did not match the Qwest calculation for the OP-4 interval.

KPMG Consulting believes that the primary issue with respect to application dates has to do with whether (and in what circumstances) weekends, particularly Sundays, and holidays are included as application dates. Qwest's documentation with respect to application date is not clear.

Finally, KPMG Consulting's database did not contain 31 of Qwest's records and Qwest's database did not contain 116 of KPMG Consulting's records.

The specifics of these discrepancies are all contained in a confidential attachment.

Based on the outstanding data integrity issues KPMG Consulting is encountering when comparing KPMG Consulting produced results to Qwest produced results, KPMG Consulting recommends that this exception remain open.

Qwest Response to KPMG Comments for EXP 3120 (04/11/2002):

Qwest has reviewed the confidential document provided by KPMG and provides the following information divided into the three KPMG areas: exclusions, dates and intervals, and missing data. Qwest is providing a confidential document that includes a cross-reference to each item identified in the KPMG confidential document.

KPMG issues are included in Italics below.

Exclusions:

1. KPMG issue: Qwest had 283 marked as having an interval longer than the standard, as compared to just one for KPMG Consulting.

Qwest found 284 items in the KPMG confidential document with an interval longer than standard. Qwest analysis on these 284 items is as follows:

- Qwest found a coding error in 281 standard interval orders that should have been included in the OP-4 results, but were not, because the Regulatory Reporting code was inappropriately counting Saturday or Sunday. This resulted in an extra day being added to the interval offered data field compared against the standard interval for that product. Once the additional day was removed, the interval offered was equal to standard and no longer excluded. The Regulatory Reporting code was updated on April 5, 2002. Liberty will audit this coding change as part of their OP-4 measurement review.
- On 2 items: 1 request had a standard interval of two days and the customer requested a four-day interval. 1 request had a standard interval of three days and the customer requested a four-day interval.
- On the 1 remaining item, Qwest agrees with KPMG that this item was correctly marked as having an interval longer than the standard.

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 284 items, section "Exclusion Issues".

2. KPMG issue: Qwest use of exception field "1" and "69".
In order to comply with new required FCC reporting requirements, Qwest reorganized and standardized the numbering scheme for data exceptions across all data sources. This resulted in no impact to Qwest official 271 results. Qwest provided KPMG with and advanced copy of the official updated chapter of the technical documentation for RSOR that documented the new data exception numbering scheme. This chapter will be included with the entire technical document, which will be available at the end of April 2002.

Dates and Intervals:

3. KPMG issue: KPMG Consulting's data failed to match Qwest's data on the application date in 345 instances.

While KPMG comments indicated 345 instances where the KPMG data failed to match Qwest's data on the application date, Qwest's review of the confidential document shows 380 total orders. Of the 380 orders, 59 were duplicate orders and 6 Qwest orders matched the KPMG application due. This leaves 315 orders where the KPMG data failed to match Qwest's data on the application date and from which Qwest provides details below. The 59 duplicate items have been moved to a new tab "Date and Interval Dups" in the Qwest Confidential document (Attachment 1).

Qwest provides the following information on the 315 application date items that did not match.

- *266 items are related to orders submitted on Saturday and Sunday that have an effective application date of Monday. In these cases, Qwest RSOR data reflects the actual date submitted by the CLEC (Saturday or Sunday). KPMG is using the effective application date, which is the next business day. This is why the date does not match. In the OP-4 calculation, Qwest uses the effective application date; the effective application date is not always the same date as the date submitted by the CLEC. For instance, an order submitted on Sunday will have an effective application date of Monday or an effective application date of Tuesday if Monday is a holiday. This resulted in Qwest having the same interval as KPMG calculated on the OP-4 interval.*
- *For 33 items, KPMG did not use the correct Application Date:*

✓ *28 items are related to Non-Dispatch Res. POTS orders submitted on Saturday that have an effective application date of Saturday. As Qwest has discussed in Observation 2080, for those orders received on Saturday, this type of order activity uses Saturday as the effective application date. KPMG incorrectly moved the application date on these orders to Monday.*

✓ *3 items fell into the 7PM MT cut-off time for application date. KPMG possibly calculated using 3PM MT cut-off.*

✓ *2 items involved supplemental versions of the LSR. Qwest appropriately applied the application date based on the date and time when the first LSR was received. KPMG appears to have based their application date on their second submission of their version 2 LSR.*

- *11 items are related to orders submitted after business hours. This issue has been addressed in previous Qwest responses to Observations/Exceptions.*
  - *5 items are related to errors made by Qwest typists. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.*

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 315 items, section "Dates and Interval Issues".

4. KPMG issue: Additionally, the completion date did not match in 2 instances.
   - *Qwest found a typist error in the completion dates on these two items. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.*

A cross-reference is provided in "Qwest Confidential Attachment 1, E3120" on these 2 items, section "Dates and Interval Issues".

5. KPMG issue: The applicable due date did not match in 4 instances.
Qwest believes the applicable due date logic is correct for these 4 items. It appears that the discrepancies noted by KPMG are attributable to differences in how Qwest and KPMG accounted for delays as customer-caused versus Qwest-caused.

- For 2 of these orders items KPMG provided the correct applicable due date in their confidential attachment. The applicable due date in the Qwest RSOR data differed because of a human input error when coding delayed causes on the service order. Again, the applicable due date logic operated correctly but, the applicable due date generated was incorrect because the inputs were incorrect. Qwest will conduct a review of the proper handling of these service requests with the typists by April 12, 2002.
- For the remaining 2 orders, Qwest believes we provided the correct applicable due date in the RSOR data. The details regarding these 2 orders are detailed in the "Qwest Confidential Attachment 2, Exception 3120".

A cross-reference is provided in "Qwest Confidential Attachment 1, E3120" on these 4 items, section "Dates and Interval Issues".

6. KPMG issue: KPMG Consulting also found 63 cases (out of 745) where the KPMG calculation for the OP-4 interval did not match the Qwest calculation for the OP-4 interval.
Qwest's review of the confidential document actually showed a total of 91 non-duplicate orders where the OP-4 interval did not match. Qwest provides the following information on the 91 items that did not match:

For 37 items, it appears that KPMG did not calculate the OP-4 interval correctly as identified below:
- 28 items related to KPMG not including Saturday as a Business Day in their OP-4 interval calculation for OP-4 Non-Dispatched Residence POTS. (see KPMG issue # 3 above)
- 3 items related to apparent KPMG errors in their OP-4 interval logic. Two of these were identified by KPMG as issues involving the applicable due date (See KPMG issue # 5 above). A review of these items is provided in the "Qwest Confidential Attachment 2, Exception 3120."
- 5 items relate to apparent KPMG application date errors. (see KPMG issue #3 above)
- 1 item relates to an order that completed on Saturday but KPMG apparently did not count Saturday in their interval calculation.

For 54 items, Qwest did not calculate the OP-4 correctly as identified below:
- 35 items had a Regulatory Reporting code error related only to Sunday Application dates. The Regulatory Reporting code was updated on April 5, 2002. Liberty will audit this coding change as part of their OP-4 measurement review.
- 2 items related to Qwest having a different completion date due to Qwest typist error. (See KPMG issue # 4 above).
- 11 items are related to orders submitted after business hours. (See KPMG issue # 3 above)
- 5 items related to Qwest application date typist errors. (See KPMG issue # 3 above).
- 1 item relates to an order with a human input error when coding delayed causes on the service order. (See KPMG issue #5 above).

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on these 91 items, section "Dates and Interval Issues."

Missing Data:
7. KPMG issue: KPMG Consulting's database did not contain 31 of Qwest's records.
All 31 records were properly included in the ad-hoc data sent to KPMG. It should be noted that 28 of the 31 record were excluded (d-excepted) from the OP-4 calculated results. The ad-hoc data provided by Qwest includes orders generated by the CLEC and test orders generated by Qwest. The remaining 3 records should be in KPMG's data.

- 28 Records were orders generated by Qwest:
  - ✓ Twenty-three (23) orders were related to the reset of the 5.1 DUF test bed.
  - ✓ Three (3) orders were part of a TI response relating to the sending of a DLR.
  - ✓ Two (2) orders shown in the data were issued to correct the bill mail address on 2 accounts converting to Resale. The same PON's were used on the orders to correct the bill name as were used on the conversion orders and are listed below. The orders were due the day after the conversion order completed.
- 3 Records pertain to orders generated by the P-CLEC, as follows:
  - ✓ 1 New Resale Business service request (This LSR required manual handling, and the order number communicated on the FOC was incorrect. This is why KPMG has no record of this order. Qwest will conduct a review of the proper handling of service requests with the typist by April 12, 2002.)
- ✓ 1 New Resale Residential service request (Qwest will provide a screen shot of this LSR in Qwest Confidential Attachment 3, E3120)
- ✓ 1 New Unbundled Loop (submitted via IIS) (Qwest will provide a screen shot of this LSR in Qwest Confidential Attachment 3, E3120)

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on the 31 items, section "Not Found Records".

8. KPMG issue: Qwest's database did not contain 116 of KPMG Consulting's records.
The following is the result of the analysis of the 116 orders that do not reflect a wholesale MCN in the data:

- Conversion to Resale - 108 orders. Qwest found a RSOR error that was incorrectly capturing the outward MCN instead of the inward MCN. For these orders, the outward MCN was a Retail MCN, therefore classified as Retail by Qwest and not included in the previous pseudo CLEC data set sent to KPMG. Qwest has corrected this problem and now properly references the inward MCN on all effected orders. The 108 orders are now included in the revised confidential attachment and revised pseudo CLEC ad-hoc data set sent to KPMG. Qwest will incorporate this change in March02 results with a rerun back to Jan02.
- Removal of Line Sharing - 6 orders. Line Sharing is unique in that the orders are written on a retail account. Qwest has developed specific steps in order to capture the wholesale activity on these retail accounts. Qwest implemented these steps to capture inward line activity only since that is the defined scope for OP measures.
- Retail - 1 order. The LSR that generated this order was treated as a partial conversion. The line converting was the retail billing account number. This specific order number was establishing a new retail billing account number for the retail line remaining. Therefore, this retail activity would not be found in the wholesale data. The wholesale activity is found in the wholesale data under the related order number.
- No PON/TN Match - 1 order. Qwest was unable to match TN/PON to order. As a result, research could not be completed on this item.

A cross-reference is provided in the "Qwest Confidential Attachment 1, E3120" on the 116 items, section "Not Found Records."

Attachment(s): None

ROC_TI813_EXP3107_KPMG Disposition Report_02_26_02.doc

Initial Release Date: January 17, 2002
First Response Date: February 6, 2002
Second Response Date: February 12, 2002
Disposition Report Date: February 26, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Qwest did not process Non-Design Edit transactions that were submitted to the Customer Electronic Maintenance & Repair (CEMR) system in the timeframe defined by the benchmark.

Summary of Exception:

The ROC TAG agreed to a benchmark standard of 0:00:24 for average processing time for Non-Design Edit transactions, as defined in the document *ROC M&R Volume Recommendation*, version 4.7, October 9, 2001. On January 10, 2002, the P-CLEC submitted Non-Design Edit transactions via the CEMR system. Qwest did not process Non-Design Edit transactions that were submitted to the Customer Electronic Maintenance & Repair (CEMR) system in the timeframe defined by the benchmark. Out of 36 Non-Design Edit transactions that were processed by Qwest, KPMG Consulting computed an average response time of 0:00:27 and has concluded that the difference of three seconds between the benchmark and Qwest's performance is statistically significant.

Summary of Qwest's Initial and Supplementary Responses:

The initial response from Qwest on January 31, 2002 indicated that Qwest used KPMG's description of the Non-Design Edit test to set up and conduct three separate tests in an attempt to replicate KPMG's test results. The three tests resulted in transaction times of 18.9, 18.1, and 22.4 seconds, respectively. The specifics of the three tests are identified within the Qwest response. Qwest indicated that the three tests were conducted during normal business hours. Qwest stated that all three of the tests included a significantly higher volume of transactions than required by the test plan and resulted in an average transaction performance below the 24 second benchmark.

For all three tests, Qwest provided confidential data, which included a count of the concurrent transactions that occurred within the testing window as well as the calculated average response time. Qwest also indicated that the confidential data demonstrated that typical business traffic occurred during the test window of each test. Based on the results of the three tests, Qwest concluded that the additional transaction time observed by the P-

CLEC must have been due to the P-CLEC's environment, which is outside of Qwest's control.

On the Supplemental Response from February 12, 2002, Qwest stated that they successfully met all 13 benchmarks for the normal days. Qwest met the Non-Design Edit transaction benchmark of 24 seconds for the normal day. Qwest met 12 of the 13 benchmarks for the peak test day accounting for 98.2% of total transactions executed. Results for the peak day was 27 seconds, which was not within the benchmark for less than 2% of the total transactions executed. Qwest's performance for the stress day on this measure is consistent with performance for the peak day, i.e., 27 seconds.

Qwest prepared an M&R transaction analysis of the monthly CEMR Logs for the 6-month period August 6, 2001 through January 31, 2002. Qwest stated that Non-Design Edit transactions represented an average of 0.3 % of the CLEC actual transaction volume through CEMR for M&R during the period reported. Qwest concluded that although the results on this transaction of 3 seconds are statistically significant, the peak test failure on this measure is immaterial in light of the actual CLEC Non-Design Edit transactions being executed. Qwest stated that the self-administered tests were not an attempt to supplant the third party test and that the tests were conducted to identify any bottlenecks causing the delay in the time reported by the P-CLEC. Qwest concluded the response by stating that the failure to meet this benchmark does not constitute an "impediment" to the CLEC's ability to compete. Qwest requested that KPMG close this exception as "Closed/Unresolved".

Summary of KPMG Consulting's Initial and Supplementary Responses:

The approach taken by Qwest to conduct three internally administered tests is inconsistent with the methodology set forth and agreed upon by the ROC TAG. As defined in the document *ROC M&R Volume Recommendation*, version 4.7, October 9, 2001, the ROC TAG agreed to a third party test conducted by KPMG Consulting. Furthermore, there are no provisions in the *Master Test Plan* for consideration of Qwest-administered tests. KPMG Consulting concluded that the difference of three seconds between the benchmark and Qwest's performance is statistically significant and constitutes an unsatisfactory result.

KPMG Consulting conducted the Volume Stress Test on January 23, 2002. As part of this testing activity, KPMG Consulting observed Non Design Edit transactions under stress load conditions, which consisted of eight hours of 'normal' and four hours of 'stress' testing. For the combined twelve hour day, KPMG Consulting calculated a response time of 0:00:27 seconds. Additionally, KPMG Consulting separated the stress test day into 'Normal Hours Only' and 'Stress Hours Only' and calculated response times of 0:00:25 seconds and 0:00:28 seconds, respectively.

KPMG Consulting's Disposition Report (02/26/02):

KPMG Consulting revicwed the second response provided by Qwest and acknowledges the request to close this Exception as unresolved.

KPMG Consulting recommends the closure of Exception 3107 and that it be categorized as closed/unresolved.

ROC_TI813_EXP3107_Qwest Response to KPMG Supp Rec_02_21_02.doc

Test Vendor ID:	EXP 3107
Qwest Internal Tracking ID:	TI 813
Observation/Exception Title:	Non-Design Edit transactions
Test Type/Domain:	Test 16 - M&R Volume
Date Qwest Received:	01/17/2002
Initial Response Date:	01/31/2002
Supplemental Response Date:	02/21/2002

Test Incident Summary:

An exception has been identified as a result of the test activities associated with MTP Test 16, Phase III, M&R Functional and Performance Evaluation.

Exception:

Qwest did not process Non-Design Edit transactions that were submitted to the Customer Electronic Maintenance & Repair (CEMR) system in the timeframe defined by the benchmark.

Background:

For Non-Design Services, the menu within the CEMR system allows users to create a trouble report, perform feature verification, view the circuit history, send MLT, obtain line record detail, maintain trouble (edit) report, and view the transaction history of trouble reports.

The ROC TAG agreed to benchmark standard of 0:00:24 for average processing time for Non Design Edit transactions, as defined in the document *ROC M&R Volume Recommendation*, version 4.7, October 9, 2001.

Issue:

On January 10, 2002, the P-CLEC submitted Non Design Edit transactions via the CEMR system. Once the transactions were submitted, KPMG Consulting computed the average transaction time. This calculation was based on the start and end processing times as documented by the P-CLEC.

Out of 36 Non Design Edit transactions that were processed by Qwest, KPMG Consulting computed an average response time of 0:00:27 and has concluded that the difference of three seconds between the benchmark and Qwest's performance is statistically significant

KPMG Consulting has provided the details of the Edit transactions in a separate confidential document.

Impact:

Untimely processing of Non Design Edit transactions in CEMR could cause repair delays for CLECs, and may require additional resources to research the issue, thus potentially increasing operating costs. A CLEC's customer may experience decreased levels of satisfaction if unnecessary delays occur.

Qwest Formal Response:

Qwest used KPMG's description of the testing cited in this Exception to set up and conduct three separate tests in an attempt to replicate KPMG's test results. Those tests and their results are described below.

The first test was executed on January 18th, 2002 to verify the response time of three CEMR screens - *Non Design Service Menu, Maintain Trouble Report and Maintain Non Design Report.* Qwest executed the test within the Qwest firewall, accessed the external Internet and came back in through the Qwest ECOM web site using a digital certificate. The test included twenty-nine transactions in a one-hour period during the middle of the day. A peak one-hour time period would see only four transactions. The test was performed using a Pentium 3/500 machine and using only LoadRunner for the test.

The first test resulted in an average response time of 18.9 seconds.
(Please see Confidential Attachment A)

The second test was executed on January 24th, 2002 using the same screens identified in the first test. The second test was run from an offsite location accessing the external Internet via a DSL line. The requests accessed the ECOM web site using a digital certificate. This test was performed to eliminate the possibility of an internal router skewing the test by choosing an optimal route. The test executed thirty transactions in a one-hour period during normal business hours. Four transactions per hour is considered "peak" level of activity. The test was performed from a Pentium 2/400 machine using only LoadRunner for the test.

The second test resulted in an average response time of 18.1 seconds.
(Please see Confidential Attachment B)

The third test was run on January 29, 2002 at Qwest using WinRunner 6.02 and LoadRunner 6.2, on a Pentium 3/500 machine. The requests accessed the External Internet and re-entered the ECOM web site using a Digital Certificate. Again, the same three screens were tested. This test was performed to capture the impact of browser processing. Thirty transactions were executed in a one- hour window. A single transaction per hour is considered a "normal" load.

The third test resulted in an average response time of 22.4 seconds.
(Please see Confidential Attachment C)

The tests cited above were conducted during normal business hours. A count of the concurrent transactions that occurred within the testing window of all three tests is provided in Confidential Attachment D.

The data in Confidential Attachment D demonstrates that typical business traffic occurred during the test window of each test. All three of the tests included a significantly higher volume of transactions than required by the test plan and resulted in an average transaction performance below the 24-second benchmark.

Based on the results of the three tests described above, Qwest can only conclude that the additional transaction time observed by the P-CLEC, during their testing, must be due to the P-CLEC's environment, which is outside of Qwest's control.

KPMG Comments (02/06/2002):

The approach taken by Qwest to conduct three internally administered tests is inconsistent with the methodology set forth and agreed upon by the ROC TAG. As defined in the document *ROC M&R Volume Recommendation*, version 4.7, October 9, 2001, the ROC TAG agreed to a third party test conducted by KPMG Consulting. Furthermore, there are no provisions in the *Master Test Plan* for consideration of Qwest-administered tests.

The M&R Volume tests were executed according to the agreed upon methodology and results were compared to the benchmarks approved by the ROC TAG. A benchmark of 0:00:24 was established for average processing time for Non Design Edit transactions. Qwest's performance for this transaction type was 0:00:27. KPMG Consulting concluded that the difference of three seconds between the benchmark and Qwest's performance is statistically significant and constitutes an unsatisfactory result.

KPMG recommends that Exception 3107 remain open.

KPMG Supplemental Recommendation (02/12/2002):

KPMG Consulting conducted the Volume Stress Test on January 23, 2002. As part of this testing activity, KPMG Consulting observed Non Design Edit transactions under stress load conditions, which consisted of eight hours of 'normal' and four hours of 'stress' testing. For the combined twelve hour day, KPMG Consulting calculated a response time of 0:00:27 seconds. Additionally, KPMG Consulting separated the stress test day into 'Normal Hours Only' and 'Stress Hours Only' and calculated response times of 0:00:25 seconds and 0:00:28 seconds, respectively.

Qwest Response to KPMG Supplemental Recommendation (02/21/2002):

Qwest's overall performance on the M&R Volume Test was excellent. The approved ROC M&R Volume Recommendation, version 4.8, November, 13, 2001, specifies that the M&R volume test includes 2 normal days (12 hours at normal volume), 1 peak day (6 hours at normal volume and 6 hours at peak volume), and 1 stress day (8 hours at normal volume and 4 hours at stress volume for diagnostic purposes only). (The referenced document does not define an Edit transaction. This exception refers to the Edit transaction represented by the combined results of Add and Modify transactions.) The normal, peak, and stress tests measured Qwest's performance against benchmarks for 13 transactions.

Qwest successfully met all 13 benchmarks for the normal days. Qwest met the Non Design Edit transaction benchmark of 24 seconds for the normal day. Qwest met 12 of the 13 benchmarks for the peak test day accounting for 98.2% of total transactions executed. Results for the peak day was 27 seconds, which was not within the benchmark for less than 2% of the total transactions executed. Qwest's performance for the stress day on this measure is consistent with performance for the peak day, i.e., 27 seconds.

Qwest prepared an M&R transaction analysis of the monthly CEMR Logs for the 6-month period August 6, 2001 (start of the CEMR Log files) through January 31, 2002 (see attached). The analysis excluded all Qwest internal and P-CLEC transactions. Also, since Event transactions are not captured in the CEMR Log, by default they were excluded from the analysis. Non Design Edit transactions represented an average of 0.3 % of the CLEC actual transaction volume through CEMR for M&R during the period reported. Although the results on this transaction of 3 seconds (average 3 seconds per transaction under "peak" and "stress" conditions) are statistically significant, the peak test failure on this measure is immaterial in light of the actual CLEC Non Design Edit transactions being executed.

Qwest's testing described in the previous response was not an attempt to supplant the third party test. The tests were conducted to identify any bottlenecks that may have caused the delay observed by the P-CLEC. The results of these tests were shared with KPMG to demonstrate that Qwest was unable to identify any problems and that performance for this transaction was observed to be within the benchmark cited by KPMG.

Qwest asserts that failure to meet this benchmark does not constitute an impediment to the CLEC's ability to compete. Qwest respectfully requests that KPMG close this exception and categorize it as "Closed/Unresolved".

Attachments: Confidential attachment sent via Data Request Process: CEMR_Trans_Count_Aug2001 thru Jan2002

ROC_TI588_EXP3055_KPMG Disposition Report_02_07_02.doc

Initial Release Date: September 27, 2001
First Response Date: October 15, 2001
Second Response Date: November 16, 2001
Third Supplemental Response Date: December 27, 2001
Fourth Response Date: January 16, 2002
Disposition Report Date: February 7, 2002

EXCEPTION DISPOSITION REPORT:

Exception:

Qwest's OSSLOG Trouble History contained inaccurate closeout codes for repairs completed to Plain Old Telephone Service (POTS) Resale and UNE-P services.

Summary of Exception:

KPMG Consulting has been conducting a test of Qwest's ability to find, repair, and accurately document the results of maintenance activities. Faults were placed on POTS Resale and UNE-P accounts and were reported through both manual and electronic processes. Once the faults were repaired, KPMG Consulting compared the Disposition and Cause (D/C) codes entered by Qwest in the OSSLOG Trouble History for each of the repairs, with the D/C codes KPMG Consulting expected to be entered based on the nature of the faults. Of the 201 faults placed, 124 (61.7%) were found to accurately reflect the fault placed on the circuit. The remaining 77 faults reflected inaccurately entered closeout codes in the Trouble History. KPMG Consulting applies a standard of 95% accuracy for the closeout codes to be entered into the Trouble History reports[1] and Qwest is not meeting this standard.

Summary of Qwest's Initial and Supplementary Responses:

Qwest initially agreed that 48 of 77 D/C codes provided in the Confidential Attachment were not accurate in the DLETH report for a 76.1% success rate. As a corrective measure to improve performance, Qwest increased the frequency of internal audits and expanded the scope of the FCC SAVER audits to improve the D/C code accuracy levels.

Upon further review, Qwest concluded that an additional 24 D/C codes were correct and requested a meeting with KPMG Consulting to review their assessment. At the conclusion of the meeting, KPMG Consulting agreed with Qwest's assessment however, even after reclassifying these as accurately coded D/Cs, Qwest's performance (88.1%) was still below the benchmark of 95%. Therefore, it was agreed a retest would be required.

[1] This standard is based on KPMG Consulting's professional judgment.

Retesting activities revealed that Qwest accurately coded 108 of 122 (88.5%) circuits. Qwest noted that they had made significant improvement over initial testing (61.7%) and committed to completing additional training for all COTs on the proper methods and procedures for closing trouble tickets. Qwest also reemphasized that continued training would occur to ensure accurate coding of D/C codes. Qwest requested that KPMG Consulting re-assess how it evaluates D/C codes by considering their relationship to the work group making the actual repairs. Qwest maintained that although all four digits of the Disposition Codes may not be correct, performance metrics only consider the first two digits therefore any discrepancies involving the last two numbers are not relevant. In addition, Qwest claimed that there is no impact to CLECs. Qwest asked KPMG Consulting to consider this information and re-evaluate the retest results. In the event KPMG Consulting disagreed with Qwest's position, Qwest requested that this Exception be closed as "Closed/Unresolved".

KPMG Consulting's Disposition Report (02/07/02):

Summary of KPMG Consulting's Retest Activities

KPMG Consulting conducted additional testing during November 2001 to retest the accuracy of close out codes (primarily disposition codes). Retesting and subsequent discussions indicated that 108 out of 122 "dispatch in" and "dispatch out" accounts were closed out properly for a success rate of 88.5%.

KPMG Consulting reviewed each incorrectly coded trouble and attempted to assess the direct relationship to CLECs and metrics, placing emphasis on the accuracy and importance of the last two digits. KPMG Consulting could not conclude that incorrectly coded closeout codes (including when the last two digits are incorrectly coded) would be of no impact to CLECs. Furthermore, Disposition (close-out) Codes are used to report on performance in corporate and regulatory reports. This data can be used to characterize the types of faults reported by CLECs/customers. Incorrect closeout codes could distort performance results that are reported to regulatory agencies and others.

Summary of KPMG Consulting's Retest Results

KPMG Consulting has noted that Qwest has completed additional training regarding the closure of trouble tickets on 1/31/2002. However, Qwest is still not meeting the 95% benchmark and has requested that no additional testing be conducted. KPMG Consulting reaffirms its response of 01/17/2002 and believes that the results of the retest, still constitute an unsatisfactory result. KPMG Consulting acknowledges Qwest's request to close this Exception as "Closed / Unresolved".

KPMG Consulting recommends closure of Exception 3055 and requests that it be categorized as "Closed / Unresolved".

ROC_TI588_EXP3055_Qwest_Supp_Response_02_01_02.doc

Test Vendor ID:	EXP 3055
Qwest Internal Tracking ID:	TI 588
Observation/Exception Title:	Plain Old Telephone Service
Test Type/Domain:	Test 18 – M&R End to End
Date Qwest Received:	09/27/2001
Initial Response Date:	10/04/2001
Supplemental Response Date:	11/02/2001
2nd Supplemental Response Date:	01/10/2002
3rd Supplemental Response Date:	01/28/2002
4th Supplemental Response Date:	02/01/2002

Test Incident Summary:

An exception has been identified as a result of the test activities associated with MTP Test 18, M&R End to End Trouble Reporting.

Exception:

Qwest's OSSLOG Trouble History contained inaccurate close-out codes for repairs completed to Plain Old Telephone Service (POTS) Resale and UNE-P services.

Background:

When Qwest receives a trouble report, it dispatches a technician to investigate the trouble. If a repair is made on an identified problem, Qwest enters a code number (referred to as a "disposition code") into the OSSLOG Trouble History to identify the type and/or location of the problem repaired by its technician. A code number is also to be entered for the cause (referred to as a "cause code") of the trouble repaired. The OSSLOG Trouble History ensures that Qwest has complete and accurate data regarding the types and frequency of problems reported and repaired.

KPMG Consulting has been conducting a test of Qwest's ability to find, repair, and accurately document the results of maintenance activities where specific faults have been placed and reported through a combination of manually and electronically reported troubles. KPMG Consulting applies a standard of 95% accuracy for the close-out codes to be entered into the Trouble History reports.[1]

Issue:

KPMG Consulting placed faults on POTS and UNE-P service accounts, and requested through the normal wholesale reporting process that Qwest repair the circuits. Once the faults were repaired, KPMG Consulting compared the close-out codes entered by Qwest in the OSSLOG Trouble History for each of the repairs, with the codes KPMG Consulting expected to be entered based on the nature of the faults. Of the

[1] This standard is based on KPMG Consulting's professional judgment.

201 faults placed, 124 (61.7%) were found to accurately reflect the fault placed on the circuit. The remaining 77 faults reflected inaccurately entered close-out codes in the Trouble History.

KPMG Consulting has provided the details of the 77 faults in a confidential attachment.

Impact:

Inaccurate close-out codes could reduce Qwest's ability to detect consistent problems reported by CLECs. This could prevent Qwest from being able to repair problems before they are reported by CLECs. This could also cause a CLEC's customers to experience avoidable problems that could reduce their level of satisfaction with a CLEC.

Qwest Formal Response:

Qwest has reviewed Exception 3055 and the Confidential Attachment and agrees that 48 dispositon and cause (D/C) codes are inaccurate. However, Qwest research indicates that 29 of the D/C codes accurately reflect the trouble found. The *Confidential Information, Exception 3055 (TI588)* attachment provided with this response has been expanded and included as a supplement to Qwest's response. Columns have been added indicating the D/C codes that Qwest agrees or disagrees are inaccurate. An explanation is provided for all disputed D/C codes.

Qwest research of the information in the Display Long Extended Trouble History (DLETH) Report indicates the same D/C codes that KPMG provided in the Confidential Attachment. The D/C codes should match the trouble history narrative in the DLETH report, not the specific faults placed by KPMG. The narrative reflects the action taken by the technician to resolve the trouble.

D/C code entry accuracy is reviewed monthly with each technician. Coding errors are discussed between the supervisor and technician emphasizing accuracy improvement. When new codes are added, technicians will receive updates as they occur.

The FCC, Sampled and Verified Employee Reporting (SAVER) audit will incorporate the review of D/C codes for accuracy in the future. Qwest has implemented quarterly audits throughout the Local Network Organization to improve D/C coding accuracy. Coding errors identified during these audits will be provided to the responsible Directors and Supervisors for corrective action.

In conclusion, Qwest agrees that 48 of 77 D/C codes provided in the Confidential Attachment are not accurate in the DLETH report. However, Qwest research indicates that 29 of the D/C codes accurately reflect the trouble found. Qwest has increased the frequency of internal audits and expanded the scope of the FCC SAVER audits to improve the D/C code accuracy levels.

KPMG Comments (10/15/2001):

KPMG Consulting initially reviewed 201 troubles, and reported that 124 (61.7%) reflected accurate coding. Qwest has responded to this exception, modifying the number accurately coded as being 153. While KPMG Consulting still has issues with some of the codes Qwest believes were correctly coded, based on Qwest's response, further investigation is not warranted. Qwest concurs that 153 out of 201 (76.1%) are accurately coded, which still places the final result below the 95% benchmark used as the quality measure for this test.

Qwest Supplemental Response (11/02/2001)

Qwest has further reviewed Exception 3055 and the Confidential Attachment and agrees that 24 of the 201 Disposition and Cause Codes were incorrect. Those items are identified in the Updated Confidential

Attachment with an "N" in the column marked Correct/Arguable/No and an "N" in the column marked Y/N.

Qwest also concluded that on 24 of the trouble reports mentioned in the updated Confidential Attachment the Dispatch and Cause Codes were correct. Those items are identified with a "C" in the Correct/Arguable/No column.

The 14 items identified with an "A" (arguable) are items that Qwest feels there could be legitimate explanations for the coding. Those reasons include:

- "Cut to Clear" tickets where the line was cut to a new cable pair
- Test bed lines that had multiple trouble conditions
- Trouble tickets where trouble condition was identified and removed prior to dispatch taking place
- Central Office trouble tickets that were identified as trouble out due to close proximity of the DMARC to the Central Office

- The 38 items that are identified with an "Y" in the Y/N column are items that Qwest feels that the Test Bed design or Test 18.6 processes impacted the Disposition and Cause Codes.

A meeting took place on 10/30 between Qwest and KPMG to discuss this Exception and the following decisions were made:

- A re-test of the ability of Qwest to accurately document Disposition and Cause Codes will be required
- KPMG will analyze the items on the Confidential Attachment that were determined by Qwest to be correct, arguable or impacted by Test Bed conditions and make changes to Test 18.6 methodology so that the re-test results will be more accurate
- Preparation for a re-test can begin immediately

Qwest recommends a meeting with KPMG prior to the re-test to ensure that the improvements in the Test 18.6 procedures will make the test results more accurate.

KPMG Supplemental Recommendation (11/16/2001):

In its 11/02/01 response, Qwest agreed with KPMG Consulting's assessment that 24 of 201 accounts were coded incorrectly, and as a result a retest will occur.

Retesting activities will include inputting troubles on 35 "dispatch in" accounts and 35 "dispatch out" accounts. Results will be analyzed by comparing the coding displayed in the DLETH header row with the narrative input by the technician in the body of the DLETH.

Based on Qwest's response, KPMG Consulting recommends that Exception 3055 remain open pending successful retest activities.

KPMG 2nd Supplemental Recommendation (12/27/2001):

As a part of additional testing conducted by KPMG Consulting during November 2001, the accuracy of close out codes (primarily disposition codes) has been retested. Retesting indicates that 106 out of 122 "dispatch in" and "dispatch out" accounts were closed out properly for a success rate of 86.9%.

Qwest 's performance of 86.9% falls below KPMG Consulting's standard of 95% accuracy for closeout codes to be entered into the Trouble History reports and the DLETH history transactions.

KPGM Consulting recommends that Exception 3055 remain open pending a successful fix and subsequent retest activities.

Qwest Response to KPMG 2nd Supplemental Recommendation (01/10/2002):

Qwest has researched and analyzed the sixteen Telephone Numbers on KPMG's Confidential Attachment. A summary of our analysis is documented below.

An Observation and Exception (O&E) conference call took place on 01/09/02 to discuss this Exception. During this call, KPMG, stated that according to their own investigation, Reference Number 9 had been coded properly.

Disposition Code Analysis:

Reference Number 4 & 7:

Qwest research indicates that the first three characters in the 4 character disposition codes were correct for Reference Numbers 4 and 7. The first three characters provide the trouble location (i.e., distribution frame). The fourth character is designed to provide more detail for the trouble disposition.

Specifically for reference numbers 4 and 7, disposition code 0530 was utilized and indicates the trouble was repaired in the Central Office at the distribution frame. The fourth character of the disposition code would provide additional details about the work action the Central Office Technician performed to repair the trouble. Had the technician entered all four disposition code characters, "0532", the last character of the disposition code would identify that the technician fixed a broken jumper at the distribution frame. This information is noted in the narrative section of the trouble ticket that is provided to the CLECs. Ultimately, the correct entry in the fourth character of the disposition code does not impact the CLECs.

All COTs will be retrained on the proper methods and procedures for closing trouble tickets by January 31, 2002 per Qwest's process, *Central Office Non-Design (ND) Ticket Training, Revision Date: 05/19/1999.* This internal confidential document will be provided to KPMG through a Data Request associated with this Exception.

Reference Number 15:

Qwest research indicates that correct disposition code was used for Reference number 15. The stated inserted trouble for reference number 15 was an open placed at the customer premises. The trouble was dispatched out correctly and the field technician discovered a broken jumper at the demarcation point on the customer premises. The field technician also did a cable pair transfer and used a disposition code of 0401. Disposition code 0401 is associated with a cable pair transfer action. The field technician coded the trouble to disposition code of 0401, which is associated with the repair activity closest to the central office. The trouble was correctly repaired and the appropriate disposition code was used.

Conclusion:

Qwest research, along with KPMG's analysis on reference 9, indicates four of the sixteen accounts used accurate disposition codes. Based on this, 110 out of 122 trouble tickets were closed with accurate disposition codes resulting in a coding accuracy rate of 90.2%.

Qwest has progressed, from 61% for the first test to 90.2% in the second test, in dispatching repair tickets correctly and using correct disposition codes. According to the test samples, Qwest accuracy has improved over 28%. Also, thirteen of the sixteen trouble tickets on the confidential attachment were dispatched to the correct location, according to the trouble insertion information provided by KPMG; thereby, resolving the trouble in a timely manner.

The trouble ticket auditing and review process that Qwest deployed after the first test has improved the results of this test by 28.5%. Qwest will continue these audits and training to ensure continued improvement.

Qwest will provide the internal confidential document, *Central Office Non-Design (ND) Ticket Training, Revision Date; 05/19/1999*, to KPMG through a Data Request associated with this Exception.

KPMG 3rd Supplemental Recommendation (01/17/2002):

As discussed on the 01/09/02 exception call, KPMG Consulting agreed with Qwest that 2 of the 16 troubles originally identified as incorrectly coded were actually coded correctly. In addition, KPMG Consulting agreed to re-examine the remaining 14 incorrectly coded troubles to assess the degree of impact these incorrectly coded troubles could have on CLECs.

KPMG Consulting reviewed each incorrectly coded trouble and attempted to assess the direct relationship to CLECs and metrics. KPMG Consulting could not conclude that incorrectly coded closeout codes would be of no impact to CLECs. Furthermore, disposition (close-out) codes are used to report on performance in corporate and regulatory reports. This data can be used to characterize the types of faults reported by CLECs/customers. Incorrect closeout codes could distort performance results that are reported to regulatory agencies and others.

KPMG Consulting reviewed the actions taken by Qwest to improve closeout code accuracy and has concluded that these actions have resulted in a significant improvement in performance. KPMG believes that further improvement is possible through continuation of remedial training and management oversight.

Based on the errors in coding and the possible impacts that could result from coding errors, KPMG Consulting recommends that Exception 3055 remain open.

Qwest Response to KPMG 3rd Supplemental Recommendation (01/28/2002):

DLETH report narratives are accurate in identifying where the trouble occurred and the action taken to resolve the trouble. Qwest maintains the information provided in the narrative is sufficient to allow the CLECs to provide quality service to their customers. Therefore, incorrect disposition/cause codes alone would not adversely affect the CLEC community. The DLETH report narratives are available to CLECs through CEMR. In addition, when a CLEC calls into Qwest's Repair Call Handling Center (RCHC) and requests information, the closing narrative is read to the CLEC, rather than the disposition/cause codes.

Further, the last two digits of the disposition codes have virtually no affect on CLECs, Qwest service to CLECs, or PID performance. The PID measurements do not use the last two characters of the disposition code in any results. For example, the PID measurements only use the first two characters of the disposition code to exclude non-Qwest trouble from the PID measurements. Only the last two characters of the disposition code were incorrectly coded for 8 out of the 14 observations on the confidential attachment, and therefore, would have no impact. By excluding the previous 8, the disposition codes were incorrect for only 6 of the 122 total observations which equates to 95% compliance as described above.

Since the first test, Qwest has implemented the following audits and reviews. D/C code entry accuracy is reviewed monthly with each technician. Coding errors are discussed between the supervisor and technician emphasizing accuracy improvement. When new codes are added, technicians will receive updates as they occur. The FCC Sampled and Verified Employee Reporting (SAVER) audit will incorporate the review of D/C codes for accuracy in the future. The FCC SAVER audit samples Design Long Extended Trouble History (DLETH) reports to determine the percent of time technicians spend on non-regulated services

versus regulated services. The SAVER audit is a FCC mandated requirement to allocate technician's time reporting correctly between non-regulated and regulated services. Qwest has implemented quarterly audits throughout the Local Network Organization to improve D/C coding accuracy. Coding errors identified during these audits will be provided to the responsible Directors and Supervisors for corrective action. In addition, Qwest research indicates that 12 of the 14 incorrect disposition/cause codes on the confidential attachment were attributable to Qwest Central Office Technicians (COTs). Therefore, all COTs will be retrained on the proper process of closing trouble tickets with accurate disposition/cause codes. The training will be completed by 01/31/02.

Qwest has improved disposition and cause code reporting accuracy from 61 % on the first test to 88.5 % on the second test. The trouble ticket auditing and review process that Qwest deployed after the first test has improved the results by 27.5 %. KPMG has acknowledged that Qwest actions have significantly improved reporting results. Qwest will continue these audits and training to ensure continued improvement.

Additionally, neither Qwest, nor the MTP, recognizes the 95% benchmark established by KPMG. If KPMG cannot re-evaluate and successfully close this Exception, then Qwest respectfully requests that KPMG close this Exception and categorize it as "Closed/Unresolved".

Qwest Supplemental Response (02/01/2002):

Qwest committed to the following action item in the 1/10/02 response:

> *"All COTs will be retrained on the proper methods and procedures for closing trouble tickets by January 31, 2002 per Qwest's process, Central Office Non-Design (ND) Ticket Training, Revision Date: 05/19/1999."*

Qwest completed the retraining effort on 1/31/02.

Attachment(s): None

ROC_TI605_EXP3058_KPMG Disposition Report_01_03_02.doc

Initial Release Date: October 3, 2001
First Supplemental Response Date: October 18, 2001
Second Supplemental Response Date: November 21, 2001
Disposition Report Date: January 3, 2002

EXCEPTION DISPOSITION REPORT

Exception:

KPMG Consulting has identified concerns that Qwest Communications did not successfully repair all of the Plain Old Telephone Service (POTS) Resale, UNE-P, and UNE-L circuits submitted for repair.

Summary of Exception:

KPMG Consulting placed faults on POTS Resale, UNE-P, and UNE-L accounts, and requested that Qwest repair the troubles through the normal wholesale repair process. Once the faults were repaired, KPMG Consulting revisited the locations where the faults were inserted to verify that the fault placed was repaired. A significant number of these lines were not found to be repaired when revisited although they were reported back to KPMG Consulting as being cleared and closed through Qwest's M&R process. If Qwest technicians report that troubles have been repaired, when in fact they have not, a CLEC could incorrectly notify its customers that the repairs have been completed. This would result in increased operating expenses for the CLEC in addition to decreased customer satisfaction with the CLEC because of unmet expectations.

Summary of Qwest's Initial and Supplementary Responses:

On October 12, 2001, Qwest responded to Exception 3058. The initial response indicated that Qwest researched the telephone numbers, provided by KPMG Consulting to determine if repair records indicated trouble isolation and closure activities for each circuit. Qwest responded that their records showed that the majority of the troubles, identified by KPMG as not being fixed, were processed properly and that they had insufficient information to respond to KPMG's assertion that these troubles were not cleared. In addition, Qwest asserted that performance with regard to successful repair of trouble was governed by the MR7 PID and concluded that they were in compliance with PID MR7.

On October 25, 2001, Qwest issued a response to KPMG Consulting's October 18, 2001 comments on the initial response. In the second response, Qwest reiterated that repair quality, or its ability to verify closed trouble tickets as repaired, was correctly captured by the PID MR-7 and that neither Qwest, nor the MTP, recognized the 95% benchmark established by KPMG. Qwest requested that in light of the differing views posited by Qwest and KPMG Consulting, that KPMG Consulting close the Exception and categorize it as "closed/ unresolved".

On November 16, 2001, Qwest issued a supplemental response to their second response on October 25, 2001. Qwest maintained its second response with data to support its conclusion and provided details of additional research conducted by Qwest.

KPMG Consulting's Disposition Report (01/03/02):

Summary of KPMG Consulting's Response Activities:

October 18, 2001, KPMG Consulting issued its first response to Qwest's initial response to Exception 3058. KPMG Consulting asserted that it had provided adequate information on the accounts in question for Qwest to properly research. KPMG Consulting also addressed that the exception was not intended to validate Qwest's performance using criteria outlined in PID MR-7, and that any such reference to PID MR-7 was inappropriate for the results reported by KPMG Consulting for this exception. KPMG Consulting requested that Exception 3058 remain open for further evaluation.

November 21, 2001, KPMG Consulting issued a second response to Qwest's October 25, 2001 and November 16, 2001 supplemental responses. KPMG Consulting restated that it did not recognize PID MR-7 as an appropriate evaluation criteria approved by the ROC TAG committee for Test 18. In addition, KPMG Consulting maintained the position that applying the 95% benchmark for successful repair of Plain Old Telephone Service (POTS) Resale, UNE-P, and UNE-L circuits submitted for repair is appropriate. In response to Qwest's formal request to close Exception 3058 as unresolved, KPMG Consulting agreed due to the fact that Qwest and KPMG Consulting disagree on appropriate evaluation criteria for this Exception.

Summary of KPMG Consulting's Responses:

KPMG Consulting believes the test criteria to be correct and based on physical verification, believes the test results to be correct as reported. Qwest and KPMG Consulting disagree on the performance standard used by KPMG Consulting to evaluate Qwest's performance and disagree over whether or not the troubles cited in this Exception were correctly resolved.

Based on Qwest's request, KPMG Consulting closes Exception 3058 as unresolved.

ROC_TI605_EXP_3058_Qwest Response to KPMG Comments_10_25_01.doc

Test Vendor ID:	EXP 3058
Qwest Internal Tracking ID:	TI 605
Observation/Exception Title:	Unsuccessful Repair of Circuits
Test Type/Domain:	Test 18 - M&R End to End
Date Qwest Received:	10/02/2001
Initial Response Date:	10/12/2001
Supplemental Response Date:	10/25/2001

Test Incident Summary:

An exception has been identified as a result of the test activities associated with MTP Test 18, M&R End to End Trouble Reporting.

Exception:

Qwest did not successfully repair all of the Plain Old Telephone Service (POTS) Resale, UNE-P, and UNE-L circuits submitted for repair.

Background:

When Qwest receives a trouble report, it dispatches a technician to investigate the trouble and perform any necessary repairs. KPMG Consulting has been testing Qwest's ability to find, repair, and accurately document the results of repair activity where specific faults are placed. KPMG Consulting applies a standard of 95% success rate for the troubles for which repairs are required.[1]

Issue:

KPMG Consulting placed faults on POTS Resale, UNE-P, and UNE-L accounts, and requested that Qwest repair the troubles through the normal wholesale repair process. Once the faults were repaired, KPMG Consulting revisited the locations where the faults were inserted to verify that the fault placed was repaired. Of the 259 faults placed, 239 (92.28%) were correctly repaired.

KPMG Consulting has provided a list of the 20 POTS Resale, UNE-P, and UNE-L accounts that were not repaired in a separate confidential attachment.

Impact:

If Qwest technicians report that troubles have been repaired, when in fact they have not, a CLEC could incorrectly notify its customers that the repairs have been completed. This could result in increased operating expenses for the CLEC as a result of the additional resources required to investigate the issue.

[1] This standard is based on KPMG Consulting's professional judgment.

Additionally, a CLEC's customers may experience decreased levels of satisfaction with the CLEC because of unmet expectations.

Qwest Formal Response:

Qwest researched the telephone numbers, provided by KPMG in a confidential attachment, to determine if repair records indicate trouble isolation and closure activities for each circuit were properly completed. Qwest records indicate that the majority of the troubles, identified by KPMG as not being fixed, were processed properly. Qwest has insufficient information, however, to respond to KPMG's assertion that these troubles were not cleared.

Qwest's performance measure for repair quality is PID MR7 Repair Repeat Report Rate. PID MR7 specifically measures repeat troubles on the same circuit for a 30 day period. If, for example, an initial trouble is cleared by Qwest and a subsequent trouble is reported on the same line, the second trouble counts against the repeat report rate. In other words, PID MR7 evaluates whether Qwest successfully repaired the trouble reported in the first instance, which is exactly the issue that KPMG is addressing in this exception.

Further, Qwest's parity performance is in compliance with PID MR7. The table below provides Qwest regional repeat report data for the type of circuits included in this exception. Specifically, it compares PID MR7 results for Qwest retail single line business/residence, UNE-P, UNE-L, and DS0 special circuits against wholesale regional performance for the month of August, 2001, and also compares retail results against the test sample results for this exception. The results show that the repeat trouble report rate was 15.9% for retail, 14.8% for wholesale, and only 7.7% for the troubles that were the subject of this Exception. This demonstrates that Qwest's parity performance is in compliance with PID MR7, and further demonstrates that Qwest's resolution of the trouble reports in this Exception was well within the governing PID MR7 measure.

	Qwest Retail	Wholesale	KPMG
MR7 – Repair Repeat Report Rate	15.9%	14.8%	7.7%

Conclusion:

Qwest performance with regard to successful repair of trouble is governed by the MR7 PID, which specifically addresses this issue. Again, from a parity perspective, Qwest is in compliance with PID MR7.

KPMG Comments (10/18/2001):

KPMG Consulting stated that of the 259 faults placed, 239 (92.28%) were correctly repaired. KPMG Consulting believes that the confidential attachment it provided Qwest in the original exception supplies Qwest with all the information needed in order to properly research the referenced accounts that KPMG Consulting asserts were not repaired.

KPMG Consulting applies a standard of 95% success rate for the troubles for which repairs are required. This exception is not intended to reflect Qwest's performance using criteria outlined in any PID, such as PID MR-7, as referenced by Qwest in its response. As such, any reference to PID MR-7 is inappropriate for the results reported by KPMG Consulting for this particular exception.

KPMG Consulting would like to reiterate that its evaluation criteria not only measures Qwest's ability to clear and close trouble tickets, but rather emphasizes that the accounts are verified as "repaired".

KPMG Consulting recommends that Exception 3058 remain open.

Qwest Response to KPMG Comments (10/25/2001):

It is Qwest's position that repair quality, or its ability to verify closed trouble tickets as repaired, is correctly captured by the PID MR-7. The stated purpose of PID MR-7, Repair Repeat Report Rate, is: "***Evaluates the accuracy of repair actions***[2], focusing on the numbers of repeated trouble reports received for the same trouble within a specified period (30 calendar days)." There is no practical or accurate way to establish a benchmark based on data alone. Parity is the only appropriate determinant for repair quality. Qwest is meeting PID MR-7. Further, for the given test sample, Qwest's repair performance compares favorably with both Qwest's Wholesale and Retail performance under PID MR-7. Additionally, neither Qwest, nor the MTP, recognizes the 95% benchmark established by KPMG. In light of the differing views posited by Qwest and KPMG, Qwest respectfully requests that KPMG close this Exception and categorize it as "closed/ unresolved".

Attachment(s): None

[2] Emphasis added.

ROC_TI586_EXP3053_KPMG Disposition Report_01_04_02.doc

Initial Release Date: September 27, 2001
First Supplemental Response Date: October 23, 2001
Second Supplemental Response Date: November 16, 2001
Disposition Report Date: January 4, 2002

EXCEPTION DISPOSITION REPORT:

Exception:

Qwest's OSSLOG Trouble History was missing the closeout codes for repairs completed to DS1 Services.

Summary of Exception:

KPMG Consulting has been conducting a test of Qwest's ability to find, repair, and accurately document the results of maintenance activities, where specific faults have been placed and reported through a combination of manually and electronically reported troubles. KPMG Consulting applies a standard of 95% accuracy for the closeout codes to be entered into the Trouble History reports.[1]

KPMG Consulting placed faults on 10 DS1 service accounts, and requested that Qwest repair the circuits through the normal wholesale reporting process. Once the faults were repaired, KPMG Consulting compared the closeout codes entered by Qwest in the OSSLOG Trouble History for each of the repairs, with the codes KPMG Consulting expected to be entered based on the nature of the faults. KPMG Consulting found that closeout codes were either inaccurate or missing from the OSSLOG Trouble Histories.

Inaccurate or missing closeout codes could reduce Qwest's ability to detect consistent problems reported by CLECs. This could prevent Qwest from being able to repair problems before they are reported by CLECs. This could also cause a CLEC's customers to experience avoidable problems that could reduce their level of satisfaction with a CLEC.

[1] This standard is based on KPMG Consulting's professional judgment.

Summary of Qwest's Initial and Supplementary Responses:

On October 4, 2001, Qwest responded to Exception 3053. The initial response indicated that Disposition and Cause codes (D/C Codes) are used to close out repair trouble reports for POTS (Plain Old Telephone Service) circuits and are not used for Design Circuits. Qwest then provided documentation indicating that Trouble and Analysis Codes are used for Design Circuits.

On November 2, 2001, Qwest issued a response to KPMG Consulting's October 22, 2001 comments. The second response indicated that Trouble and Analysis Codes are not always found on the OSSLOG history primarily for manually entered trouble tickets. Qwest continues by indicating that the OSSTR system should be used to verify the proper Trouble and Analysis Codes. Qwest then provided KPMG Consulting the appropriate OSSTR histories for analysis.

KPMG Consulting's Disposition Report (01/04/02):

Summary of KPMG Consulting's Initial and Supplemental Responses:

KPMG Consulting initially reviewed trouble histories of the 10 DS1 service accounts and incorrectly analyzed the closeout codes used. On October 5, 2001 Qwest responded to the Exception and provided KPMG Consulting with documentation indicating that Trouble and Analysis Codes, not Disposition and Cause codes are used to close out designed circuits.

KPMG Consulting indicated in its October 22, 2001 response that of the 10 DS1 service accounts, four were improperly coded on the Design Circuit OSSLOG History.

In Qwest's second response on November 2, 2001, Qwest indicated that the close out coding for DS1 Services could be found in the OSSTR records. Qwest then provided KPMG Consulting the above-mentioned OSSTR records on 11/02/01. Upon reviewing the histories, KPMG Consulting concurs on November 16, 2001 with Qwest that 3 of the 4 accounts in question were coded correctly.

Based on input from Qwest and a review of the Qwest provided documentation, KPMG Consulting agrees with Qwest that 1 of the 10 DS1 circuits was incorrectly coded. As only one circuit was incorrectly coded in a sample size of 10, KPMG Consulting cannot draw a statistically accurate conclusion regarding Qwest's performance on the use of closeout codes of trouble tickets for DS1 circuits. KPMG Consulting extended Qwest the opportunity to increase the sample size by conducting additional testing and it was declined.

KPMG Consulting recommends closing Exception 3053 as inconclusive. The inconclusive finding is due to insufficient volume from which to draw a conclusion.

ROC_TI586_EXP3053_KPMG Supp Rec_Retest_11_16_01.doc

Initial Release Date: September 27, 2001
First Supplemental Response Date: October 23, 2001
Second Supplemental Response Date: November 16, 2001

EXCEPTION REPORT:

An exception has been identified as a result of the test activities for MTP Test 18, M&R End to End Trouble Reporting.

Exception:

Qwest's OSSLOG Trouble History was missing the close-out codes for repairs completed to DS1 Services.

Background:

When Qwest receives a trouble report, it dispatches a technician to investigate the trouble. If a repair is made on an identified problem, Qwest enters a code number (referred to as a "disposition code") into the OSSLOG Trouble History to identify the type and/or location of the problem repaired by its technician. A code number is also to be entered for the cause (referred to as a "cause code") of the trouble repaired. The OSSLOG Trouble History ensures that Qwest has complete and accurate data regarding the types and frequency of problems reported and repaired.

KPMG Consulting has been conducting a test of Qwest's ability to find, repair, and accurately document the results of maintenance activities, where specific faults have been placed and reported through a combination of manually and electronically reported troubles. KPMG Consulting applies a standard of 95% accuracy for the close-out codes to be entered into the Trouble History reports.[1]

Issue:

KPMG Consulting placed faults on DS1 service accounts, and requested that Qwest repair the circuits through the normal wholesale reporting process. Once the faults were repaired, KPMG Consulting compared the close-out codes entered by Qwest in the OSSLOG Trouble History for each of the repairs, with the codes KPMG Consulting expected to be entered based on the nature of the faults. None of the 10 faults placed and subsequently repaired by Qwest had close-out codes entered into the Trouble History.

KPMG Consulting has provided the details of the 10 faults in a confidential attachment.

[1] This standard is based on KPMG Consulting's professional judgment.

Impact:

Inaccurate or missing close-out codes could reduce Qwest's ability to detect consistent problems reported by CLECs. This could prevent Qwest from being able to repair problems before they are reported by CLECs. This could also cause a CLEC's customers to experience avoidable problems that could reduce their level of satisfaction with a CLEC.

Qwest Formal Response:

Disposition and cause codes (D/C Codes) are used to close out repair trouble reports for POTS (Plain Old Telephone Service) circuits *(Disposition & Cause Codes – All States Res Bus Public Network, Revision Date 08/27/01)*. D/C Codes are not used for Design Circuits.

In conclusion, D/C codes are not used for Design Circuits.

Qwest is providing the appropriate documentation as a Supplemental Data Request for this incident.

- *Disposition & Cause Codes – All States Res Bus Public Network, Revision Date 08/27/01*

KPMG Comments (10/22/01):

KPMG Consulting initially reviewed trouble histories of 10 DS1 service accounts and incorrectly analyzed the close out codes used. Because 8 of the 10 Design Circuit OSSLOG Histories had fields where Disposition and Cause codes could be entered, KPMG Consulting incorrectly assumed that Disposition and Cause codes were used to close out DS1 service accounts.

Upon reviewing documentation provided by Qwest *(Disposition & Cause Codes – All States Res Bus Public Network, Revision Date 08/27/01)* KPMG Consulting agrees with Qwest that Disposition and Cause codes are not used to close out repair trouble reports for Designed Circuits.

However, further review of Qwest documentation indicated that Trouble Codes and Analysis Codes are used to close out DS1 service accounts *(Local Network Design Services: Analysis Codes/Trouble Code Cross Reference, Effective Date 07/21/99)*. Analysis of the 10 DS1 service account trouble and analysis codes indicated that four Design Circuit OSSLOG History reports were improperly coded.

Two accounts had incorrect codes:

Ref. No.	Account Number
1	Redacted
2	Redacted

Two accounts had no coding at all:

Ref. No.	Account Number
3	Redacted
4	Redacted

KPMG Consulting analyzed 10 DS1 service accounts and 6 (60%) were properly coded. A standard of 95% accuracy is still applied for correct closeout codes to be entered into the Design Circuit OSSLOG History reports[2]. The above results indicate Qwest is still not meeting the criteria for Accuracy of Coding of DS1 service accounts.

KPMG Consulting recommends that Exception 3053 remain open pending retest activities.

Qwest Response to KPMG Comments (10/30/01):

KPMG's analysis of the DS1 Service accounts and Trouble and Analysis codes (TC/ANA Codes) indicated that four DS1 OSSLOG History reports were improperly coded. KPMG assesses two accounts had incorrect codes and two tickets had no coding at all. Qwest's research indicates three of the four accounts were correctly coded and repaired based on Qwest's internal processes and procedures. Qwest's Trouble Codes and Analysis Codes are used to close out Unbundled Designed Service accounts based on the internal process document, *Local Network Design Services: Analysis Codes/Trouble Code Cross Reference, Effective Date 07/21/99.* In the fourth instance, Qwest technicians did not code the repair ticket correctly. In the four examples provided by KPMG, Qwest technicians correctly entered the appropriate Trouble Code/Analysis Code (TC/ANA Code) for three of the tickets. Qwest has added the following six additional columns on the Exception 3054 Confidential Attachment: Electronically Transferred, OSSTR Coded, Disposition Codes (Disp), Electronically Transferred Validation Code (ETV), ETV Match, and Trouble Code/ Analysis Code (TC/ANA). The TC/ANA Code column indicates whether the Repair Ticket was properly coded.

[2] This standard is based on KPMG Consulting's professional judgment.

Electronic/Manual Interface

Trouble tickets can be sent to Qwest by the CLECs either through an electronic interface, or delivered manually. Trouble tickets sent via Electronic Transfer (ET) would automatically download from the Work Force Administrator (WFA) to Qwest's proprietary systems: Operational Support System Log (OSSLOG), and Operational Support System Trouble Report (OSSTR). Per Qwest's internal documented process, *Local Network Designed Services Process Bulletins, Effective Date: 10/17/2001, Subject: Flow Control Responsibilities Bulletin Number: PB99124-2*, manually entered trouble tickets will not download to OSSLOG and OSSTR. The TC/ANA Codes are manually entered in the OSSTR by the technicians for billing, records, and maintenance purposes. The OSSTR will always contain the TC/ANA Codes whether electronically downloaded or manually input. The OSSTR is the system that should be used to verify if the proper TC/ANA Codes were entered.

Reference numbers 1 and 2 of the confidential attachment were Electronically Transferred. According to Qwest's research, all four tickets were properly coded, therefore, these tickets should be counted as properly coded.

Reference numbers 4 of the confidential attachment was manually entered, therefore the TC/ANA codes are not included in the OSSLOG. The TC/ANA Code was entered on the OSSTR. Qwest is providing information on the confidential supplemental attachment matrix to support this assertion. Base on the findings of Qwest's analysis, this ticket should be considered correctly coded.

Human Error

Reference number 3 of the confidential attachment was referenced as not coded. Because this was a manually processed trouble ticket, the codes are not electronically passed to the CLEC. The ticket was coded in the OSSTR according to process, but the technician did not enter the correct TC/ANA codes. Qwest agrees that this was a mis-coded ticket.

Conclusion

Three of the four trouble tickets identified by KPMG as incorrectly coded were coded properly, and closed with the appropriate TC/ANA codes. Qwest will provide the OSSTR records for the three trouble tickets by 11/02/01.

Attachment(s): None

KPMG Consulting's Second Supplemental Response (11/16/01):
In Qwest's second response (10/30/01), it indicated that the close out coding for DS1 Services could be found in the OSSTR records.

Qwest provided KPMG Consulting the above-mentioned OSSTR records on 11/02/01. Upon reviewing the histories, KPMG Consulting concurs with Qwest that 3 of the 4 accounts in question were coded correctly.

KPMG Consulting concurs that close out coding for DS1 Services is found in the OSSTR records, and concludes that Qwest coded 90% of these accounts correctly.

KPMG Consulting recommends that Exception 3053 remain open until additional testing observations can be completed and evaluated.

ROC_TI818_EXP3109_KPMG Disposition Report_03_19_02.doc

TI 818
EXCEPTION 3109 – DISPOSITION REPORT
Qwest OSS Evaluation

Initial Release Date: January 22, 2002
First Response Date: February 21, 2002
Disposition Report Date: March 19, 2002

EXCEPTION DISPOSITION REPORT

Exception:

Qwest's Mediated Access Electronic Bonding and Trouble Administration (MEDIACC-EBTA) End-to-End testing lacks a complete testing environment.

Summary of Exception:

Qwest provides CLECs with the opportunity to implement a trouble reporting system called Mediated Access Electronic Bonding Trouble Administration (MEDIACC-EBTA). A detailed System Test plan, provided by Qwest, outlines the following framework for a CLEC to test its EBTA interface:

1. Gateway-to-Gateway testing
2. Stack-to-Stack testing
3. End-to-End testing (System Testing)
4. Operational Readiness Test (Production Environment)

During the End-to-End testing phase, as described in the System Test Plan, test scenarios for non-designed services, such as Plain Old Telephone Service (POTS) circuits, are processed by the LMOS production mainframe. Limitations in testing non-designed services during End-to-End testing include:

1. Qwest utilizes the LMOS production mainframe for End-to-End testing of any non-designed services. By using the LMOS production mainframe for CLEC testing purposes, Qwest does not provide CLECs with a test environment that is completely separate from the production environment.

2. The dependency to use Qwest's LMOS production mainframe for testing limits certain test scenarios, as there are particular circumstances in which Qwest is not be able to prevent services from being dispatched. As a result, if erroneous test scenarios are submitted during End-to-End testing, and are processed by LMOS, live production accounts will be affected in a negative way. These limitations for testing the full range of non-designed services, without impacting live accounts, are neither documented nor made publicly known to CLECs.

Based on the identified limitations, the Qwest EBTA testing environment does not provide CLECs with a true representation of how transactions will function and respond in Qwest's EBTA production environment.

Summary of Qwest's Initial and Supplementary Responses:

Qwest initially responded on February 4, 2002. Qwest acknowledged that for non-Designed ETE (End-to-End) testing, trouble reports and MLT tests are processed using the LMOS production applications. However, Qwest stated that it does not believe the use of the production environment limits the interface testing capabilities of CLECs. Qwest described the specific process steps that CLECs follow to conduct end-to-end testing for EBTA. The steps include developing a Joint Implementation Agreement (JIA), creating a System Test Plan, formulating a Project Plan, negotiating test scenarios, and submitting transactions. Qwest also described the manual and automatic safeguards employed to facilitate testing while preventing negative impacts to the production environment.

Qwest reiterated its position in its March 13, 2002 response. Qwest stated that it has successfully demonstrated its ability to mitigate any risk associated with using the LMOS production system within its EBTA test environment. Furthermore, Qwest believes that the structure and processes used for EBTA testing are more than sufficient to allow a CLEC to perform interoperability testing without negatively impacting production accounts or systems. Qwest also maintained that the EBTA testing environment provides CLECs with a true representation of how transactions will function and respond in Qwest's EBTA production environment, regardless of the manual interventions.

Additionally, Qwest referenced a regulatory position that the *"FCC has in the past held that the provision of an integrated, computer-to-computer maintenance and repair interface is not required to satisfy the "substantial same time and manner" test, provided that the BOC otherwise demonstrates that it provides equivalent access to its maintenance and repair functions."* Qwest believes that the EBTA interface and its test environment more than satisfy the requirements set forth by the FCC.

Based on the facts set forth in its response, Qwest respectfully requested that KPMG Consulting close this exception and categorize it as "closed/unresolved".

Summary of KPMG Consulting's Initial and Supplementary Responses:

In KPMG Consulting's February 21, 2002 response, it maintained that that segregation of testing environments from production environments is an important aspect of interface development for a variety of reasons, and that it is inherently risky to test transactions within a production environment.

KPMG Consulting further investigated the commercial experience of CLECs to assess the impact of the production component on their testing efforts. KPMG Consulting

discovered that, although CLECs were able to test all of the agreed upon scenarios, they found the process of testing non-designed services cumbersome, due to the necessary manual intervention of the Qwest Tester. KPMG also cited commercial activity where a CLEC had two of its non-designed services test trouble reports pass by the Qwest Tester through to the Qwest Production Screeners. The Screeners proceeded to call the CLEC's production operation center to obtain additional information and/or dispatch permission. Although the production environment was not ultimately impacted, KPMG Consulting maintained that this example proves the potential pitfalls of not completely separating test environments from production systems.

Additionally, KPMG Consulting stated that Qwest has not adequately documented the architecture of the EBTA test environment. Based on the documentation provided, KPMG Consulting determined that Qwest has not sufficiently described how the LMOS production system is used during end-to-end testing or what the known limitations are of using a test environment with a production component.

KPMG Consulting's Disposition Report (03/19/02):

KPMG Consulting reviewed Qwest's March 13, 2002 supplemental response, and acknowledges the request to close this Exception as unresolved.

Attachments: *None*

ROC_TI818_EXP3109_Qwest Response to KPMG Comments_03_13_02.doc

Test Vendor ID:	EXP 3109
Qwest Internal Tracking ID:	TI 818
Observation/Exception Title:	Mediated Access Electronic Bonding
Test Type/Domain:	Test 24 – Interface Development and Relationship Mgt.
Date Qwest Received:	01/22/2002
Initial Response Date:	02/04/2002
Supplemental Response Date:	03/13/2002

Test Incident Summary:

An exception has been identified as a result of test activities for Test 24.6 OSS Interface Development Review.

Exception:

Qwest's Mediated Access Electronic Bonding and Trouble Administration (MEDIACC-EBTA) End-to-End testing lacks a complete testing environment.

Background:

Qwest provides CLECs with the opportunity to implement a trouble reporting system called Mediated Access Electronic Bonding Trouble Administration (MEDIACC-EBTA). The Joint Implementation Agreement (JIA) describes the appropriate ANSI standards to develop, test, and deploy an interface for the exchange of trouble reports. CLECs are required to use a Common Management Information Protocol (CMIP) network management protocol and X.25 communications protocol to provision the communication from their EBTA environment to Qwest's EBTA testing and production environments.

Qwest provides CLECs with a baseline test deck for the EBTA testing environment. Test scenarios can be removed and/or created to tailor the testing to the CLEC's unique needs. A detailed System Test plan, provided by Qwest, outlines the following framework for a CLEC to test its EBTA interface:

1. Gateway-to-Gateway testing
2. Stack-to-Stack testing
3. End-to-End testing (System Testing)
4. Operational Readiness Test (Production Environment)

The End-to-End testing process, as defined in the System Test Plan, requires CLECs to submit test cases that are designed to test the functionality of the EBTA through Qwest's middleware and back-end systems.

Test scenarios for "designed services" and "non-designed services" are processed by the Work Force Administration (WFA) and Loop Maintenance Operational Services (LMOS) back end systems, respectively.

Issue:

During the End-to-End testing phase, as described in the System Test Plan, test scenarios for non-designed services, such as Plain Old Telephone Service (POTS) circuits, are processed by the LMOS production mainframe. Limitations in testing non-designed services during End-to-End testing include:

1. Qwest utilizes the LMOS production mainframe for End-to-End testing of any non-designed services. By using the LMOS production mainframe for CLEC testing purposes, Qwest does not provide CLECs with a test environment that is completely separate from the production environment.

2. The dependency to use Qwest's LMOS production mainframe for testing limits certain test scenarios, as there are particular circumstances in which Qwest is not be able to prevent services from being provisioned. As a result, if erroneous test scenarios are submitted during End-to-End testing, and are processed by LMOS, live production accounts will be affected in a negative way. These limitations for testing the full range of non-designed services, without impacting live accounts, are neither documented nor made publicly known to CLECs.

Impact:

The lack of a Qwest EBTA testing environment does not provide CLECs with a true representation of how transactions will function and respond in Qwest's EBTA production environment. The lack of a comprehensive test environment hinders a CLEC's ability to troubleshoot problems before entering production. This increases the likelihood of encountering production problems, which may result in increased time, cost, and effort for both the CLEC and Qwest to resolve these unforeseen production issues.

Qwest Formal Response:

The response below addresses the two issues raised in KPMG's exception above. The issues have been repeated in Italics to improve readability.

1. *Qwest utilizes the LMOS production mainframe for End-to-End testing of any non-designed services. By using the LMOS production mainframe for CLEC testing purposes, Qwest does not provide CLECs with a test environment that is completely separate from the production environment.*

   Qwest acknowledges that for non-Designed ETE (End-to-End) testing, trouble reports and MLT tests are processed using the LMOS production applications. However, Qwest does not view this arrangement as detrimental or limiting to ETE testing, but rather as advantageous to the CLEC. The full functionality of MEDIACC can be tested as defined in the test cases. Qwest has been successfully testing with Carriers and CLECs using this strategy since 1995.

2. *The dependency to use Qwest's LMOS production mainframe for testing limits certain test scenarios, as there are particular circumstances in which Qwest is not be able to prevent services from being provisioned. As a result, if erroneous test scenarios are submitted during End-to-End testing, and are processed by LMOS, live production accounts will be affected in a negative way. These limitations for testing the full range of non-designed services, without impacting live accounts, are neither documented nor made publicly known to CLECs.*

   Qwest has worked diligently to optimize Electronic Bonded Trouble Administration (EBTA) testing with its CLEC partners. The processes and documents described below are the cumulative result of the experience Qwest has gained since 1995 that assures robust EBTA testing while minimizing customer risk.

CONTINUATION

[10]

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Qwest's CLEC testing for EBTA adheres to specific steps. The first step is to cooperatively develop the Joint Implementation Arrangement (JIA). The JIA is an outline of the responsibilities of both Trading Partners, the CLEC and Qwest. JIAs are developed to specify differing Agent (Qwest) requirements from Manager (CLEC) requirements. JIAs are a valuable tool for defining parameters, selected optional attributes, contact information and so forth. The JIA represents a letter of understanding between the two companies defining how the EBTA interface works. The JIAs reference ANSI standards documents: T1.227, T1.228, and T1.262. These standards were developed by TCIF (Telecommunications Industry Forum) to standardize EBTA implementations. MEDIACC complies with these standards.

The second step of EBTA testing is creation of the System Test Plan, a high-level overview of the testing required to implement EBTA. The System Test Plan is based on the JIA and also reflects Qwest's accumulated experience of implementing and operating EBTA. The System Test Plan helps define roles and responsibilities for both Qwest and the CLEC and helps explain how the testing proceeds. The System Test Plan helps both parties determine the resources needed to complete the project and provides data for the Project Plan.

The Project Plan sets time lines and resource allocations for the EBTA test and provides a basis for committing to get the project completed. Included as part of the Project Plan are the scenarios to be tested. Qwest maintains a baseline of EBTA test scenarios. The End-to-End (ETE) test scenario list captures the accumulated knowledge and experience gained from previous implementations.

Beginning with the ETE scenarios, the CLEC submits a list of test scenarios it believes necessary to conduct a thorough test. The final list of test scenarios is the result of negotiations between Qwest and the CLEC. Qwest works with the CLEC to develop any agreed upon scenarios that are not already in the ETE baseline. The agreed upon tests must be successfully completed as defined. All open issues must be resolved before the project is considered completed.

Qwest has never encountered a valid test scenario that could not be safely executed in Qwest's EBTA test environment, which includes the production LMOS applications. Qwest employs a combination of automatic and manual safeguards to facilitate robust testing without negatively impacting live accounts. CLEC testing is conducted only under the direct supervision and in cooperation with the assigned Qwest Tester. The Tester strictly controls access to the test environment. Before a test session can begin, the Tester must enable the environment. When the test session is complete the environment is disabled to prevent further access.

All tickets created by the CLEC for testing contain one of two values in the "can be reached" (CBR) field. One value causes the ticket to automatically close in the Shared Screening Module (SSM) through which all LMOS trouble tickets pass before any downstream activity occurs. The second CBR value causes SSM to place the ticket in a held status to allow further testing with the ticket before the tester manually closes it. A held ticket cannot trigger downstream activity. Also, Qwest's assigned Tester screens every test ticket created by the CLEC and has the ability to cancel any ticket that could present a problem.

The processes and documents described above clearly outline a safe and comprehensive EBTA testing process. However, Qwest acknowledges that the practice of using the production LMOS application for ETE testing was not clearly documented. On January 23rd, 2002 Qwest updated the Qwest Co-Provider System Test Plan, adding section 1.3.9. The added section explains test circuits and informs customers (CLECs) that non-designed circuits are tested in a production environment.

KPMG Comments (02/21/2002):

KPMG Consulting has reviewed Qwest's comments for each of the issues identified in this Exception, and has provided its responses below.

1. *Qwest utilizes the LMOS production mainframe for End-to-End testing of any non-designed services. By using the LMOS production mainframe for CLEC testing purposes, Qwest does not provide CLECs with a test environment that is completely separate from the production environment.*

Qwest acknowledges that non-designed test transactions use the LMOS production application and that the current EBTA test environment, therefore, relies on a component of the production systems. KPMG Consulting believes that segregation of testing environments from production environments is an important aspect of interface development because it achieves the following:

- Eliminates the risk of negatively impacting the production environment (e.g., data integrity, stability, other customers' use, etc.)
- Allows a new market entrant CLEC or a CLEC testing an upgrade to a new release to test their interface systems and conduct code debugging without relying on live customer account information
- Provides a structured learning environment where both CLECs and Qwest can understand exactly how transactions process under a defined set of conditions

A test environment that is not fully segregated is inherently risky to both the CLECs and to Qwest. Since the LMOS production application is currently required for testing non-designed services, this issue remains open.

2. *The dependency to use Qwest's LMOS production mainframe for testing limits certain test scenarios, as there are particular circumstances in which Qwest is not able to prevent services from being dispatched (sic). As a result, if erroneous test scenarios are submitted during End-to-End testing, and are processed by LMOS, live production accounts will be affected in a negative way. These limitations for testing the full range of non-designed services, without impacting live accounts, are neither documented nor made publicly known to CLECs.*

Qwest's response asserts that it has created an environment that allows CLECs to test maintenance and repair test scenarios without jeopardizing live account information in the production systems. Qwest indicated it has implemented several safeguards to prevent services from being dispatched and to minimize other impacts to the production environment. Qwest also believes the testing process allows CLECs to test a variety of agreed upon scenarios.

KPMG Consulting further investigated the commercial experience of CLECs to assess the impact of the production component on their testing efforts. KPMG Consulting discovered that, although CLECs were able to test all of the agreed upon scenarios, they found the process of testing non-designed services cumbersome, due to the necessary manual intervention of the Qwest Tester. The architecture of the EBTA test environment necessitates direct intervention and monitoring by a Qwest Tester.

The element of human intervention and monitoring increases the risk of human error and of impact to CLEC production operations. One CLEC stated that two of its non-designed services test trouble reports were not placed on hold by the Qwest Tester, causing the trouble tickets to go to Qwest Production Screeners. The Screeners then called the CLEC's production operation center requesting additional information and/or dispatch permission. Although the production environment was not ultimately impacted, the situation required the CLEC and Qwest to spend production resource time and effort resolving the two test cases. Human intervention potentially impacts other CLECs and Qwest customers.

since Qwest production resources are tied up resolving issues caused by testing in the production environment.

The need for CLEC testing to be conducted under the supervision of, and in close cooperation with, the Qwest Tester potentially limits the time available for testing. It may also delay or extend the testing period due to the need to schedule and closely coordinate all EBTA testing activity with the Tester. A fully separate test environment would not impose these restrictions on the CLECs.

Qwest's response acknowledged that the use of the LMOS production application during end-to-end testing was not clearly documented. Therefore, Qwest added section 1.3.9 to the Qwest Co-Provider System Test Plan as of January 23, 2002 to explain test circuits and to inform CLECs that non-designed circuits are tested in a production environment. KPMG Consulting has received and reviewed a copy of the updated System Test Plan obtained through Data Request ID191. The new section, "Test Circuits", states the following:

"Prior to entering Gateway-to-Gateway testing, a meeting will be held to ensure that the entrance criteria are met, including a list of circuits for Serial, POTS, Message, Carrier Facility, and designed Telephone Numbers for use during testing. Qwest will provide test Designed circuits that will be built in a test OSS environment. The Co-Provider will provide non-Designed circuits (telephone numbers) for testing in Production OSS."[1]

Based on the documentation provided, KPMG Consulting does not believe that Qwest has adequately described how the LMOS production system is used during end-to-end testing or what the known limitations are of using a test environment with a production component.

KPMG Consulting recommends that Exception 3109 remain open pending resolution of the issues identified.

Qwest Response to KPMG Comments (03/13/2002):

Qwest believes that any risk inherent in utilizing a production system behind the EBTA testing interface has been managed exceptionally well. Qwest, IXC, or CLEC operations have not been negatively impacted in the more than 6 years of existence and testing of the interface using this configuration. The benefits of using the Production environment far outweigh the risk. Qwest is especially cognizant of the CLECs' need to conduct effective tests of EBTA and recognizes the mutual benefit of successfully completing those tests prior to actual business activity.

Qwest has successfully demonstrated its ability to mitigate any risk of utilizing a production LMOS system as described in the previous response. Interoperability testing amounts to less than one percent of LMOS activity at any given time. Given the minimal volume of test transactions there is no negative impact to the normal load of transactions or Qwest production resources.

The JIA Section 7 discusses the various tests performed before a CLEC is brought into production. Extensive preliminary tests (including stack to stack, network validation and gateway to gateway) are conducted. These tests check connectivity and basic business functions and are conducted in the EBTA test environment without connectivity to the OSS. The production OSS is only included in End to End testing and Operational Readiness testing. Qwest's progressive testing approach serves to minimize risk by working through any preliminary issues that could impact production.

Although one CLEC reported two test cases not being placed on hold, these two instances represent a rare exception in the overall volume of test transactions processed.

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[1] Qwest and Co-Provider Electronic Bonded Trouble Administration System Test Plan, Version 1.0, Created February 12, 2002 - Section 1.3.8, "Test Circuits", p.3.

Qwest and the CLEC identify, work through, and manage the transactions through joint testing. Use of the production system allows the CLEC to test all test scenarios. Qwest has successfully used this strategy to test with CLECs and IXCs. There has been no request by a CLEC or IXC to change the environment used for testing.

The creation and execution of a structured, comprehensive test plan is the key to a CLEC's understanding of how transactions are processed. Qwest's testing environment allows for the complete execution of the defined test scenarios and, therefore, successful interoperability testing. Included in KPMGs response is the remark "CLECs were able to test all of the agreed upon scenarios". This statement confirms that Qwest's test environment and architecture as defined meet the requirements necessary for CLEC development. Similarly, an end-to end test was conducted by KPMG in conjunction with a CLEC who has successfully completed EBTA interoperability testing across several releases. This test effort was successfully concluded on 8/24/01 with related exceptions.

Participation of a Qwest Tester during interoperability testing is independent of the LMOS environment used. Even if a completely isolated LMOS test instance was employed, the Qwest Tester's role would remain the same. Qwest encourages cooperative testing because the nature of EBTA demands real-time responses to input from the CLEC. The Qwest Tester fills the roles of downstream Qwest personnel during interoperability testing. For example, the Qwest Tester would enter test results to mimic the activity of a Screener in entering test results and updating a repair ticket.

Qwest values the interoperability test highly and makes its testing staff available as required. To Qwest's knowledge, no CLEC request for interoperability testing has ever been denied for lack of tester availability.

The Qwest/Co-Provider EBTA END-TO-END FUNCTIONAL TEST SCENARIOS document has been updated. The revised document includes additional clarifying language in Sections 2.0 and 2.2. The language expands the explanation of the testing process and the responsibilities of Qwest Testers. The CLEC is informed that production LMOS is used. The additional wording explains the steps the Qwest Tester takes to prevent outages and manual screening activities.

Qwest maintains that the EBTA testing environment does provide CLECs with a true representation of how transactions will function and respond in Qwest's EBTA production environment. The lack of a comprehensive test environment does not hinder a CLEC's ability to troubleshoot problems before entering production. There is no increased likelihood of encountering production problems, increasing time, cost, or effort for CLEC or Qwest, because the test environment is production.

In summary, Qwest has addressed each of KPMGs concerns raised in its response.

- Qwest, IXC, or CLEC operations have not been negatively impacted in the more than 6 years of existence and testing of the interface using this configuration.
- Qwest's test environment and architecture as defined meet the requirements necessary for CLEC development.
- Qwest encourages cooperative testing because the nature of EBTA demands real-time responses to input from the CLEC representing activity of screeners and technicians.
- Qwest maintains that the EBTA testing environment does provide CLECs with a true representation of how transactions will function and respond in Qwest's EBTA production environment.

Additionally, the FCC has in the past held that the provision of an integrated, computer-to-computer maintenance and repair interface is not required to satisfy the "substantial same time and manner" test, provided that the BOC otherwise demonstrates that it provides equivalent access to its maintenance and repair functions. [2/] To accommodate the needs of CLEC community, Qwest provides a computer-to-

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2/ *See New York Section 271 Order*, 15 FCC Rcd at 4069 (¶ 215).

computer M&R interface. If KPMG maintains its position that the use of production LMOS for EBTA testing has impact to the CLECs, Qwest respectfully requests that KPMG close this exception and categorize it as "closed/unresolved".

Attachments: None

215. We disagree with AT&T's assertion that Bell Atlantic must demonstrate that it provides an integratable, application-to-application interface for maintenance and repair. Bell Atlantic is obligated to provide maintenance and repair functionality in substantially the same time and manner that it provides the functionality to itself. Although the Commission has indicated that a BOC would afford carriers a more complete opportunity to compete by offering an integratable, application-to-application maintenance and repair interface, we also found that the lack of integration does not necessarily constitute discriminatory access, provided that the BOC otherwise demonstrates that it provides equivalent access to its maintenance and repair functions. Accordingly, although it presently does not offer an application-to-application interface, we find Bell Atlantic satisfies its checklist obligation by demonstrating that it offers substantially the same means of accessing maintenance and repair functions as Bell Atlantic's retail operations.

ROC_TI678_EXP3077_KPMG Disposition Report_04_15_02.doc

Initial Release Date: November 7, 2001
First Response Date: January 8, 2002
Second Response Date: January 24, 2002
Third Response Date: April 3, 2002
Disposition Report Date: April 15, 2002

EXCEPTION DISPOSITION REPORT

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the Test 24.6 OSS Interface Development Review.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Stand Alone Test Environment (SATE) does not offer CLECs sufficient testing capabilities.

Summary of Exception:

KPMG Consulting observed, through interviews and documentation reviews, that the IMA EDI SATE does not provide sufficient testing capabilities for CLECs prior to connecting to Qwest's production systems. Certain limitations in the IMA EDI SATE were identified, including the following:

- SATE does not generate post-order responses in the same manner as they are created in the production environment.
- Flow-through orders are not supported in SATE, even though these types of orders will be processed in the production environment.
- The volume of order responses supported in SATE is restricted due to manual response handling.
- The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

A limited or insufficient testing environment could delay the timely implementation of a CLEC's IMA EDI release. Also, problems could arise in the production environment that may have otherwise been avoided if SATE more closely mirrored the production environment. These factors could increase a CLEC's operating expenses as a result of additional time required to ensure the functionality of the systems, and could inhibit revenues if testing delays hinder a CLEC's ability to service its customers.

Summary of Qwest's Initial and Supplementary Responses:

Throughout the course of the testing and in response to this Exception, Qwest addressed each of the identified issues as follows:

(1) SATE does not generate post-order responses in the same manner as they are created in the production environment.

Qwest implemented an enhancement to SATE called the Virtual Interconnect Center Knowledge Initiator (VICKI) on January 28, 2002. VICKI was created to provide a method for CLECs to receive automated post-order responses in the test environment based on the request of the CLEC.

Qwest responded to the following issues related to VICKI:

- *VICKI response times may not match production response times*
- *VICKI response detail may not match production response detail*
- *VICKI does not support "real world scenario testing"*

Qwest addressed the first two issues by stating that it would modify the VICKI supporting documentation on April 15, 2002 to clarify the language that caused KPMG Consulting to raise the issues. For the remaining "real world scenario testing" issue, Qwest stated that VICKI is purposefully dissimilar from the production environment and is designed to allow CLECs to certify IMA EDI capabilities by making paths available to trigger the all of the necessary post order responses.

(2) Flow through orders are not supported in SATE

Qwest committed to implementing a test flow through system and test Service Order Processors (SOPs) in SATE. At the time that this Disposition Report was filed, Qwest was scheduled to implement the remainder of test flow through capabilities by May 20, 2002. Qwest implemented the test flow through capability for two types of orders, POTS and UNE-P POTS orders, in the Western region on February 22, 2002.

In response to a concern raised that flow through enhancements would not include all types of post order transactions, Qwest stated that the order completion or jeopardy is independent of whether an order was created by a service center representative or automatically with flow through. Qwest indicated that it could manually provide other responses, such as an order completion or jeopardy, for a flow through LSR if desired by the CLEC. Qwest believes that there is no limitation for a CLEC to test all desired responses with a potential flow through LSR.

(3) The volume of order responses supported in SATE is restricted due to manual response handling.

As part of the EDI Implementation Guide updates for 9.0 published on January 22, 2002, Qwest removed all references to the FOC limit in SATE. Qwest believes that these actions resolved the perceived post-order capacity restraint in SATE, as referenced by KPMG Consulting.

(4) The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

In response to KPMG Consulting's examples of Qwest documentation and sample CLEC EDI test transactions that indicated that the SATE transaction responses were not consistent with those found in the production environment, Qwest asserted that SATE order responses are consistent with production responses even though the specific data within the responses may be different. SATE contains facilities, addresses, CSRs, and other data instances that do not exist in

production. The type of data in SATE mirrors production data, but the SATE data instance is not identical to production data instances. For the specific examples provided, Qwest stated that three of the four examples differed from production because they were handled manually. With the implementation of VICKI, this was not expected to occur again.

Qwest further stated that all known differences between the IMA production environment and SATE are included in the Overview section of the IMA EDI SATE Data Document. Any case where SATE had to differ from production due to a functional requirement for SATE, the case was noted for inclusion in the Data Document. For future implementations in SATE, if a new functionality causes the system behavior to differ from production, this information will be added to the Overview section of the IMA EDI SATE Data Document.

Qwest also noted that the SATE PID (PO-19) helps to ensure that Qwest has a complete and accurate Data Document. On a monthly basis, the PID tests that the data in the Data Document reflects the data in the system. This helps CLECs to feel confident that a successful test in SATE will mean a successful move to production.

In its April 8, 2002 response, Qwest respectfully requested that KPMG close this Exception and categorize it as "Closed/Unresolved".

KPMG Consulting's Disposition Report (04/15/02):

Summary of KPMG Consulting's Retest Activities and Results:

KPMG Consulting's response for each of the issues identified is below.

(1) SATE does not generate post-order responses in the same manner as they are created in the production environment.

With the implementation of VICKI, KPMG Consulting acknowledged that Qwest provided CLECs with a method for receiving automated responses, but noted that VICKI had certain limitations. One of the identified issues was that VICKI does not support "real world scenario testing." Without this capability, KPMG Consulting does not believe that VICKI provides CLECs an understanding of how different types of transactions will react in the production environment. Although VICKI helps CLECs to understand the EDI mapping structure and to determine if their systems can accept certain types of responses for the orders submitted, by design, it does not support complete interface testing capabilities. KPMG Consulting considers the real world scenario testing an essential element to a complete EDI testing environment.

(2) Flow through orders are not supported in SATE

Based on the proposed flow through enhancements, KPMG Consulting acknowledged that Qwest plans to address the issue of flow through capabilities within SATE. However, until the proposed enhancements are fully implemented, KPMG Consulting does not believe that the current test environment provides a CLEC with an accurate representation of the production environment's flow through capabilities. Based on its review and the timeline for implementation, KPMG Consulting was unable to assess this proposed SATE enhancement.

(3) The volume of order responses supported in SATE is restricted due to manual response handling.

KPMG Consulting acknowledged that the VICKI and flow through enhancements would diminish Qwest's use of human resources to support the test environment. By minimizing reliance on manual handling, Qwest could release the restrictions on the number of post order transactions that a CLEC could receive. KPMG also noted that Qwest had revised the documentation to remove any references to response generation limits and considers this issue to be resolved.

(4) The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

KPMG Consulting provided Qwest documentation and EDI transaction responses that indicated that post order response data may not be consistent with production. Qwest stated that manual handling caused many of the discrepancies and that the proposed SATE enhancements should rectify that issue. Qwest also affirmed that known differences are documented in the SATE Data Document. KPMG Consulting believes that documentation of known differences does not substitute for a test environment that mirrors the transactional behavior of the production environment.

KPMG Consulting was only able to observe limited commercial activity for SATE and only prior to the implementation of the VICKI and flow through enhancements. KPMG Consulting was unable to determine whether or not SATE produced consistent post order responses that accurately reflected the behavior and content expected for the same transactions in the production environment.

KPMG Consulting recommends that Exception 3077 be closed unresolved.

ROC_TI678_EXP3077_Qwest Response to KPMG 2nd Supp Rec_04_08_02.doc

Test Vendor ID:	EXP 3077
Qwest Internal Tracking ID:	TI 678
Observation/Exception Title:	CLECs Sufficient Testing Capabilities
Test Type/Domain:	Interface Development & Relationship Management
Date Qwest Received:	11/08/2001
Initial Response Date:	11/20/2001
Supplemental Response Date:	12/04/2001
2nd Supplemental Response Date:	12/21/2001
3rd Supplemental Response Date:	01/23/2002
4th Supplemental Response Date:	02/19/2002
5th Supplemental Response Date:	02/25/2002
6th Supplemental Response Date:	04/08/2002

Test Incident Summary:

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the Test 24.6 OSS Interface Development Review.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Stand Alone Test Environment (SATE) does not offer CLECs sufficient testing capabilities.

Background:

Qwest employs a phased approach for CLECs that wish to develop an IMA/EDI application-to-application interface with Qwest's OSS systems. The steps of the current process are listed below:[1]

1. Initial Communications (includes Kick Off conference call)
2. Project Plan (proposed/negotiated)
3. Requirements Review (by the CLEC)
4. Firewall Rules and IA-to-IA Testing
5. Testing - Interoperability and/or SATE environment
6. Controlled Production
7. Production ("Turn-Up")

Qwest developed SATE in May 2001 as an alternative testing environment to the Interoperability environment. By creating SATE, Qwest now offers CLECs the option between the Interoperability

[1] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 6.0, Released October 11, 2001, Section 2, Implementation Activities, p.6.

environment and SATE for testing their IMA EDI interface. The latest version, SATE 8.01, was implemented as of October 22, 2001.

Issue:

KPMG Consulting has observed through interviews and documentation reviews, that the IMA EDI SATE does not provide sufficient testing capabilities for CLECs prior to connecting to Qwest's production systems. Certain limitations in the IMA EDI SATE have been identified, including the following:

- SATE does not offer true end-to-end testing capabilities through to Qwest's provisioning and billing systems. Currently, SATE does not generate post-order responses in the same manner as they are created in the production environment. Specifically, a Test System Engineer (TSE) manually provides responses to the CLEC that would be system-generated in the production environment (e.g. firm order completion notices, and other post-order responses such as rejections). Manual response generation is not representative of the production environment, and does not provide adequate assurance that CLECs will see similar transaction behavior once in production. Additionally, manual intervention increases the risk of human error.

- Flow-through orders are not supported in SATE, even though these types of orders will be processed in the production environment. Therefore, CLECs are unable to truly test the ability of orders to flow-through (no manual intervention) the IMA systems in production. CLECs will only have limited ability to evaluate the behavior of the system in a manner that is consistent with flow-through orders in production. A test environment should mirror the production environment, and provide evidence of what is to be expected when entering production, including flow-through behavior.

- The volume of order responses supported in SATE is restricted due to manual response handling. As stated in the IMA EDI Implementation Guidelines[2]:

  > "As with the Interoperability environment, Post-Order responses are manually generated in SATE and may include Rejects, FOCs, Jeopardys, and Completions. Responses will be generated on posted SATE operation business days as follows:

  - FOCs - each day for the first ten Order transactions received the prior business day.
  - Progression responses - as negotiated in Project Plan
  - Regression responses other than FOCs - within 5 days of a request for a response"

  The number of responses that a CLEC receives in automated format should not be restricted. Because SATE does not support automated response handling, the CLEC can only receive a prescribed number of responses to its order transactions. This capacity limitation does not adequately mirror the production process, and does not allow the CLEC the ability to test large volumes of orders and the expected response behaviors.

- The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses. According to the IMA EDI Implementation Guidelines[3]:

  > "In SATE, pre-order and order transactions are created using Qwest-provided data that, when submitted to SATE, will return consistent responses. These responses will enable the SATE user to test the EDI mapping structure. *Those responses will hold data that could appear in production, however, may not match the response that would be received on the same query sent*

[2] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 6.0, Released October 11, 2001, Section 2, Implementation Activities, p.16.
[3] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 6.0, Released October 11, 2001, Section 2, Implementation Activities, p.15.

to the Interoperability or Production Environment. The error codes returned in SATE will mirror the Production environment. *Verbiage on outbound responses in SATE may not exactly mirror what would be returned from Qwest production systems or represent the actual message/data content expected from the result of the transaction.*"

The inability to provide consistent data within the EDI order responses impacts the CLEC's ability to accurately assess the expected outcomes of orders. Additionally, it impairs the CLEC's ability to analyze EDI problems when the CLEC cannot consistently compare actual data outcomes to expected data outcomes.

As a result of an interview with a Qwest employee on September 12, 2001, KPMG Consulting requested clarification for the paragraph quoted above from the EDI Implementation Guide (Data Request No. ID128). Qwest responded that identical queries created in SATE and production may receive different responses due to the differences between the test deck data in SATE and the account data in production. Qwest specifically stated[4]:

"For example, an address validation query for "999 Van Cleve Rd" would result in an "Exact Match" in SATE, but "No Match" in production. Alternatively, the address "1999 Broadway" would result in an "Exact Match" in production, but no match in SATE."

KPMG Consulting understands that the differences in the test deck data could potentially yield different results in SATE and production. As long as the processing logic in SATE and production is identical, this is not considered a system deficiency. However, Qwest continues in its response as follows:

"Second, SATE stubs do not hold some of the error messages held in production. For example, a query in production for a certain telephone number might result in an error message that says "Host Not Found." In SATE, the CLEC might receive "Bad NPA/NXX." In all cases, the error message received will be a real production error message and in all likelihood, it will be the error message received on such a query, however, such functionality cannot be guaranteed. If a CLEC would like to receive a certain error message in SATE, they can request it be added via the SATE Data Request Process."

KPMG Consulting does not understand how different error messages could be received in SATE versus production for identical queries, other than the case of test deck data specific errors. The response processing logic for SATE should replicate the logic in production, and therefore, no differences should exist between the error messages received in the two environments for identical queries. Based on Qwest's clarification, KPMG Consulting still believes that there is a potential deficiency with SATE in that response data is not necessarily consistent with production.

Impact:

A limited or insufficient testing environment could delay the timely implementation of a CLEC's IMA EDI release. Also, problems could arise in the production environment that may have otherwise been avoided if SATE more closely mirrored the production environment. These factors could increase a CLEC's operating expenses as a result of additional time required to ensure the functionality of the systems, and could inhibit revenues if delays hinder a CLEC's ability to service its customers.

[4] Qwest response to Data Request ID128 received by KPMG Consulting on September 27, 2001

Qwest Formal Response:

The following paragraphs outline Qwest's response to the four concerns raised by KPMG regarding SATE. Each issue has been briefly recapped to more easily correlate the response. Each response identifies current capabilities that are provided and if Qwest has any current plans to enhance the SATE in that area.

1. KPMG concern: SATE does not generate post-order responses in the same manner as they are created in the production environment.

Currently, a Qwest Technical Support Engineer (TSE) uses IMA to create Firm Order Confirmations (FOCs), manual rejects, jeopardies and non-fatal error transactions. IMA then automatically sends the transaction to the CLEC. This manual generation represents what the Interconnect Service Center representative's actions would be in production. However, if the LSR were to flow through, SATE and the Interop environment do not currently automatically generate the FOC, Jeopardy, or Completion that could occur in production. An automatically generated FOC, Completion and other post-order response does occur when the CLEC is performing their Controlled Production Testing.

Additionally, Qwest will provide automated post-order responses in SATE by January 28, 2002.With the launch of automated post-order transactions in SATE, new test scenarios will provide the CLEC with the ability to experience the behavior of IMA consistent with production timing of post-order transactions. It will also ensure that CLECs receive automated responses consistent with those received in production, negating any risk from manual handling. While the current SATE and Interop environments allow the CLEC to test all post order transactions in their EDI interface, these changes will resolve any timing concerns or concerns resulting from manual handling.

- Note: Those post-order transactions currently done manually by an Interconnect Service Center (ISC) representative in production will not be automated. Those transactions, as well as the status updates that follow them, will be done manually using the same interface used today in production by an ISC representative.

2. KPMG concern: Flow through orders are not supported in SATE

Qwest currently works with CLECs to improve their flow through numbers and help CLECs improve their business processes to achieve greater flow through in two ways. First, Qwest as part of its standard EDI implementation process educates CLECs on the key elements affecting flow through. Second Qwest works weekly on an individual basis as needed to provide training that can help a CLEC improve its flow through numbers. This training allows a CLEC to improve its business process, while SATE testing focuses on interface testing and therefore the timing based scenarios referenced in Item 1 above.

Additionally, Qwest will enhance the SATE environment to add a test flow through system and test Service Order Processors (SOPs). Qwest will implement the test flowthrough capability for Western region POTS flow LSRs during the first quarter of 2002. Qwest will implement the remainder of test flow through capabilities by May 20, 2002. Once flow through is implemented in SATE, CLECs will have the option to choose when they want their SATE transaction to be sent to the test flow through systems, or receive a specific test scenario response. If the CLEC chooses to have their transaction sent through the test flow through systems, only flow through eligible LSRs will successfully flow. LSRs, which are not eligible for flow through, will be sent to the queue for manual handling. The option to send the test LSR to the flow through systems will allow the CLEC to experience an immediate response once the flow through order is successfully processed and a manual response if flow through is not successful. CLECs will also be able to contact Qwest regarding the flowthrough of those LSRs sent to SATE for flowthrough testing.

3. KPMG concern: The volume of order responses supported in SATE is restricted due to manual response handling.

First, Qwest does not currently limit the number of post order transactions sent to those CLECs working to implement an EDI interface with Qwest or migrating to a new release of IMA. Qwest only limits the number of post order transactions within a certain window for those CLECs in regression testing. Qwest will however update its EDI Implementation process and the EDI Implementation guide by 12/03/01 to allow CLECs in regression testing to negotiate post-order transaction testing processes. At a CLEC's EDI kick-off conference call, Qwest will negotiate the number of, and manner in which, manual post-order transactions will be sent. The current process, previously agreed to via a CLEC vote, will be used as a starting point for all negotiations.

Second, the post order automation referenced in Item #1 will provide the CLECs with two enhancements. It insures that production timing and scenarios can be tested and it eliminates the need for much of the manual handling done for post order transactions in SATE today. For most post order transactions, a CLEC will no longer need to contact Qwest and request a manual post-order transaction be sent. They can request the specific transaction be sent as part of their test scenario and it will automatically be sent as a result. For those transactions still requiring manual handling (transactions manually handled by an Interconnect Service Center representative in production) after this automation, Qwest representatives will continue to issue responses manually as negotiated at the CLEC's EDI kick-off conference call.

4. KPMG concern: The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

The data instances in SATE are different from production data instances in that SATE contains facilities, addresses, CSRs, and other data instances that do not exist in production. The type of data in SATE mirrors production data, but the SATE data instance is not identical to production data instances. SATE does not contain production data so that a CLEC can easily test any production scenario without concern for end-user or contract-based privacy issues. The CLEC does have the ability to test all relevant situations such as those described in the example of obtaining an "exact match" using the address "999 Van Cleve Rd". A CLEC could test multiple situations in order to understand responses and the conditions that cause them to occur.

Second, SATE uses specific test data and planned test responses. The responses are similar to production responses as detailed below:

- SATE uses a production (or, in the month prior to an IMA release, pre-production) instance of IMA. Using a production release of IMA ensures that the condition and EDI format of all error messages sent to a CLEC are identical to those messages in production. The business rules by which a message is returned are also identical in SATE and IMA production.
- In SATE those error messages originating from a downstream system are SATE specific to test deck scenarios, which reflect actual production scenarios. These error messages are returned under the same business conditions as in production. If a CLEC wants additional test scenarios, they can request them via the SATE Data Request process.
- Qwest regularly reviews its SATE error messages to ensure that they match production error messages.

SATE allows CLECs to test their code and certify their system to IMA. A CLEC will generally not code to the content of an error message, but to the conditions of the error and the system's published APIs to ensure the flexibility of the software and to decouple the dependency of their systems on Qwest's systems. SATE returns error messages consistent with IMA business rules and EDI Disclosure Documents.

Conclusion

In addition to the above stated planned enhancements to SATE, Qwest has established a working sub-team of CMP members to further analyze and define test environment needs to ensure Qwest continues to meet the CLEC's testing objectives. The introduction of the test environment requirement sessions was done at the 10-18-01 CMP meeting and the first meeting was held on 11-06-01. Qwest has included in this meeting minutes of this first meeting. The purpose of the sessions is to collaboratively define any additional needs

for the test environment. System enhancements resulting from the CLEC requirements sessions will be submitted as Change Requests to the CMP process and prioritized for implementation. The Change Requests can also include upgrades to the test scenarios that will allow the CLECs to more extensively test either their EDI interface, or their business process and LSR construction.

Attachment(s): ROC_TI678_EXP3077_Attachment1_11_20_01 (Meeting Minutes from 11/6/01 requirements session)

Qwest Supplemental Response (12/04/2001):

Qwest stated the following in the 11/20/01 formal response:

> *"Qwest will however update its EDI Implementation process and the EDI Implementation guide by 12/03/01 to allow CLECs in regression testing to negotiate post-order transaction testing processes."*

Qwest completed the EDI Implementation process and guideline updates on 11/30/01. The EDI Implementation Guideline document is posted on Qwest's Wholesale web site at: http://www.uswest.com/wholesale/ima/edi/document.html

The associated industry notification was issued on 12/3/01 with the subject line, "EDI Implementation Guidelines for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL) Updated."

Qwest Supplemental Response (12/21/2001):

The numbers below correspond to the number used in the 11/20/01 response:

2. Qwest will implement the addition of flowthru capability to SATE in two phases. The first phase is scheduled to be available on February 20, 2001. This phase will include POTS and UNE-P POTS flowthru for Western region LSRs. The second phase will include implementation of all other flowthru eligible products and POTS and UNE-P POTS in the central and eastern regions. This phase is scheduled to be completed prior to May 20, 2002. Qwest will issue a Release Notice announcing the deployment of each release.

3. Qwest does not limit the number of response transactions a CLEC may receive while testing in SATE.

The current IMA EDI Implementation Guide reflects the following information regarding the amount of transaction responses:

In the Project Plan Development/Negotiation section (page 11):

> Qwest will negotiate the number of, and manner in which, manual post-order transactions will be returned to the CLEC. The current approach for returning these responses, previously agreed to via a CLEC vote in CMP, will be used as a starting point for all such negotiations.

In the SATE Transaction Responses section (page 25):

> Post-Order responses are manually generated in SATE and may include Rejects, FOCs, Jeopardies, and Completions. Responses will be generated on posted SATE operation business days as follows:
>
> - FOCs - each day for the first ten Order transactions received the prior business day.

- Progression responses other than FOCs - as negotiated in the Scenario Summary

In Appendix A:

IMPLEMENTATION AREAS	PROGRESSION Interoperability Environment	PROGRESSION Stand Alone Environment	REGRESSION Stand Alone Environment
Number of Transactions Permitted	As negotiated in Project Plan	As negotiated in Project Plan	As negotiated in Usage Plan

These statements do not mean that responses are limited, only negotiated. As responses in the present environment are manual, Qwest has implemented processes to allow Qwest to ensure that proper staffing levels are available for all CLEC testing. Nothing in the above statements are intended to indicate that the volume is limited.

Additionally, when post-order responses are automated with the release of SATE 9.0, CLECs will be able to receive automated responses for their LSRs. The IMA EDI Implementation Guide will be updated accordingly. The updated IMA EDI Implementation Guide for 9.0 will be published on January 21, 2001 with an associated Release Notification.

4. All known differences between the production and IMA versions of SATE are included in the Overview section of the IMA EDI SATE Data Document. As part of the creation of the initial SATE requirements, any case where SATE had to differ from production due to a functional requirement for SATE was noted to be included in the data document.

On an ongoing basis, every candidate that is placed into IMA is placed into SATE. If the implementation in SATE causes the system behavior to differ from production, this will be added to the Overview section of the IMA EDI SATE Data Document.
The SATE PID (PO-19) will help ensure that Qwest has a complete and accurate data document in the future. The PID will test on a monthly basis that the data in the data document reflects the data in the system. This will help CLECs to feel confident that a successful test in SATE will mean a successful move to production.

Based upon the confidential information provided, Qwest observed a common theme in three of the four attached issues. Issue 1, 3, and 4 were all cases of manually generated responses not system generated responses. Thus, these are not problems with the system being out of synch with production. The implementation of automated post-order responses in SATE will resolve this issue. Qwest is modeling the content of the responses after actual similar post-order responses from production. This will ensure that the responses provided to CLECs in SATE reflect those used in production.

Issue 2 : In Qwest's CLEC CMP SATE User's Group, a CR has been created to change all SATE NPA-NXX values to utilize those that are valid in LERG.

As part of the flowthru upgrade to SATE, Qwest must change all NPA-NXX and other central office values to match those valid in production. The flowthru system relies on valid production data. As a result, this request will be fulfilled in two phases to correspond to the SATE flowthru upgrades.

KPMG Comments (01/08/2002):

KPMG Consulting has addressed each of the points outlined in Qwest's November 20 and December 21, 2001 responses. Below, KPMG Consulting has recapped each of the major SATE issues, along with a response.

1. SATE does not generate post-order responses in the same manner in which they are created in the production environment.

   In its response dated November 20, 2001, Qwest states that, *"Qwest will provide automated post-order responses in SATE by January 28, 2002. With the launch of automated post-order transactions in SATE, new test scenarios will provide the CLEC with the ability to experience the behavior of IMA consistent with production timing of post-order transactions. It will also ensure that CLECs receive automated responses consistent with those received in production, negating any risk from manual handling."*

   Based on Qwest's response and proposed SATE enhancements, KPMG Consulting understands that Qwest plans to address the issue of post-order automation within SATE. Qwest has announced the introduction of the Virtual Interconnect Center Knowledge Initiator (VICKI) that will become effective in January 2002. In its White Paper released on January 3, 2002, Qwest has reiterated the business need driving this change: "Production-like Flow Through systems are needed for a CLEC to test whether a given LSR would Flow Through if sent to production.[5]" However, until such proposed enhancements are implemented, the current test environment does not provide a CLEC with an accurate representation of the production environment, due to its current manual handling of responses. Therefore, KPMG Consulting recommends that this issue remain open until the proposed enhancements are fully implemented in SATE.

2. Flow through orders are not supported in SATE.

   In its response dated November 20, 2001, Qwest states, *"Qwest will enhance the SATE environment to add a test flow through system and test Service Order Processors (SOPs). Qwest will implement the test flow through capability for Western region POTS flow LSRs during the first quarter of 2002. Qwest will implement the remainder of test flow through capabilities by May 20, 2002. Once flow through is implemented in SATE, CLECs will have the option to choose when they want their SATE transaction to be sent to the test flow through systems, or receive a specific test scenario response. If the CLEC chooses to have their transaction sent through the test flow through systems, only flow through eligible LSRs will successfully flow. LSRs, which are not eligible for flow through, will be sent to the queue for manual handling. The option to send the test LSR to the flow through systems will allow the CLEC to experience an immediate response once the flow through order is successfully processed and a manual response if flow through is not successful."*

   Qwest further clarified the anticipated SATE flow through enhancements in its December 21, 2001 response by stating, *"Qwest will implement the addition of flowthru capability to SATE in two phases. The first phase is scheduled to be available on February 20, 2001. This phase will include POTS and UNE-P POTS flowthru for Western region LSRs. The second phase will include implementation of all other flowthru eligible products and POTS and UNE-P POTS in the central and eastern regions. This phase is scheduled to be completed prior to May 20, 2002. Qwest will issue a Release Notice announcing the deployment of each release."*

[5] *A White Paper on Flow Through in The Stand Alone Test Environment (SATE)*, January 3, 2001, V1.00, p. 3.

Based on its responses and proposed SATE enhancements, KPMG Consulting acknowledges Qwest's plans to address the issue of flow through capabilities within SATE. However, until such proposed enhancements are implemented, the current test environment does not provide a CLEC with an accurate representation of the production environment's flow through capabilities. Therefore, KPMG Consulting recommends that this issue remain open until the proposed enhancements are fully implemented in SATE, and confirmed and reviewed by KPMG Consulting in cooperation with end users.

3. The volume of order responses supported in SATE is restricted due to manual response handling.

In its response dated November 20, 2001, Qwest states, *"Qwest does not currently limit the number of post order transactions sent to those CLECs working to implement an EDI interface with Qwest or migrating to a new release of IMA. Qwest only limits the number of post order transactions within a certain window for those CLECs in regression testing."*

In its response dated December 21, 2001, Qwest quotes the latest version of the EDI Implementation Guide, stating:

"Post-Order responses are manually generated in SATE and may include Rejects, FOCs, Jeopardies, and Completions. Responses will be generated on posted SATE operation business days as follows:

- *FOCs - each day for the **first ten** Order transactions received the prior business day.*
- *Progression responses other than FOCs - as negotiated in the Scenario Summary."*[6]

For SATE regression testing, the EDI Implementation Guide states:

*"Qwest provides FOCs each business day for the **first ten** product Orders received the prior business day. ISC Rejects, Jeopardies, Non-Fatals, Status Updates, and Completions are provided within 5 business days of a request for a response."*[7]

Finally, Appendix A of the EDI Implementation Guide states the following regarding EDI responses[8]:

[6] EDI Implementation Guidelines–for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 8.0, Released November 30, 2001, Section 2, Implementation Activities–Progression Testing, p.25.
[7] EDI Implementation Guidelines–for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 8.0, Released November 30, 2001, Section 2, Implementation Activities–Regression Testing, p.41.
[8] EDI Implementation Guidelines–for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 8.0, Released November 30, 2001, Appendix A, p.72.

IMPLEMENTATION AREAS	PROGRESSION Interoperability Environment	PROGRESSION Stand Alone Environment	REGRESSION Stand Alone Environment
EDI Response	Provided by TSEs Qwest provides direct feedback on error conditions and responses as negotiated in the Project Plan	Provided by TSEs Qwest provides direct feedback on error conditions and responses as negotiated in the Project Plan	Provided by TSEs Responses other than FOCs generated within 5 business days of e-mail request indicating specific PONs & INQNUMS needing a response. FOCs sent each business day for the first ten Orders or transactions received the prior business day.

The section of Appendix A that Qwest provided in its December 21, 2001 response describes a limitation in the number of transactions submitted to SATE, not the number of post order responses received from the test environment.

For both progression and regression testing in SATE, it appears that Qwest currently places a limit on the number of FOCs generated, due to the manual handling of those responses. The other post order responses are negotiated, also due to the manual handling of those responses. This capacity limitation in SATE is not indicative of the production environment, and, therefore, is considered to be a deficiency in the test environment. Although Qwest intends to automate post order responses, as noted in Point 1 of Qwest's November 20, 2001 response, CLECs are currently constrained by the number of post order responses that they can receive in SATE. Therefore, KPMG Consulting recommends that this issue remain open until Qwest can directly address the post order capacity restraint in SATE.

4. The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

In its response dated December, 2001, Qwest states, *"All known differences between the production and IMA versions of SATE are included in the Overview section of the IMA EDI SATE Data Document. As part of the creation of the initial SATE requirements, any case where SATE had to differ from production due to a functional requirement for SATE was noted to be included in the data document. On an ongoing basis, every candidate that is placed into IMA is placed into SATE. If the implementation in SATE causes the system behavior to differ from production, this will be added to the Overview section of the IMA EDI SATE Data Document."*

KPMG Consulting's expectation is that test environment transaction responses should mirror those from the related production environment. Accordingly, CLECs can gain a reasonable level of assurance that they will receive the same results for the transactions they are testing, once they migrate into production. This should facilitate a smooth transition into production for CLECs, and minimize problems for both the CLEC and Qwest. Although the known differences between the behavior of SATE and the production environment are documented in the SATE Data Document, this does not negate the fact that SATE does not completely mirror the production environment.

Additionally, in its response dated December 21, 2001, Qwest stated, *"The SATE PID (PO-19) will help ensure that Qwest has a complete and accurate data document in the future. The PID will test on a monthly basis that the data in the data document reflects the data in the system. This will help CLECs to feel confident that a successful test in SATE will mean a successful move to production."*

Although the proposed SATE PID, when implemented, will test the data in the data document by running transactions in SATE, it does not contain provisions to run the test deck in the production environment. Therefore, it provides no assurance that the same results will be achieved in the production environment.

KPMG Consulting found specific examples, during its review of CLEC testing experiences, for which the EDI response in SATE differs from the EDI response that would be found in production. The differences relate to EDI segments and data that are normally found in production transactions, but did not appear in the equivalent SATE transactions. As per the Focus Observation & Exception Call held on Thursday, December 6, 2001, KPMG Consulting agreed to provide Qwest with specific examples for which SATE results did not match the results obtained in the production environment. KPMG Consulting provided these in a separate, confidential document.

After its review of the confidential data, Qwest stated in its response dated December 21, 2001, *"Issue 1, 3, and 4 were all cases of manually generated responses not system generated responses. Thus, these are not problems with the system being out of synch with production. The implementation of automated post-order responses in SATE will resolve this issue."*

Qwest addresses the last item by stating, *"As part of the flowthru upgrade to SATE, Qwest must change all NPA-NXX and other central office values to match those valid in production. The flowthru system relies on valid production data. As a result, this request will be fulfilled in two phases to correspond to the SATE flowthru upgrades."*

Based on Qwest's review of the confidential data and its response, KPMG Consulting believes that Qwest will address these issues with the SATE planned enhancements. However, until such proposed enhancements are implemented, the current test environment does not provide a CLEC with an accurate representation of the production environment. Therefore, KPMG Consulting recommends that this issue remain open until the proposed enhancements are fully implemented in SATE.

KPMG Consulting's expectation is that test environment transaction responses should mirror those from the related production environment. Accordingly, CLECs can gain a reasonable level of assurance that they will receive the same results for the transactions that they are testing, once they migrate into production. This should facilitate a smooth transition into production for CLECs, and minimize problems for both the CLEC and Qwest. Until Qwest can provide assurance that SATE produces results that are consistent with those that would be expected in the production environment, KPMG Consulting recommends that this issue remain open.

KPMG Consulting recommends that Exception 3077 remain open until Qwest can address the stated SATE deficiencies, or implement the proposed enhancements.

Qwest Response to KPMG Comments (01/23/2002):

Qwest committed to the following action item in the 12/21/01 response:

> *"When post-order responses are automated with the release of SATE 9.0, CLECs will be able to receive automated responses for their LSRs. The IMA EDI Implementation Guide will be updated accordingly. The updated IMA EDI Implementation Guide for 9.0 will be published on January 21, 2001 with an associated Release Notification."*

Qwest completed the updates to the IMA EDI Implementation Guide on 1/22/02 (pp. 30-34). The updated document can be accessed on Qwest's Wholesale web site at: http://www.qwest.com/wholesale/ima/edi/document.html. The associated industry notification was issued on 1/22/02 with the subject line, "9.0 Release Implementation Guide, FAQ, IMA EDI Corrective

Procedures and Error Codes Document and the FBDL EDI Corrective Procedures and Confirmation/Error Codes."

KPMG Supplemental Recommendation (01/24/2002):

KPMG Consulting reviewed the updated EDI Implementation Guide, dated January 21, 2002, about which Qwest notified CLECs on January 22, 2002. KPMG Consulting noted the additional and revised information relating to the upcoming implementation of the Virtual Interconnect Center Knowledge Initiator (VICKI) in SATE Version 9.0.

As stated in previous responses to this Exception, Qwest has asserted that it will be making several enhancements to SATE over the coming months. Although these enhancements are expected to collectively address the identified test environment issues, Qwest does not anticipate completing the proposed changes until May 20, 2002. Therefore, KPMG Consulting will respond to each enhancement once it has been fully implemented, and the CLEC community has been notified per the release management schedule.

KPMG Consulting recommends that Exception 3077 remain open until Qwest can address the stated SATE deficiencies, or implement the proposed enhancements.

Qwest Response to KPMG Supplemental Recommendation (02/19/2002):

In regards to flow through capability in SATE, the phase one addition as originally described in Qwest's 12/21/01 response, has been rescheduled for a 2/25/02 implementation. The first phase will include POTS and UNE-P POTS flow through for Western region LSRs.

Qwest Supplemental Response (02/25/2002):

Qwest stated the following in the 2/19/02 response:

> *"In regards to flow through capability in SATE, the phase one addition as originally described in Qwest's 12/21/01 response, has been rescheduled for a 2/25/02 implementation. The first phase will include POTS and UNE-P POTS flow through for Western region LSRs."*

Qwest completed implementation of phase one SATE flow through capability on 2/25/02. The associated industry notification was issued on 2/25/02 with the subject line, "Deployment of SATE 9.0 Flowthrough, Phase 1."

KPMG 2nd Supplemental Recommendation (04/03/2002):

Since KPMG Consulting's January 24, 2002 response, Qwest has implemented the Virtual Interconnect Center Knowledge Initiator (VICKI) and flow through capabilities for POTS and UNE-P POTS for Western region LSRs in SATE 9.0. Based on these SATE enhancements, KPMG Consulting has readdressed the issues outlined in its January 8, 2002 response and the current status of SATE in relation to this Exception.

1. **SATE does not generate post-order responses in the same manner in which they are created in the production environment.**

   In its response dated November 20, 2001, Qwest stated:

   > "Qwest will provide automated post-order responses in SATE by January 28, 2002. With the launch of automated post-order transactions in SATE, new test scenarios will provide the CLEC

with the ability to experience the behavior of IMA consistent with production timing of post-order transactions. It will also ensure that CLECs receive automated responses consistent with those received in production, negating any risk from manual handling."

Qwest implemented the Virtual Interconnect Center Knowledge Initiator (VICKI) with the deployment of SATE 9.0 on January 28, 2002. As of the date of this response, KPMG Consulting has not been able to assess commercial activity associated with VICKI. Therefore, KPMG Consulting's evaluation is strictly limited to process documentation regarding the functionality of VICKI.

KPMG Consulting reviewed the following sources of information:

1. *A White Paper on The Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator, Version 1.00, December 7, 2001*
2. *IMA EDI SATE VICKI Paths for the Stand Alone Test Environment (SATE), Version 9.05, March 22, 2002*
3. *EDI Implementation Guidelines for Interconnect Mediated Access (IMA), Version 9.1, February 18, 2002*

Based on the documentation, it appears that VICKI provides CLECs the following:

- Ability to receive specific, expected responses to LSRs, based on the Product, Activity, and Supplemental Type for that LSR (known as "paths")
- Predetermined time delays between responses, based on the Product, Activity, Supplemental Type, and Remarks field combination for the LSR
- Ability to request additional paths for new combinations that CLECs wish to test

CLECs employ VICKI by populating the "Remarks" field of the submitted LSR with the prescribed VICKI path. The Remarks field must also reflect whether the CLEC wants to receive responses with production-like intervals or with shorter time delays specifically designed for interface testing. The VICKI paths currently available in SATE are documented in the *IMA EDI SATE VICKI Paths* document. Post order transaction responses that are handled manually in production by an ISC representative will continue to be manually processed in SATE.

Although VICKI appears to have enhanced some aspects of EDI interface testing, KPMG Consulting noted certain limitations of the application, as described below:

(1) VICKI response times may not match production response times

Qwest states, "responses and timeframes may not exactly match a similar LSR submitted to production."[9] KPMG Consulting would expect that the automated post order response times would accurately reflect the response times obtained in the production environment. The fact that VICKI response times do not necessarily mimic production response times is an indication that the testing environment does not provide CLECs with an accurate depiction of production capabilities.

(2) VICKI response detail may not match production response detail

Qwest states, "due to the complexities of certain responses, the detail on these transactions may not match the detail received on a production response for a similar transaction. FOCs are provided with varying quantities of service orders. Also, with respect to the Service and

[9] *IMA EDI SATE VICKI Paths for the Stand Alone Test Environment (SATE)*, Version 9.05, March 22, 2002, pg.4.

Equipment detail of a Completion notice, VICKI is built to allow a CLEC to understand the EDI Map structure and content of a Completion. It does not return a Service and Equipment section specific to the CLEC's test LSR. If a CLEC desires a specific Service and Equipment section be returned, they can request it be added to VICKI via the Data Request Process."[10] KPMG Consulting would expect that the detail on the post order responses would be the same as the detail found in the production responses. The fact that VICKI response detail does not match the production response detail is another indication that the testing environment does not provide CLECs with an accurate depiction of production capabilities.

(3) VICKI does not support "real world scenario testing"

Although VICKI provides CLECs the opportunity to receive certain post order responses without manual intervention, it does not allow CLECs to experience "real world scenario testing". As stated in the document, *A White Paper on The Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator:*

"Qwest has also recently made plans to move ahead with Real World Scenario Testing for post-order transactions. With real world scenario testing, when a CLEC sends an LSR request to Qwest they are asking "what" would happen to this specific LSR if the telephone numbers, circuits, and facilities in SATE existed in Qwest's Production Network and this specific LSR was sent to Production. Plans for Real World Scenario post-order testing will be addressed in the Flow-Through White Paper to be reviewed on January 8, 2002. These plans were also discussed in the SATE User Group Meeting on November 27, 2001. For post-order processing today, only the above interface testing scenario is supported. Real World Scenario Testing will allow CLECs to test the exact message they would receive in production for the LSR they sent. VICKI allows them to test message formats, messages, and maps for specific pre-determined test scenarios."[11]

KPMG Consulting would expect that a fully functioning and robust test environment would support real world testing as described above.

Although VICKI helps CLECs to understand the EDI mapping structure and to determine if their systems can accept certain types of responses for the orders submitted, by design, it does not appear to adequately support complete interface testing capabilities. The limitations described above prevent CLECs from experiencing transaction responses as they would be received in the production environment. By having to select predetermined paths in order to receive responses automatically, VICKI is inherently dissimilar to the way in which orders are processed in the production environment.

KPMG Consulting acknowledges that Qwest intends to implement a flow through component to SATE, as discussed in Issue #2 below. While the implementation of this component should alleviate the third identified limitation of VICKI, it will not completely overcome the deficiencies noted. Therefore, KPMG Consulting recommends that this issue remain open until the identified issues are addressed.

2. Flow through orders are not supported in SATE.

In its response dated November 20, 2001, Qwest stated, "Qwest will enhance the SATE environment to add a test flow through system and test Service Order Processors (SOPs). Qwest will implement the test flow through capability for Western region POTS flow LSRs during the first quarter of 2002.

[10] *IMA EDI SATE VICKI Paths for the Stand Alone Test Environment (SATE)*, Version 9.05, March 22, 2002, pg.5.
[11] *A White Paper on The Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator*, Version 1.00, December 7, 2001, pg.3

Qwest will implement the remainder of test flow through capabilities by May 20, 2002. Once flow through is implemented in SATE, CLECs will have the option to choose when they want their SATE transaction to be sent to the test flow through systems, or receive a specific test scenario response. If the CLEC chooses to have their transaction sent through the test flow through systems, only flow through eligible LSRs will successfully flow. LSRs, which are not eligible for flow through, will be sent to the queue for manual handling. The option to send the test LSR to the flow through systems will allow the CLEC to experience an immediate response once the flow through order is successfully processed and a manual response if flow through is not successful."

Qwest further clarified the anticipated SATE flow through enhancements in its December 21, 2001 response by stating, "Qwest will implement the addition of flowthru capability to SATE in two phases. The first phase is scheduled to be available on February 20, 2001. This phase will include POTS and UNE-P POTS flowthru for Western region LSRs. The second phase will include implementation of all other flowthru eligible products and POTS and UNE-P POTS in the central and eastern regions. This phase is scheduled to be completed prior to May 20, 2002. Qwest will issue a Release Notice announcing the deployment of each release."

Qwest implemented the flow through capabilities for POTS and UNE-P POTS transactions in the Western region with the deployment of SATE 9.1 on February 25, 2002. As of the date of this response, KPMG Consulting has not been able to assess commercial activity for flow through orders. Also, KPMG Consulting does not have any SATE transaction testing results from the ROC 3rd Party Test to evaluate flow through capabilities. As with VICKI, KPMG Consulting's evaluation is strictly limited to documentation and a process review regarding SATE's flow through functionality.

KPMG Consulting reviewed the following documentation:

1. *A White Paper on Flow Through in The Stand Alone Test Environment (SATE), Version 1.00, January 3, 2002*
2. *EDI Implementation Guidelines for Interconnect Mediated Access (IMA), Version 9.1, February 18, 2002*
3. *Master Red-Lined CLEC-Qwest CMP Re-design Framework Interim Draft – Revised 03-27-02*

Based on the documentation, it appears that CLECs will be able to choose to have orders either sent to VICKI or to a flow through component of SATE. If a CLEC populates the remarks field with a path, then the order will employ the VICKI component; otherwise, the order will automatically be tested against the flow through system. Each order will either receive a FOC, an "Errored" status update if the order failed to flow through, or no response if flow through was not attempted. CLECs must have the Status Updates feature enabled to receive an "Errored" status update.

KPMG Consulting noted that flow through capabilities will not apply to all possible post order responses. The flow through documentation states, "Transactions not mentioned above, specifically those beyond service order creation such as Completions and Service Order Holds, will not be automated with this enhancement." It also states, "Note that no other automated responses will be sent to CLECs beyond the automated FOCs or "Errored" Status Updates mentioned above."[12]

The functionality enhancement does not appear to provide CLECs with a full understanding of how an order could flow through to a "Completed" end state in the production systems. Without complete flow through functionality, CLECs may not be able to gain a complete understanding of how an LSR will react to a given set of conditions within the production environment. KPMG Consulting does not

[12] *A White Paper on Flow Through in The Stand Alone Test Environment (SATE)*, Version 1.00, January 3, 2002, pg.4.

believe that this fundamental objective of interface testing can be fulfilled if CLECs cannot perform end-to-end, real world testing.

As of the date of this response, the new flow through capabilities have only been rolled out to one region for two products. KPMG also noted in CMP documentation that certain components of the test environment have yet to be implemented. The CMP document states, "The CTE contains the appropriate applications for pre-ordering and Local Service Request (LSR) ordering up to but not including the service order processor. Qwest intends to include the service order processor as part of the SATE component of the CTE by the end of 2002."[13] Until the flow through enhancements, including the service order processor, are completely implemented in SATE, the current test environment does not provide a CLEC with an accurate representation of the production environment's flow through capabilities.

Based on the lack of end-to-end flow through functionality and the current implementation time frame, KPMG Consulting recommends that this issue remain open.

3. **The volume of order responses supported in SATE is restricted due to manual response handling.**

In its November 20, 2001 and December 21, 2001 responses, Qwest stated that it did not limit, but rather negotiated, the number of post order responses received by CLECs. However, KPMG Consulting noted several instances within the *EDI Implementation Guide* where it is explicitly stated that there are limitations to the number of FOCs that Qwest will provide to CLECs. The limitations appeared to stem from the manual response generation required for SATE. With the implementation of VICKI, the resource requirements necessary to support SATE transactions should have been diminished. KPMG Consulting would expect that with a production-like testing environment, Qwest would be able to support CLEC test order volumes without imposing limitations on the response activity. Limitations on the number of post order responses would not occur in the production environment under normal circumstances, and therefore, should not be imposed in the testing environment. Any such limitations are considered to be a deficiency of the test environment. Therefore, KPMG Consulting recommends that this issue remain open until Qwest can directly address the post order capacity restraint in SATE.

4. **The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.**

Qwest stated in its December 21, 2001 response that it documents all known differences between IMA and SATE in the Overview section of the SATE Data Document. Additionally, Qwest stated that the proposed SATE PID (PO-19) will help ensure that Qwest has a complete and accurate data document.

KPMG Consulting maintains its position that test environment transaction responses should mirror those from the corresponding production environment. Accordingly, CLECs can gain a reasonable level of assurance that they will receive the same results for the transactions they are testing, once they migrate into production. This should facilitate a smooth transition into production for CLECs, and minimize problems for both the CLEC and Qwest. Although the known differences between the behavior of SATE and the production environment are documented in the SATE Data Document, this does not negate the fact that SATE does not completely mirror the production environment.

While the proposed SATE PID, when implemented, will test the data in the data document by running transactions in SATE, it does not contain provisions to run the test deck in the production environment. Therefore, it provides no assurance that the same results will be achieved in the production environment.

[13] *Master Red-Lined CLEC-Qwest CMP Re-design Framework Interim Draft – Revised 03-27-02*, pg.69

Until Qwest can provide assurance that SATE produces results that are consistent with those that would be expected in the production environment, KPMG Consulting recommends that this issue remain open.

KPMG Consulting's expectation is that test environment transaction responses should mirror those from the related production environment. Although Qwest is continually enhancing the functionality of SATE, the test environment does not currently have sufficient end-to end testing capabilities that would be expected of a robust and fully functional testing environment.

KPMG Consulting recommends that Exception 3077 remain open until Qwest can address the stated SATE deficiencies, and complete implementation of the proposed enhancements.

Qwest Response to KPMG 2nd Supplemental Recommendation (04/08/2002):

For ease of reading, the KPMG comments from 04/04/02 have been repeated in Italics and Qwest's responses are included under the same headings used by KPMG.

(1.) SATE does not generate post-order responses in the same manner in which they are created in the production environment.

(1.) VICKI response times may not match production response times

The statement quoted by KPMG from the VICKI path document "responses and timeframes may not exactly match a similar LSR submitted to production."[14] was included to provide CLECs with realistic expectations that response times cannot be consistently predicted in production, and as a result, the response times in the test environment may not exactly match production. In the production environment, response times can vary due to many factors including whether the transaction was processed manually or using flow through and levels of use of the system at the time of submission. With VICKI, Qwest has mimicked the system performance of similar production LSRs to determine the appropriate response times.

Qwest will clarify the discussion surrounding this issue in the VICKI Path Document to read as follows:

> Two types of paths are included in this document. The first are those with time delays conducive to testing, and have remarks that begin with "Test". The second are those with time delays that parallel production, and have remarks that begin with "Prod". Qwest has based the paths, responses, and production time frames on actual production responses for similar LSRs. However, these responses and timeframes will be comparable to production but may not exactly match a similar LSR submitted to production due to the variability of the production environment. In production, response times can vary due to many factors including whether the transaction was processed manually or using flow through and levels of use of the system at the time of submission.

This update will be made to the VICKI Path Document with the next scheduled release of the document on April 15, 2002. Based upon a SATE Users' Group decision regarding the issuance of the data document, Qwest is unable to schedule an out-of-cycle release of this document.

(2.) VICKI response detail may not match production response detail

The purpose of VICKI is to provide the CLECs consistent automated responses in a test environment ensuring that CLECs can receive and respond to Qwest's EDI responses. The

[14] *IMA EDI SATE VICKI Paths for the Stand Alone Test Environment (SATE)*, Version 9.05, March 22, 2002, pg.4.

content of the responses provides standardized record output while CLEC input is variable. Although the detail of the responses may vary slightly from the input transaction, the CLEC can still utilize VICKI for the above stated purpose of testing.

Qwest will clarify the discussion surrounding this issue in the VICKI Path Document to read as follows:

> Due to the complexities of certain responses, the detail data on these transactions may not match the detail received on a production response for a similar transaction. The structure of the EDI response will mirror production. FOCs are provided with varying quantities of service orders. Also, with respect to the Service and Equipment detail of a Completion notice, VICKI is built to allow a CLEC to understand the EDI Map structure and content of a Completion. It does not return a Service and Equipment section specific to the CLEC's test LSR. If a CLEC desires a specific detail data in the Service and Equipment section to be returned, they can request it be added to VICKI via the Data Request Process.

This update will be made to the VICKI Path Document with the next scheduled release of the document on April 15, 2002. Based upon a SATE Users' Group decision regarding the issuance of the data document, Qwest is unable to schedule an out-of-cycle release of this document.

Additionally, the specific examples cited by KPMG were included in the VICKI White Paper that was discussed with the CLECs in the CLEC SATE Users' Group on December 11, 2002. CLEC participants raised no issues regarding Qwest's plans as they relate to these examples.

Qwest has also included in the VICKI Path Document the provision that if a CLEC desires to test specific data in their response not already existing, then it can be added to SATE in an expeditious manner using the Data Request Process. This ensures the CLECs' ability to test for specific response content, if needed.

*(3.) **VICKI does not support "real world scenario testing"***

KPMG's latest response includes the statement *"By having to select predetermined paths in order to receive responses automatically, VICKI is inherently dissimilar to the way in which orders are processed in the production environment."* Qwest believes that to best support our CLECs for the purpose of testing an IMA EDI interface, particularly for IMA EDI certification testing, VICKI is purposefully dissimilar in order to allow CLECs to receive all the necessary test responses. To be placed into production, CLECs must test all responses. VICKI is designed to allow CLECs to effectively meet this requirement by making available paths to trigger the various responses.

2. ***Flow through orders are not supported in SATE.***

Qwest believes that to best support our CLECs for the purpose of testing an EDI interface VICKI should be independent of flow through in order to allow CLECs to receive all the necessary test responses for certification. To be placed into production, CLECs must test all IMA EDI responses; however, flow through testing is not a requirement of certification. Flow through testing is designed to facilitate the CLECs' ability to ensure that orders are not manually handled by Qwest Interconnect Center representatives. Thus, the focus of flow through testing is to ensure uniformly successful order submission, whereas VICKI ensures that CLECs can receive all possible transaction responses. Therefore, flow through does not provide the predictable responses needed for CLEC certification.

Additionally, Qwest is making flow through available in SATE to allow CLECs to test if their transactions would flow through to the Service Order Processor in the production environment. The flow through enhancement was not intended to provide information on order completion or

service order holds (jeopardy). The order completion or jeopardy is independent of whether an order was created by a service center representative or automatically with flow through.

If desired by a CLEC, Qwest could provide other responses for a flow through LSR manually, including an order completion or jeopardy. A CLEC would indicate the additional responses desired for a specific scenario on their Scenario Summary prior to the beginning of testing. As a result, Qwest believes that there is no limitation in the ability of a CLEC to test all desired responses with a potential flow through LSR.

In KPMG's response, they question the statement included in the master redline CMP document which states, *"Qwest intends to include the service order processor as part of the SATE component of the CTE by the end of 2002."*[15] Qwest remains committed to adding the service order processor to SATE by the end of May 2002. As a result, Qwest will propose updating the master redline document in the next CMP Redesign meeting.

3. ***The volume of order responses supported in SATE is restricted due to manual response handling.***

   As stated in Qwest's supplemental response from 12/21/01, "Qwest does not limit the number of response transactions a CLEC may receive while testing in SATE."

   As part of the EDI Implementation Guide updates for 9.0 published on January 22, 2002, Qwest removed all references to the FOC limit in SATE. Qwest believes that this should resolve the perceived post-order capacity restraint in SATE, as referenced by KPMG.

4. ***The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.***

   KPMG makes the following statement in their last response, *"While the proposed SATE PID, when implemented, will test the data in the data document by running transactions in SATE, it does not contain provisions to run the test deck in the production environment. Therefore, it provides no assurance that the same results will be achieved in the production environment."* First, the SATE PID is no longer a proposed PID, as the PID has been accepted in both the ROC and in Arizona. Second, during the negotiation of the SATE PID (PO-19), this issue as raised by KPMG here was discussed and dismissed by the CLECs again both in the ROC and in Arizona.

   Furthermore, the intent of 'production mirroring' is that while a test environment must mirror production behavior, the exact data within a transaction need not be identical. Based on this understanding and as implied by the definition of the PID, PO-19 measures the extent to which SATE conforms to the same interface specifications as production, ensuring that the SATE mirrors production without relying on comparing transactions with different data elements. The definition implies reliance upon and an adherence to the business rules published in Qwest's IMA EDI Disclosure Documentation, in the same way that the CLEC community relies upon this information.

   The IMA code that is used in SATE is the same code as in production. In SATE, the data returned is test data so that predictable test results can be reused. This was the intent and design of SATE. In Production, data changes. Therefore, running the SATE PID in SATE and Production will result in different data being returned for the transaction.

In conclusion, Qwest respectfully requests that KPMG close this Exception and categorize it as "Closed/Unresolved".

Attachment(s): None

[15] *Master Red-Lined CLEC-Qwest CMP Re-design Framework Interim Draft – Revised 03-27-02*, pg.69

ROC_TI765_EXP3095_KPMG Disposition Report_04_11_02.doc

Initial Release Date: December 11, 2001
First Response Date: January 6, 2002
Second Response Date: February 5, 2002
Third Response Date: April 2, 2002
Disposition Report Date: April 11, 2002

EXCEPTION DISPOSITION REPORT

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the OSS Interface Development Review, Test 24.6.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Stand Alone Test Environment (SATE) does not offer CLECs testing capabilities for all Qwest products offered in production.

Summary of Exception:

KPMG Consulting observed, through interviews and documentation reviews, that the IMA EDI SATE does not offer testing capabilities to CLECs, prior to connecting to Qwest's production systems, for all Qwest wholesale products. SATE only supports a subset of the products and transactions that are available in the IMA production environment. Therefore, KPMG Consulting raised the specific issue that SATE does not accurately and comprehensively represent Qwest's production environment. This potentially prohibits CLECs from testing any desired product before migrating to the production environment.

Additionally, if a CLEC desires to test a product that is not currently supported in SATE, the additional product(s) must be requested via a Change Request (CR) issued through the Change Management Process (CMP). Once the CR is submitted, it needs to be discussed and prioritized within the parameters of the CMP. Given the current schedule for CMP and implementation of major releases, the requesting CLEC(s) may have to wait several months for a new release before the requested products can be included in SATE's functionality. Therefore, the CLEC(s) cannot test all of its products for the current IMA release.

By not providing for testing of all of Qwest's available products in SATE, and by not being able to quickly incorporate those products into the test environment, CLECs are not able to sufficiently test all of the products that they can sell to their customers.

Summary of Qwest's Initial and Supplementary Responses:

In its first response, Qwest stated that any product that a CLEC had implemented into production or was in the process of testing was included in the initial deployment of SATE. This ensured that when SATE was placed into production, it would support those products that the CLECs

needed to be able to use SATE to migrate to the next release. Qwest also stated that CLECs had not expressed a desire to add new products in either the CMP forum or at the SATE User Group meetings that began in November 2001. Furthermore, as part of the CMP Redesign process, Qwest and the CLECs discussed the development of a Bona Fide Request process to allow a CLEC to pay for CRs to be implemented when a CR does not get prioritized high enough to get implemented based upon the available Qwest resources. If agreed upon, this process would allow a CLEC to add a product to SATE even if it is not a priority for the CLEC community.

In its January 30, 2002 response, Qwest stated that CLECs wish to prioritize all SATE functionality, including the addition of new products, through the Change Management Process. In support of this position, Qwest created Change Requests (CRs) for the IMA products that SATE does not currently support. These changes were presented to the CLEC community for prioritization on March 21, 2002. In addition to putting into practice a separate SATE prioritization process, Qwest also asked CLECs to vote "Yes" or "No" on accepting each CR as a desired change and implementing the associated functionality. Qwest provided the results of the prioritization vote in its April 5, 2002 response. Based on those results, Qwest believes that CLECs have demonstrated that it is acceptable for SATE to support less than 100% of the products and transactions available in the production environment. Qwest plans to continue to separately prioritize SATE and to update the Master Red Lined CMP Document to reflect the separate SATE prioritization process.

Qwest stated that even without the availability of a product in SATE, a CLEC has the ability to implement the product in EDI using the Interoperability environment and the associated testing process. Through that mechanism, CLECs are able to test all of the products for the current IMA release.

In its April 5, 2002 response, Qwest respectfully requested that KPMG close this Exception and categorize it as "Closed/Unresolved".

KPMG Consulting's Disposition Report (04/11/02):

Summary of KPMG Consulting's Retest Activities and Results:

KPMG Consulting acknowledged that Qwest had worked in collaboration with the CLEC community when initially developing SATE and setting up user group meetings to enhance SATE. Although Qwest committed to working with CLECs, KPMG Consulting noted that the test environment does not precisely and accurately reflect the offerings of either the production environment or of a new release of the production environment. Additionally, the process for adding new functionality to SATE is onerous and untimely for a CLEC expecting to test unsupported functionality during its EDI implementation. KPMG Consulting cited examples of new SATE functionality requests from CLECs to show that CLECs may need to test products that are not included in the current version of SATE. KPMG Consulting also indicated that the Bona Fide Request process proposed by Qwest through the Redesign process would not be finalized or available until the Redesign efforts had been completed.

KPMG Consulting stated that the use of the Interoperability environment for testing products not currently supported in SATE did not sufficiently address the issues raised in this Exception. Several limitations had been identified regarding the Interoperability environment in Exception 3029. Additionally, Qwest had stated that it would only invest resources to further develop SATE, and that SATE would overcome the deficiencies of Interop as a testing environment. Based on these facts, KPMG Consulting did not believe that Interop provided CLECs with a suitable alternative for testing products not supported in SATE.

KPMG Consulting reviewed Qwest's April 5, 2002 supplemental response and data items, and acknowledges the request to close this Exception and categorize it as "Closed/Unresolved".

KPMG Consulting recommends that Exception 3095 be closed unresolved.

ROC_TI765_EXP3095_Qwest Response to KPMG 2nd Supp Rec_04_05_02.doc

Test Vendor ID:	EXP 3095
Qwest Internal Tracking ID:	TI 765
Observation/Exception Title:	Testing Capabilities not Offered for all Products
Test Type/Domain:	Test 24 - CLEC Support Processes
Date Qwest Received:	12/12/2001
Initial Response Date:	12/19/2001
Supplemental Response Date:	01/30/2002
2nd Supplemental Response Date:	02/26/2002
3rd Supplemental Response Date:	03/26/2002
4th Supplemental Response Date:	04/02/2002
5th Supplemental Response Date:	04/05/2002

Test Incident Summary:

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the OSS Interface Development Review, Test 24.6.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Stand Alone Test Environment (SATE) does not offer CLECs testing capabilities for all Qwest products offered in production.

Background:

Qwest employs a phased approach for CLECs that wish to develop an IMA/EDI application-to-application interface with Qwest's OSS systems. The steps of the current process are listed below:[1]

1. Initial Communications (includes Kick Off conference call)
2. Project Plan (proposed/negotiated)
3. Requirements Review (by the CLEC)
4. Firewall Rules and IA-to-IA Testing
5. Testing - Interoperability and/or SATE environment
6. Controlled Production
7. *Production ("Turn-Up")*

Qwest developed SATE in May 2001 to serve as an alternate testing environment to its Interoperability environment. By creating SATE, Qwest now offers CLECs the option of using either the Interoperability environment or SATE for testing their IMA EDI interfaces. The latest version, SATE 8.01, was implemented as of October 22, 2001.

[1] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 6.0, Released October 11, 2001, Section 2, Implementation Activities, p.6.

Issue:

KPMG Consulting has observed, through interviews and documentation reviews, that the IMA EDI SATE does not offer testing capabilities to CLECs, prior to connecting to Qwest's production systems, for all Qwest resale products. The following IMA EDI SATE limitations have been identified:

- SATE does not allow for testing of all of the products that are supported in the IMA production environment. Currently, SATE only supports the following transactions[2]:

  Pre-Order
  - Address Validation (Numbered Addresses only)
  - Appointment Scheduling
  - Cancel TN/Appointment
  - Connecting Facility Assignment
  - Facility Availability (Unbundled ADSL, Convert POTS to Unbundled Loop, POTS Facility Availability)
  - Meet Point Query
  - Raw Loop Data Query
  - Retrieve CSRs
  - Service Availability
  - TN Reservation Query (with TNSR following)

  Order
  - Centrex Plus
  - Directory Listing Only
  - Local Number Portability
  - Loop with Number Portability (LNP only)
  - POTS Resale
  - Shared Loop
  - Unbundled Loop
  - UNE-P Centrex
  - UNE-P POTS

  ~~PostOrder~~
  - ~~FOC~~
  - ~~Completion~~
  - ~~Reject~~
  - ~~Jeopardy~~
  - ~~Status Updates~~

  ~~The transactions above represent only a subset of the total transactions that are supported in the IMA EDI environment. Certain products that CLECs may offer to their customers may not be supported in the test environment. Therefore, SATE does not accurately and comprehensively support all of the transactions that are available in Qwest's production environment. This potentially prohibits CLECs from testing all of their products before migrating to the production environment.~~

- ~~If a CLEC desires to test a product that is not currently supported in SATE, the additional products must be requested via a Change Request (CR), through the Change Management Process (CMP). The~~

[2] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Version 7.0, Released November 9, 2001, Section 2, Implementation Activities – Progression Testing Phase, p.23.

CR is then prioritized, in accordance with the CMP. As an example, Qwest announced at a SATE Enhancement User Group meeting on November 27, 2001, that it would submit two CRs for adding Line Splitting and Loop Splitting. Once these CRs are submitted, they will need to be discussed and prioritized within the parameters of the CMP. Given the current schedule for CMP, the requesting CLEC(s) may have to wait several months for a new release before the requested products are included in SATE's functionality. Therefore, the CLEC(s) cannot test all of its products for the current IMA release.

Impact:

A limited testing environment could prevent a CLEC from adequately preparing for its transition to a production environment. By not providing for testing of all of Qwest's available products in SATE, CLECs will not be able to sufficiently test all of the products that they can sell to their customers. This limitation, therefore, could negatively impact a CLEC's ability to offer products to its customers in the production environment. For products for which a testing capability is not offered, CLECs must venture blindly into the production environment, potentially jeopardizing their ability to offer those products to their customers, if the migration is unsuccessful.

Qwest Formal Response:

When Qwest initially deployed SATE, any product that a CLEC had implemented into production or was in the process of testing was included in SATE[3]. This ensured that when SATE was placed into production, it would support those products that the CLECs needed to be able to use SATE to migrate to the next release. Additionally, on June 29, 2001, prior to SATE deployment, Qwest conducted a CLEC meeting where the list of proposed SATE products was discussed. The CLECs[4] expressed no concerns regarding the proposed product list. Qwest continues to support all products for which any CLEC has created a production EDI interface.

The current process for the addition of new products to SATE is for a CLEC to issue a CR through the change management process. The CR can then be processed by the CLEC community; this process ensures that Qwest is using its resources in the manner that is beneficial to the most CLECs.

Qwest has conducted five SATE Users' Group meetings. During these meetings, CLECs have an opportunity to suggest improvements to SATE. To date, no CLEC has requested the addition of products to SATE. However, Qwest continues to monitor the products that CLECs express interest in and has proactively added products or created CMP CRs to add products to SATE. Unbundled Distribution Loop and Unbundled Distribution Loop with Number Portability have recently been added to SATE, as Qwest anticipated future EDI implementations of these products. Additionally, Qwest is creating a CR for FBDL to be added to SATE, as this will be implemented as an IMA product in 9.0.

In the next SATE Users' Group Meeting on January 8, 2001, Qwest will ask CLECs to voice any concerns regarding the prioritization of new product implementations.

Furthermore, as part of the CMP Redesign process, Qwest and the CLECs are currently discussing a Bona Fide Request process to allow a CLEC to pay for CRs to be implemented when a CR does not get prioritized high enough to get worked based upon the available Qwest resources. If agreed upon, this process would allow a CLEC to add a product to SATE even if it is not a priority for the CLEC community.

[3] The pseudo-CLEC was excluded when this analysis was performed.
[4] AT&T, WorldCom, Fairpoint, Sprint, and Allegiance

KPMG Comments (01/07/2002):

KPMG Consulting acknowledges that Qwest worked with the CLEC community when initially developing SATE, and through user group meetings for continually enhancing SATE. Although SATE currently supports all products that CLECs are currently running in production, it does not support all products that a CLEC *could* run in production. A CLEC that decides to add a new product to the suite of products that it offers to its customers, but for which that product is not currently supported in SATE, must submit a CR through CMP in order to be certified to provide that service/product in production. Several major releases of SATE may be required before the new product is then added to the test environment. This does not allow a CLEC sufficient flexibility to offer new products in a timely manner; nor does it appear to offer a test environment that adequately mirrors production environment capabilities.

Qwest stated in its response dated December 19, 2001, the following:

"Qwest has conducted five SATE Users' Group meetings. During these meetings, CLECs have an opportunity to suggest improvements to SATE. To date, no CLEC has requested the addition of products to SATE."

However, at the November 13, 2001 SATE User's Group Meeting, a participant requested that Line Splitting and Loop Splitting products and all associated activities be added to those supported by SATE.[5] Qwest then drafted a CR, on behalf of the participant, to present to the CMP forum.[6] The requesting participant may have to wait for several versions of SATE to be released before being able to test transactions associated with these products, thereby potentially placing the CLEC at a competitive disadvantage with its customers. Sudden, unexpected demand to test new products in SATE has occurred, and could occur at any point in the future, yet SATE does not support all of the products offered in production.

Qwest also stated the following in its response dated December 19, 2001:

"Furthermore, as part of the CMP Redesign process, Qwest and the CLECs are currently discussing a Bona Fide Request process to allow a CLEC to pay for CRs to be implemented when a CR does not get prioritized high enough to get worked based upon the available Qwest resources. If agreed upon, this process would allow a CLEC to add a product to SATE even if it is not a priority for the CLEC community."

The Bone Fide Request process appears to present CLECs with an option to bypass the inherent constraints of the CMP process - specifically, the need for CR prioritization that will lead to implementation. However, this process will not be fully developed until the CMP redesign is completed. Additionally, although implementation of the Bone Fide Request process may allow CLECs to pay to implement a CR, regardless of its CMP-assigned priority level, it does not alter the fact that SATE does not currently support all of the products offered in production. KPMG Consulting believes that the functionality a fully functioning test environment should mirror that of the production environment.

KPMG Consulting recommends that Exception 3095 remain open until SATE supports the products that are offered in Qwest's production environment.

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[5] SATE Users' Group Meeting Minutes, Dated November 13, 2001, "Interoperability and SATE" section, p.1.

[6] SATE Users' Group Meeting Minutes, Dated November 27, 2001, "Proposed CMP CRs" section, p.1; and SATE Users' Group Meeting Minutes, Dated December 4, 2001, "Proposed CMP CRs" section, p.1.

Qwest Response to KPMG Comments (01/30/2002):

Qwest supports the CMP processes through which the CLECs must prioritize all new functionality, including SATE changes. The addition of a new product, either at the initiation of Qwest or a CLEC, constitutes an addition in functionality to SATE. Based upon feedback during the SATE CMP Users' Group meetings and the last CMP meeting, it appears that the CLECs want to prioritize all SATE functionality, including the addition of new products. During the January 17th CMP meeting, Qwest took an action item to further discuss the implementation of SATE prioritization at the February CMP Redesign sessions. Based upon discussions to date, Qwest and the CLEC community appear to be in agreement on this issue.

Even without the availability of a product in SATE, a CLEC has the ability to implement the product in EDI using the Interoperability environment. Therefore, CLEC(s) can test all of the products for the current IMA release. Additionally, Qwest has not seen or been informed by CLECs of "sudden, unexpected demand to test new products" in SATE as stated in KPMG's First Response. While CMP CRs exist for two products to be added to SATE, no CLEC has requested an implementation of either of the products in EDI. With the availability to test within the Interoperability Test Environment and the fact that CLECs are not requesting these products be added to SATE, the impact identified in the initial release of this exception[7] as noted below is an inaccurate statement.

KPMG Supplemental Recommendation (02/05/2002):

KPMG Consulting acknowledges that Qwest has been working with the CLEC community through both the CMP Redesign sessions and the SATE Enhancement meetings. Part of the purpose of these discussions is to develop a sound, consistent process for supporting the CLECs with their EDI testing efforts. KPMG Consulting has attended all of these meetings, and has reviewed the meeting minutes from each. Based on those observations and reviews, KPMG Consulting has found no concrete evidence to support that CLECs have specifically agreed that it is acceptable for SATE to support less than 100% of the products available in the production environment. KPMG Consulting's expectation is that a fully functional test environment should support all of the functionality and products that are available in the production environment, unless the CLECs have officially agreed through CMP, or an equivalent forum, that specific functionality is not required in the test environment.

Even if the CLEC community were to agree that not all production products must be supported in SATE, Qwest should be able to accommodate testing for any product that a CLEC decides it needs to test for its implementation of EDI. As stated previously, under the current process, CLECs that want to add new products to SATE must create a CR, which must then be prioritized through CMP. As such, the potential exists for requested products to not be available for testing for at least two major releases of SATE. If CLECs wish to test a new release of Production, and that new release version offers an expanded array of new products, CLECs might not be able to test the new products until well after their implementation in Production.

This significantly impairs CLECs' ability to test products that they would like to implement and offer to their own customers. The fact that CLECs have not historically made unanticipated requests to test and implement products not currently supported in the test environment does not negate the fact that such an occurrence could happen, and that Qwest's testing process should account for the possibility of such an occurrence.

In an attempt to address this issue, Qwest's response, dated January 30, 2001, stated:

[7] KPMG original Impact statement: *"For products for which a testing capability is not offered, CLECs must venture blindly into the production environment, potentially jeopardizing their ability to offer those products to their customers, if the migration is unsuccessful."*

"Even without the availability of a product in SATE, a CLEC has the ability to implement the product in EDI using the Interoperability environment. Therefore, CLEC(s) can test all of the products for the current IMA release."

KPMG Consulting does not believe that the use of the Interoperability environment for testing products not currently supported in SATE can sufficiently address this concern. As KPMG Consulting previously outlined in Exception 3029, the Interoperability environment has the following limitations:

1. Interop does not generate post-order responses in the same manner as they are created in production,
2. Interop does not provide flow through,
3. Production data must be used in Interop.

In Exception 3029, Qwest sought to address each of these Interop concerns by stating that SATE has, or will eventually have, the features and functionality necessary to overcome the deficiencies of Interop. Qwest also states, in its October 19, 2001 response to Exception 3029, *"Qwest has no plans to continue to enhance the Interop environment; Qwest will continue to enhance SATE."* Finally, as outlined in KPMG Consulting's January 31, 2002 response to Exception 3029, Qwest has not yet adequately developed and documented a process for CLECs to seamlessly use both the Interop environment and SATE when testing for a single implementation of IMA EDI.

Based on the identified limitations of the Interop environment, and the assertions made in Exception 3029, KPMG Consulting believes that offering CLECs the Interop environment as an alternative for testing products that are not currently supported in SATE is insufficient.

KPMG Consulting recommends that Exception 3095 remain open until enhancements are made to the SATE testing process, so that SATE supports all of the functionality and products that are offered in Qwest's production environment.

Qwest Response to KPMG Supplemental Recommendation (02/26/2002):

In the KPMG Second Response (02/05/02), KPMG noted several specific concerns regarding SATE supporting all functionality and products that are offered in Qwest's production environment. Each of the bullet points below represents Qwest's understanding of KPMG's concerns followed by Qwest's response.

1 *"...KPMG Consulting has found no concrete evidence to support that CLECs have specifically agreed that it is acceptable for SATE to support less than 100% of the products available in the production environment."*

As of February 22, 2002, Qwest created 30 Change Requests (CRs) that identify adding to SATE those production products not currently supported in SATE (SCR021902-01 to SCR021902-30). This is in addition to the 2 CLEC sponsored CRs previously created for Loop Splitting and Line Sharing. These CMP CRs appear in the "CMP Change Requests -- Systems Interactive Report" on the Qwest CMP web site, and are eligible for presentation and CLEC voting at the Monthly Systems CMP Meeting to be held on March 21, 2002. An interactive report showing these requests may be accessed at: http://www.qwest.com/wholesale/cmp/changerequest.html.

Qwest believes that this formal CR presentation and voting will provide concrete evidence of CLEC support for SATE supporting less than 100% of products available in the production environment.

2 *"...Qwest should be able to accommodate testing for any product that a CLEC decides it needs to test for its implementation of EDI. As stated previously, under the current process, CLECs that want to add new products to SATE must create a CR, which must then be prioritized through CMP. As such, the*

potential exists for requested products to not be available for testing for at least two major releases of SATE."

> Qwest is investigating the general level of effort necessary for adding existing IMA products to SATE (depending upon product complexity) in order to address KPMG's concern regarding the timing of product availability. However, as Qwest has stated in its January 30, 2002 response Qwest believes that the CLECs have clearly expressed their interest during the CMP Redesign meetings in prioritizing all additions of functionality and products to SATE independently of IMA CRs. This separate prioritization provides the CLEC community with the flexibility to implement SATE specific changes ahead of other IMA functionality (for example, implementing flow through before a new product that no CLEC is planning to use in production). Qwest supports this CLEC desired process and believes the process should be adhered to.

Qwest will supplement this response with further detail regarding both issues by March 26, 2002 following the Monthly Systems CMP meeting.

Qwest Supplemental Response to KPMG Supplemental Recommendation (03/26/2002):

In reference to item 3 above, the following discussion occurred around SATE ranking at the Systems CMP meeting held on March 21, 2002.

> The prioritization process for SATE was discussed and the ballot and instructions will be sent out by 5 p.m. MST, March 25, 2002. Completed ballots (1 per CLEC) are due to Qwest by 5 p.m. MST, March 28, 2002. Qwest will then tally and tabulate the results with a prioritized list provided to CLECs by 5 p.m. MST, April 1, 2002. The prioritization form was reviewed and it was noted that Qwest has added CRs to add products in SATE. Qwest wants to gauge the level of interest on the CLECs part for adding specific products. As part of prioritizing each CR, Qwest asked that the CLECs additionally indicate yes or no if they are interested in adding these products in SATE. The prioritized list will include yes/no interest in product implementation.

In reference to item 4 above, the attached meeting minutes from the SATE Users Group on February 26, 2002 clearly indicates the CLECs desire to prioritize SATE CRs independently from IMA CRs. Additionally, the CLEC community has adopted this position, incorporating it into the CMP Master Redline document (see section 9.0 PRIORITIZATION). This process will be followed going forward.

Qwest will provide a supplemental response to this exception once the results of the CLEC vote for SATE CRs are available by April 3, 2002.

KPMG 2nd Supplemental Recommendation (04/02/2002):

In its February 26, 2002 response, supplemented on March 26, 2002, Qwest focused on two issues regarding the current functionality of SATE, and the process for adding new functionality to SATE. Those issues are restated below with KPMG Consulting's respective responses.

1. *"...KPMG Consulting has found no concrete evidence to support that CLECs have specifically agreed that it is acceptable for SATE to support less than 100% of the products available in the production environment."*

KPMG Consulting reviewed the "CMP Change Requests -- Systems Interactive Report", noting the addition of the 30 SATE "production equivalent functionality" CRs (SCR021902-01 to SCR021902-30) that Qwest referenced in its February 26, 2002 response. Qwest stated that these CRs would be voted upon in the CMP meeting held on March 21, 2002. KPMG Consulting observed the prioritization and voting process for the SATE functionality CRs at the CMP meeting.

KPMG Consulting also received a copy of the SATE Prioritization Form and Instructions on March 25, 2002. KPMG reviewed the form, noting that it included 49 IMA CRs, including 22 of the 30 originally Qwest proposed SATE functionality additions. However, KPMG Consulting noted that the following CRs were removed from the list that Qwest originally proposed:

- SCR021902-9
- SCR021902-10
- SCR021902-11
- SCR021902-12
- SCR021902-15
- SCR021902-20
- SCR021902-23
- SCR021902-25
- SCR021902-28
- SCR021902-30

KPMG Consulting is not sure why certain CRs were removed from the voting and prioritization form. Based on this omission, it does not appear that CLECs were offered the opportunity to vote on all products that could be added to SATE. With the exception of the removed CRs, KPMG Consulting noted that the voting form allowed CLECs to indicate whether or not they want to have the stated product functionality added to SATE for each CR.

Qwest stated in its March 26, 2002 response that it would provide a supplemental response to this Exception once the results of the CLEC vote for SATE CRs are available by April 3, 2002. Once Qwest clarifies the reasons for removing the ten SATE CRs listed above, and provides the results of the prioritization activity, KPMG Consulting will be able to assess CLECs desire to have the same products supported in SATE as what is available in IMA.

2. *"... Qwest should be able to accommodate testing for any product that a CLEC decides it needs to test for its implementation of EDI. As stated previously, under the current process, CLECs that want to add new products to SATE must create a CR, which must then be prioritized through CMP. As such, the potential exists for requested products to not be available for testing for at least two major releases of SATE."*

In its February 26, 2002 response, Qwest stated the following:

> *"Qwest is investigating the general level of effort necessary for adding existing IMA products to SATE (depending upon product complexity) in order to address KPMG's concern regarding the timing of product availability. However, as Qwest has stated in its January 30, 2002 response Qwest believes that the CLECs have clearly expressed their interest during the CMP Redesign meetings in prioritizing all additions of functionality and products to SATE independently of IMA CRs. This separate prioritization provides the CLEC community with the flexibility to implement SATE specific changes ahead of other IMA functionality (for example, implementing flow through before a new product that no CLEC is planning to use in production). Qwest supports this CLEC desired process and believes the process should be adhered to."*

In its March 26, 2002 response, Qwest further stated its position by stating:

> *"The attached meeting minutes from the SATE Users Group on February 26, 2002 clearly indicates the CLECs desire to prioritize SATE CRs independently from IMA CRs. Additionally,*

the CLEC community has adopted this position, incorporating it into the CMP Master Redline document (see section 9.0 PRIORITIZATION). This process will be followed going forward."

KPMG Consulting observed the SATE User Group meeting on February 26, 2002, and reviewed the meeting minutes that were attached with Qwest's March 26, 2002 response. KPMG Consulting recognized through its observation and review of the meeting minutes that SATE users had many questions regarding the separate prioritization of SATE CRs. Participants needed clarification about the process that would be employed to prioritize SATE and SATE impacting CRs. However, it is not clear from the minutes that CLECs have expressed the desire to have the SATE CRs prioritized separately but rather that this was how Qwest presented the SATE enhancement decision-making process. Additionally, since only two CLECs and one service provider have actively participated in the SATE User Group meetings, it is misleading to extrapolate the conclusions drawn in those meetings to the entire CLEC community.

In its review of Section 9.0 of the *Master Redlined CLEC-Qwest CMP Redesign Framework* document updated on March 27, 2002, KPMG Consulting noted that the first sentence states, *"Each OSS Interface and Test Environment release is prioritized separately."* Additionally, the document states in Section 9.2.1, "Prioritization Review", that the prioritization objectives are to:

- Introduce newly initiated CLEC and Qwest OSS interface and test environment change requests.
- Allow CLECs and Qwest to prioritize eligible OSS Interface or test environment change requests by providing specific input as to the relative importance that CLECs, as a group, and Qwest assign to each such change request.

Beyond these generic references, there is no explicit, detailed documentation describing the process for separately voting and prioritizing SATE and SATE impacting CRs. Furthermore, KPMG Consulting would expect that prioritization results for features of upcoming IMA releases could have an impact on prioritization of SATE. Therefore, it is not definitively clear that the CLEC community has adopted this approach, and subsequently incorporated it into the CMP documentation.

KPMG Consulting believes that separate prioritization of SATE CRs does not address the fundamental issue that was raised in Point #2 of this Exception. If a product is not currently supported in SATE and a CLEC decides to offer the product to its customers, then the CLEC will not be able to test that product in SATE. Instead, the CLEC must submit a request to add the functionality to SATE through CMP. The proposed CR may not be implemented until several releases of SATE have been developed and deployed. Therefore, the CLEC is unable to test the product and offer it to its customers during its current EDI implementation. Without a process for rapidly including product functionality into SATE, Qwest is placing CLECs at a competitive disadvantage relative to EDI product testing capabilities.

KPMG Consulting recommends that Exception 3095 remain open pending resolution of the identified issues.

Qwest Response to KPMG 2nd Supplemental Recommendation (04/05/2002):

In its 3/26/02 response Qwest committed to a supplemental response update on the CLEC CMP vote. This response, as well as Qwest's response to the latest comments from KPMG, is found below. For ease of reading, the KPMG comments from 04/02/02 have been repeated in Italics.

From KPMG's response on 04/02/02: *"...KPMG Consulting has found no concrete evidence to support that CLECs have specifically agreed that it is acceptable for SATE to support less than 100% of the products available in the production environment."*

On April 1, 2002, Qwest published the prioritized list for SATE release 11.0, which is sent as a separate attachment (see SATE Prioritization List.xls). As a result of the CLEC prioritization, the majority of the CRs to add new products to SATE were prioritized at the bottom of the list as numbers 31–49. As part of prioritizing each CR, Qwest asked that the CLECs additionally indicate with a yes or no vote if they are interested in adding these products in SATE (see SATE Yes-No Analysis.xls provided through confidential Data Request). For nine products, all CLECs indicated that they did not desire for SATE to support the products. Qwest believes that this provides evidence that CLECs agree that *"it is acceptable for SATE to support less than 100% of the products available in the production environment"*.

Based upon the SATE Prioritized List, Qwest will follow the CMP process and work all items in prioritized order for the SATE 11.0 release until all available resources are utilized.

From KPMG's response on 04/02/02: *"KPMG Consulting is not sure why certain CRs were removed from the voting and prioritization form. Based on this omission, it does not appear that CLECs were offered the opportunity to vote on all products that could be added to SATE."*

As noted by KPMG above, several CRs were removed from the list to be prioritized. There are several products, such as PRI ISDN, that require two separate orders in IMA, one for a trunk and one for a facility, in order that the product be provisioned. When Qwest initially created the CRs, separate CRs were created for the trunk and facility portions. However, a CLEC is required to implement both the trunk and the facility when implementing the product in EDI. As a result, the separate trunk and facility CRs were combined into one CR. This consolidation occurred for PRI ISDN, UNE-P PRI ISDN, UNE-P DSS, and Unbundled DS1 DID/PBX, as referenced below.

Additionally, as discussed in March's Systems CMP meeting and agreed to by the CLECs, the Interim Number Portability and PAL-PSP were removed prior to prioritization. The following is the excerpt from the March CMP Meeting Minutes where this was discussed:

> Terry Wicks/Allegiance – Do the new CRs represent all supported products that are not currently in SATE?
> Wendy Green - Yes, with the exception of PAL/PSP (payphone-not CLEC issue) and Interim Number Portability[8]

Interim Number Portability was not included because, as stated in the PCAT for Local Number Portability, "Qwest has deployed LNP in nearly every end office."[9] As a result, there will be minimal future demand for Interim Number Portability. PAL-PSP was also removed from prioritization because CLECs are not PSPs (Payphone Service Providers), as a result, the product is not relevant to CLECs.

In reviewing the list of CRs, Qwest also discovered several duplicates. The following list summarizes the CRs noted by KPMG in their 04/02/02 Supplemental Response and the reasons why these were not included at the CMP meeting on March 21, 2002:

- SCR021902-9: SATE-Add PRI ISDN Resale; Duplicate of SCR021902-16
- SCR021902-10: SATE-Add FBDL; Duplicate of SCR122701-6
- SCR021902-11: SATE-Add Interim Number Portability; See above explanation
- SCR021902-12: SATE-Add PAL-PSPs; CLECs are not PSPs
- SCR021902-15: SATE-Add PRI ISDN Facility; Combined with SCR021902-15 to create one CR for PRI ISDN
- SCR021902-20: SATE-Add Unbundled DS1 DID/PBX Trunk Port Facility; Combined with SCR021902-21 to create one CR for Unbundled DS1 DID/PBX

[8] "Monthly Systems CMP Meeting Minutes", March 21, 2002. http://www.qwest.com/wholesale/downloads/2002/020329/CMPMonthlySystemsMeetingMinutes.pdf
[9] Product Catalog Local Number Portability, Availability, http://www.qwest.com/wholesale/pcat/lnp.html.

- SCR021902-23: SATE-Add UNE Centrex Star; Duplicate of SCR012502-2
- SCR021902-25: SATE-Add UNE-P PRI ISDN Facility; Combined with SCR021902-26 to create one CR for UNE-P PRI ISDN
- SCR021902-28: SATE-Add UNE-P DSS Facility; Combined with SCR021902-29 to create one CR for UNE-P DSS
- SCR021902-30: SATE-Add UNE POTS Star; Duplicate of SCR012502-2

From KPMG's response on 02/05/02: *"... Qwest should be able to accommodate testing for any product that a CLEC decides it needs to test for its implementation of EDI. As stated previously, under the current process, CLECs that want to add new products to SATE must create a CR, which must then be prioritized through CMP. As such, the potential exists for requested products to not be available for testing for at least two major releases of SATE." Additionally,* ***from KPMG's response on 04/02/02:*** *"Without a process for rapidly including product functionality into SATE, Qwest is placing CLECs at a competitive disadvantage relative to EDI product testing capabilities."*

Qwest's current process, as developed with the CLECs, for addition of new products to SATE provides the CLECs with an avenue of prioritizing all SATE work. Qwest will honor that process and proceed with product implementations according to the CLEC priority and the established release plan. If products were implemented outside of that process, the CLEC prioritization would be compromised, because items would not be worked in the order of the prioritization.

Qwest will continue to make the Interoperability environment available to all CLECs that want to test any products, providing CLECs with a test environment for those products that are not currently available in SATE. Since the inception of SATE, Qwest has seen limited interest from CLECs to implement products not supported by SATE. In the few cases where CLECS have expressed an interest, the CLECs are developing interfaces with plans for testing in the Interoperability environment. For example, one CLEC is currently developing an ordering interface for EELs, a product not currently supported in SATE, using the Interoperability environment. A second CLEC has expressed an interest in beginning their testing of EEL, Unbundled Digital Line Side Port, and Qwest DSL starting in June 2002 using the Interoperability environment.

Additionally, four CLECs have been placed into production after testing Facility Based Directory Listings (FBDL) in the Interoperability environment, while three other CLECs are currently testing this product in the Interoperability environment. It should be noted that while FBDL is not currently supported in SATE, Qwest provides test data for testing FBDL in the Interoperability environment, as Qwest does for products in SATE. Additionally, all FBDL test transactions are processed through a test version of the listings legacy system ensuring that the responses provided mirror those generated in production. For FBDL, the limitations previously identified for the Interoperability environment, are not applicable.

From KPMG's response on 04/02/02: *"However, it is not clear from the minutes that CLECs have expressed the desire to have the SATE CRs prioritized separately but rather that this was how Qwest presented the SATE enhancement decision-making process. Additionally, since only two CLECs and one service provider have actively participated in the SATE User Group meetings, it is misleading to extrapolate the conclusions drawn in those meetings to the entire CLEC community."*

Only two CLECs and one service provider have regularly and actively participated in the SATE Users' Group meetings. The process for prioritizing CRs in SATE was developed collaboratively with Users' Group participants during the February 12, 2002 SATE Users' Group meeting. However, once the process for prioritizing SATE was agreed upon, this process was presented at the February Systems CMP meeting and agreed upon by the larger CLEC body in part upon the opinion of the participating CLECs. Since the adoption of this CMP process, multiple opportunities have existed for CLECs to question or change the agreed upon process; however, CLECs have made no such effort. Therefore, Qwest believes that the absence of CLEC issue with this process shows the support of the CLEC community for the now adopted process and believes that this part of KPMG's issue should be closed.

Qwest will attempt to ensure that the process for prioritizing SATE as developed in the SATE Users' Group and agreed upon by the CLECs in CMP is incorporated into the Master Redline Document for CMP Redesign in more detail. However, this decision is not Qwest's alone and is up to the CLEC participants to accept.

In conclusion, Qwest is committed to providing CLECs the capability to test their EDI interface for all IMA available products. All IMA available products are accessible for testing today in either the SATE and/or Interoperability environments. Qwest will continue to work with CLECs, as agreed in the CMP Redesign efforts, to implement new products and functionality in SATE according to the CLEC prioritization.

Qwest respectfully requests that KPMG close this Exception and categorize it as "Closed/Unresolved".

Attachment(s):

ROC_TI499_EXP3029_KPMG Disposition Report_03_14_02.doc

TI 499
EXCEPTION 3029—DISPOSITION REPORT
Qwest OSS Evaluation

Initial Release Date: August 31, 2001
First Response Date: September 28, 2001
Second Response Date: November 2, 2001
Third Response Date: January 8, 2002
Fourth Response Date: February 4, 2002
Disposition Report Date: March 14, 2002

EXCEPTION DISPOSITION REPORT

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the Test 24.6 OSS Interface Development Review.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Interoperability Testing Environment does not offer Co-Providers with sufficient testing capabilities.

Summary of Exception:
In the course of interviews and documentation reviews, KPMG Consulting noted that the IMA EDI Interoperability test environment does not provide the testing capabilities for a CLEC to sufficiently test the IMA EDI interface prior to connecting to Qwest's production systems. The following limitations were specifically identified:

- The Interoperability testing environment, does not offer true end-to-end testing capabilities through to Qwest's provisioning and billing systems.

- Flow-through orders are not supported in the Interoperability testing environment, even though these types of orders will be processed in the production environment. A CLEC is unable to predict the performance of flow-through orders in production. This limits the ability of a CLEC and Qwest to test completion of orders in a timely manner.

- In order to test transactions in the IMA/EDI Interoperability Testing Environment, CLECs must use valid production data, because the customer information is validated against data that resides in the production databases. The use of valid customer data could adversely impact CLEC customers.

KPMG Consulting stated that these limitations could hinder a CLEC's ability to effectively test its EDI interface capabilities. The inability to conduct effective testing could increase a CLEC's operating expenses as a result of additional time required to ensure the functionality of the systems, and could also decrease revenues if delays prevent a CLEC from servicing clients. KPMG Consulting issued Exception 3029 on August 31, 2001 based on these identified issues.

Summary of Qwest's Initial and Supplementary Responses:

Qwest initially responded on September 13, 2001, stating that the EDI Certification process involves a multi-step testing process that was agreed to by CLECs in workshops, and is described in Section 12.2.9.3 of the SGAT. Qwest further stated that the multi-step testing process has resulted in over 25 successful CLEC implementation and migrations (Release 4.0, 5.0, 6.0, 7.0 and 8.0) over the last 2 years.

In Qwest's response dated October 19, 2001, Qwest attempted to address the concerns that KPMG Consulting had outlined in its previous response. The concerns were outlined as follows:

1. Interop does not generate post-order responses in the same manner they are created in production,
2. Interop does not provide flow through,
3. Production data must be used in Interop.

In addressing the concerns of the Interoperability environment, Qwest specifically stated the following:

"Although these findings are focused on the Interop test environment, Qwest has no plans to continue to enhance the Interop environment; Qwest will continue to enhance SATE."

Within the context that Qwest would only devote resources to further developing the Stand Alone Test Environment (SATE), Qwest responded to each concern. For the first two items, Qwest stated that it would develop mechanisms to automate certain post order responses and to support flow through testing in future versions of SATE. The post order responses that would not be automated would continue to be manually generated by System Test Engineers. For the third point, Qwest stated that SATE provides the ability to use test accounts and scenarios, which can be readily reused, and that the CLECs can request new test scenarios as needed.

In Qwest's supplemental response dated December 21, 2001, Qwest provided further clarification regarding the implementation timeframes for the proposed SATE functionality enhancements (automated post order responses and flow through capabilities). Qwest also outlined proposed updates to the EDI Implementation Guide, including procedures for a CLEC to use both SATE and the Interoperability environment for a single implementation of EDI.

Qwest updated the EDI Implementation Guide on January 22, 2002, to include language that described how a CLEC could utilize both the SATE and Interoperability environment for a single EDI implementation. Qwest also issued a notification to make the CLEC community aware of the new EDI documentation. Subsequently, Qwest updated the EDI Implementation Guide and released another version of the documentation on February 18, 2002. The revisions included further clarification regarding the dual use of SATE and Interop for an EDI implementation. In

Qwest's February 19, 2002 response, Qwest detailed the enhancements that it had made to the EDI Implementation Guide to adequately describe the process for using both SATE and Interop for testing and implementing EDI. The enhancements specifically addressed documentation concerns that KPMG Consulting had outlined in its February 4, 2002 response.

KPMG Consulting's Disposition Report (03/14/02)

Summary of KPMG Consulting's Retest Activities:

Qwest indicated in its December 21, 2001 response that it would begin allowing CLECs to use a combination of Interop and SATE to test EDI transactions during an implementation of IMA. By asserting that CLECs may use a combination of the environments for EDI implementation, KPMG Consulting believes that each of the issues raised in this Exception is addressed by SATE functionality and its proposed enhancements. The issues of manual handling of post order responses and lack of flow through capabilities in SATE are further documented and addressed in Exception 3077.

Since the process of utilizing both testing environments for an implementation is a new process, Qwest modified the EDI Implementation Guide to describe the process and its ramifications. The EDI Implementation Guide was initially updated and released to CLECs on January 22, 2002. KPMG Consulting reviewed that version of the documentation and determined that it did not adequately and thoroughly describe the combined test environment process. In its February 4, 2002 response, KPMG Consulting specifically outlined the minimum documentation expected to support the combined test environment process. KPMG Consulting stated that such documentation should include, at a minimum, the following subjects:

- Full description of all steps in the new process, highlighting deviations from the normal progression testing process;
- Detailed description of how a CLEC can seamlessly transition between the two environments during testing;
- Requirements for using both environments;
- Limitations when using both environments;
- Pros and cons for choosing each of the testing options.

Qwest updated the EDI Implementation Guide as of February 18, 2002 and made it publicly available on the Qwest Wholesale website. KPMG Consulting reviewed the documentation, as well as Qwest's February 19, 2002 response, to determine if Qwest had adequately enhanced the EDI Implementation Guide per the minimum guidelines set forth by KPMG Consulting.

Summary of KPMG Consulting's Retest Results:

Based upon its review of the updated *EDI Implementation Guide* released on February 18, 2002, as well as Qwest's February 19, 2002 response, KPMG Consulting believes that Qwest has satisfactorily addressed the minimum documentation requirements to help CLECs understand the process for utilizing the combined test environment option. Therefore, KPMG Consulting is satisfied that the issues raised in this Exception are resolved.

KPMG Consulting recommends that Exception 3029 be closed.

ROC_TI499_EXP3029_Qwest_Supp_Response _02_25_02.doc

Test Vendor ID:	EXP 3029
Qwest Internal Tracking ID:	TI 499
Observation/Exception Title:	IMA EDI Interoperability Testing Environment
Test Type/Domain:	Interface Development & Relationship Management
Date Qwest Received:	09/04/2001
Initial Response Date:	09/13/2001
Supplemental Response Date:	10/19/2001
2nd Supplemental Response Date:	11/20/2001
3rd Supplemental Response Date:	12/21/2001
4th Supplemental Response Date:	01/23/2002
5th Supplemental Response Date:	01/30/2002
6th Supplemental Response Date:	02/12/2002
7th Supplemental Response Date:	02/19/2002
8th Supplemental Response Date:	02/25/2002

Test Incident Summary:

An exception has been identified as a result of the Qwest documentation review, and information gathered during interviews, for the Test 24.6 OSS Interface Development Review.

Exception:

Qwest's Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) Interoperability Testing Environment does not offer Co-Providers with sufficient testing capabilities.

Background:

Qwest employs a phased approach for Co-Providers who wish to develop an IMA/EDI application-to-application interface with Qwest's OSS systems. The steps of the current process are listed below:[1]

1. *Initial Communications*
2. *Proposed Project Plan*
3. *Requirements Review*
4. *Firewall Rules and Interactive Agent to Interactive Agent Testing*
5. *Testing (Interoperability/SATE)*
6. *Controlled Production*

[1] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Section 2, Implementation Activities, Released July 25, 2001.

7. Production

Issue:

KPMG Consulting has observed through interviews, and documentation reviews, that the IMA EDI interoperability test environment does not provide the testing capabilities for a Co-Provider to sufficiently test the IMA EDI interface prior to connecting to Qwest's production systems. Certain limitations in the IMA EDI testing process have been identified, including the following:

- The interoperability testing environment, does not offer true end-to-end testing capabilities through to Qwest's provisioning and billing systems.
- Flow-through orders are not supported in the Interoperability Testing environment, even though these types of orders will be processed in the production environment. Co-Providers are therefore unable to predict the performance of flow-through orders in production. This limits the ability of Co-Providers and Qwest to test completion of orders in a timely manner.
- In order to test transactions in the IMA/EDI Interoperability Testing environment, Co-Providers must use valid production data, because the customer information is validated against data that resides in the production databases. The use of valid customer data could adversely impact CLEC customers.

Impact:

Qwest's existing IMA EDI testing environment limits a Co-Provider's ability to successfully develop and test its IMA EDI interface before connecting to Qwest's IMA EDI production environment, which can delay timely service delivery to the Co-provider's customers. This could increase a CLEC's operating expenses as a result of additional time required to ensure the functionality of the systems, and could also decrease revenues if delays prevent a CLEC from servicing clients.

Qwest Formal Response:

The Qwest EDI Certification process involves a multi-step testing process in its implementation with CLECs. Qwest has committed to provide CLECs with access to a stable testing environment to adequately test their EDI implementation end-to-end and describes the multi-step testing process in section 12.2.9.3 of the SGAT. This is language that Qwest and the CLECs have agreed to in the SGAT workshops. This multi-step testing process has resulted in over 25 successful CLEC implementation and migrations (Release 4.0, 5.0, 6.0, 7.0 and 8.0) over the last 2 years. These CLECs were able to immediately send large volumes of orders to the production environment following completion of certification. For example, in 2/99 a specific CLEC sent over 1000 orders within one week of being placed in production. Qwest works closely with each individual CLEC to ensure its desired implementation dates are fully supported and has multiple examples of accelerating typical project timelines to support CLEC business needs. Qwest has also worked with a number of service bureaus and software providers who support multiple CLECS and have successfully implemented EDI functionality by utilizing Qwest's certification process.

KPMG Comments (09/28/2001):

KPMG Consulting is providing additional clarification for this Exception.

Qwest provides an Interconnect Mediated Access (IMA) Electronic Data Interchange (EDI) interface as one of the options with which a co-provider can perform pre-ordering and ordering functions. A co-provider needs to certify its OSS systems and interfaces before connecting to the Qwest OSS production environment. Qwest's certification process includes several steps. As stated in Qwest's documentation[2],

[2] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Section 2,

"The typical project steps for those co-providers implementing a given release will include:

1. Initial Communications (includes kick off conference call)
2. Proposed Project Plan
3. Requirements Review
4. Firewall Rules and Interactive Agent to Interactive Agent Testing
5. Testing (Interoperability and/or SATE)
6. Controlled Production
7. Production (Turn-up)"

Interoperability testing is offered as an alternative to the Stand Alone Test Environment (SATE). The objectives of testing are threefold. First, to ensure that a co-provider can test the interfaces that it has developed using Qwest's documentation. Second, to provide some assurance that the test environment mirrors the production environment. And third, to ensure that when there are new releases, or system upgrades, that the changes to the systems do not interrupt ongoing business activity between a co-provider and Qwest.

This exception addresses the capabilities of the Interoperability Testing environment. KPMG Consulting has observed through interviews, and documentation reviews that the functionality of the IMA EDI interoperability test environment does not provide adequate testing capabilities for a co-provider to sufficiently test the IMA EDI interface. Certain limitations in the IMA EDI testing process have been identified, including the following:

- As stated in interviews with Qwest's EDI testing personnel, the interoperability testing environment does not generate post-order responses in the same manner as they are created in the production environment. Specifically, a Test System Engineer (TSE) manually provides responses to the CLEC that would be system-generated in the production environment (e.g. firm order completion notices, and other post-order responses such as rejections). Manual response generation is not representative of the production environment, and manual intervention increases the risk of human error.

- Flow-through is defined as orders that do not require manual intervention. These order types are not supported in the Interoperability Testing environment. Therefore, CLECs are not able to evaluate the behavior of the system in a manner that is consistent with flow-through orders in production. A test environment should mirror the production environment, and provide evidence of what is to be expected when entering production, including flow-through behavior.
- In order to test transactions in the IMA/EDI Interoperability Testing environment, co-providers must use actual customer data to submit valid orders. This customer information is validated against data that resides in Qwest's production databases. As stated in Qwest's documentation:[3]

> "For scenario transactions to be successfully processed in the interoperability environment or Controlled Production Phase, the co-provider must supply valid account data and populate the Scenario Template field data according to the Developer Worksheet requirement before submitting the EDI transaction. This means that the account information must exist within the Qwest systems and be valid in terms of its owner (Qwest or Co-provider), account number, end user, and related content and format."

Implementation Activities, Released in July 25, 2001, Page 6.

[3] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Section 2, Implementation Activities, Released in July 25, 2001, Page 20

Qwest's documentation states that the account used in testing will be left intact in Qwest's production systems, and that the orders are not provisioned. The use of production systems certainly provides some assurance that the same edits applied during testing, are applied in production. Nevertheless, the necessity of providing live accounts for testing is, in our opinion, both burdensome and risky for the CLEC.

Finally, KPMG Consulting does not believe that the fact that CLECs and Qwest have been able to make the Interoperability Testing environment work at some level removes the fundamental problems that exist therein.

KPMG Consulting recommends that Exception 3029 remain open.

Qwest Response to KPMG Comments (10/19/2001):

KPMG has outlined three objectives of testing in their 09-28-01 response. These are: 1) to ensure that a co-provider can test the interfaces that it has developed using Qwest's documentation, 2) to provide some assurance that the test environment mirrors the production environment, and 3) to ensure that when there are new releases, or system upgrades, that the changes to the systems do not interrupt ongoing business activity between a co-provider and Qwest. While it is arguable whether the Interoperability test environment satisfies all of these objectives, Qwest's overall testing process accomplishes these objectives. Further, the Stand Alone Testing Environment (SATE) was recently developed to streamline the testing process and more fully satisfy these objectives.

SATE and Interop provide the CLECs environments where they can test IMA transactions used in the production Electronic Data Interface (EDI) according to Qwest documentation. These environments allow the CLECs to test communication with the Qwest EDI system, ensure data fields meet the EDI standards, and ensure the transactions can be successfully received and processed by Qwest and that Qwest responses can be successfully received and interpreted by the CLEC. SATE and Interop include the ability to test post order transactions which will be experienced in production. SATE also provides test accounts and scenarios so that system upgrades and changes can be readily tested with the test data. As a final step, the Controlled Production environment will continue to allow CLECs to experience live production behavior prior to full production use.

The primary concerns outlined in KPMG's 09-28-01 response are abbreviated as follows:
1. Interop does not generate post-order responses in the same manner they are created in production.
2. Interop does not provide flow through.
3. Production data must be used in Interop.

Although these findings are focused on the Interop test environment, Qwest has no plans to continue to enhance the Interop environment; Qwest will continue to enhance SATE. The concerns raised by KPMG are specifically addressed below:

1. All post order transactions are produced manually by a Test System Engineer (TSE) in both SATE and the Interop environment. The TSE uses IMA to create Firm Order Confirmations (FOCs), manual rejects, jeopardies and non-fatal error transactions. IMA then automatically sends the transaction to the CLEC. This manual generation simulates the Interconnect Service Center representative's actions in production. However, if the LSR were to flow through, SATE and the Interop environment do not automatically generate the FOC. An automatically generated FOC occurs when the CLEC is performing their Controlled Production Testing.

   In order to provide CLECs with the ability to test automated post order transactions earlier in the certification testing process, Qwest is developing automated post order transactions for the SATE environment. The new test scenarios will provide the ability to experience the behavior of IMA consistent with production timing of post-order transactions. So, while the current SATE and Interop

environment allows the CLEC to test all post order transactions in their EDI interface, these changes will resolve any timing concerns. The EDI transactions which will mirror the automatically generated transactions in production are:

- 855 FOC for LSR for Flow Through LSRs
- 865 Completion
- 855 Status Updates for the following:
- Physical Work Completed (Order Level)
- Posted To Be Billed (Order Level)

Transactions which are normally generated manually in production can continue to be requested and provided by SATE. SATE will automatically produce the following EDI 855 and 865 transactions when requested by the CLEC test scenario:

- Hold (Order Level)
- Jeopardy (Order Level)
- Manual FOC for LSR

The transactions listed above will be available on 01/26/02.

The following transactions will continue to be manually generated in SATE:

- Manual Errors (LSR Level)
- Non-Fatal Errors (LSR Level)
- Manual Jeopardies (LSR Level)
- Status Updates that follow the above manual transactions

LSR level Rejects will continue to be automatically generated in SATE.

2. Since Qwest's current testing environment exercises the same edits that exist in production, Qwest believes the absence of the flow through system in SATE only impacts the timing of an FOC on flow through eligible LSRs. This difference does not preclude a CLEC from thoroughly testing its EDI system, including conformance with Qwest's business rules that enable flowthrough. Even though the timing differences are addressed in item 1 above, Qwest will enhance the SATE environment to add a test flow through system and test Service Order Processors (SOPs), which mirror production. CLECs will have the option to choose when they want their SATE transaction to be sent to the test flow through systems, or receive a specific test scenario response which was described in item #1 above. If the CLEC chooses to have their transaction sent through the test flow through systems, only flow through eligible LSRs will successfully flow. LSRs which are not eligible for flow through will be sent to the queue for manual handling. The option to send the test LSR to the flow through systems will allow the CLEC to experience an immediate response if flow through is successful and a manual response if flow through is not successful. Qwest will provide a supplemental response by 11-19-01 to provide the date by which this capability will be available.

3. SATE currently provides the ability to use test accounts and scenarios which can be readily reused. The CLECs can request new test scenarios as needed.

Further, Qwest will hold requirement sessions for the test environment with the CLECs to ensure Qwest is meeting the CLEC's testing objectives. The introduction of the test environment requirement sessions was done at the 10-18-01 CMP meeting. The purpose of the sessions will be to collaboratively define the additional needs for the test environment. System enhancements resulting from the CLEC requirements sessions will be submitted as Change Requests to the CMP process and prioritized for implementation. The Change Requests can also include upgrades to the test scenarios that will allow the CLECs to more extensively test either their EDI interface, or their business process and LSR construction.

KPMG Supplemental Recommendation (11/01/2001):

Qwest has stated that its overall IMA EDI testing process, which allows CLECs the choice between the Interoperability environment (Interop) and the Stand Alone Test Environment (SATE), satisfies the objectives of testing stated in the KPMG Consulting comments provided on 9/28/01. It is important to note that this test exception only applies to the Interoperability environment. Although SATE was created to address some of the concerns with Interop, it is a different environment that is being evaluated separately for its ability to provide adequate testing capabilities for CLECs. Since CLECs have to choose between becoming certified in either Interop or SATE when implementing IMA EDI, KPMG Consulting is evaluating the testing process for Interop and SATE separately but based upon the same fundamental criteria. Therefore, the remainder of the comments for this exception will only address the Interop environment.

Qwest individually addressed each of the three primary concerns noted in the KPMG Consulting comments provided on 9/28/01. Those concerns are as follows:

1. Interop does not generate post-order responses in the same manner they are created in production.
2. Interop does not provide flow through.
3. Production data must be used in Interop.

In addressing these concerns, Qwest first stated:

"Although these findings are focused on the Interop test environment, Qwest has no plans to continue to enhance the Interop environment; Qwest will continue to enhance SATE."

By making this statement, KPMG Consulting interprets Qwest's statements as meaning that the deficiencies described in this exception will not be addressed within the Interop environment. Instead, Qwest intends to further enhance SATE to overcome the shortcomings of Interop. Qwest then proceeds to address each of the concerns individually. In each of its responses, it refers to features of, or the proposed enhancements to, SATE that should address the noted deficiency of the Interoperability Environment. However, Interop is a separate and distinct testing environment that CLECs can choose as an alternative to SATE. CLECs who continue to use the Interop environment will still have to conduct testing within the restrictive parameters previously defined. Therefore, CLECs choosing Interop will be placed at a relative disadvantage to their SATE counterparts.

KPMG Consulting recommends that Exception 3029 remain open until Qwest can directly address the concerns related to the Interop environment.

Qwest Response to KPMG Supplemental Recommendation (11/20/2001):

Working in collaboration with the CLECs through the CMP process, Qwest has moved forward with the implementation of the SATE to address among other requirements, the opportunity for CLECs to develop and test their EDI interface without having to provide "production data" to complete the testing. Qwest and CLECs continue to be successful in the testing process through the use of the interoperability test environment. Given the current use of the Interop environment, Qwest will continue to make it's interoperability testing environment available to CLECs who prefer this method of testing until such time and if this option no longer makes sense to Qwest and the CLECs.

Additionally, Qwest has several enhancements planned to the SATE as described briefly below. A full description of this work is addressed in Qwest's response to Exception 3077.

- Qwest will provide automated post-order responses in SATE

- Qwest will implement a test Flow Through System and test SOPs behind the SATE

Qwest has established a collaborative process with CMP members to further analyze and define any additional CLEC test environment needs. Qwest believes that the above plan addresses all issues raised by KPMG.

Qwest Supplemental Response (12/21/2001):

Qwest would like to clarify the availability of the automated post-order processing functionality in SATE. This functionality will be available for use by the CLECs on January 28, 2001 after the installation of the new version of SATE on January 26, 2001.

Qwest will add flowthru capability to SATE in two phases. The first phase is scheduled to be implemented on February 20, 2001. This phase will include POTS and UNE-P POTS flowthru for Western region LSRs. The second phase will include flowthru for all other flowthru eligible products, including POTS and UNE-P POTS, in the Central and Eastern regions. The second phase is scheduled to be implemented prior to May 20, 2002.

The current IMA EDI Implementation Guide (version 8.0) contains overviews of both of Qwest's EDI Test environments: SATE and Interoperability. These overviews include what products are supported by the environment and how post-order responses are provided. With the implementation of the next release of SATE, the guide will be updated to include new SATE functionality and the process if a CLEC wanted to utilize both environments.

With the implementation of post-order, the SATE section of the IMA EDI Implementation Guide will be updated. The updates will include:

- Adding a new goal to the list of goals of SATE for the receipt of automated post-order responses.
- Revise the "SATE Transaction Responses" to add explanation of automated post-order responses and remove references to manually generated FOCs and Completions.
- Add reference to "SATE Transaction Responses" to SATE VICKI data document.

To clarify the process for CLEC use of both environments, information will be added to the Progression Testing Phase section that reads:

> A CLEC may choose to use one or both of Qwest's two testing environments. If a CLEC chooses to use both environments during a single implementation or migration, the CLEC should indicate on the scenario summary which environment will be used to test each scenario. Additionally, the CLEC should ensure that the appropriate connectivity set-up is completed for both environments.

The next version of the guide will be published on January 21, 2002.

SATE is available for new release testing approximately 30 days prior to the implementation in production of that release. This is explained on page 25 of the IMA EDI Implementation Guide.

KPMG 2nd Supplemental Recommendation (01/08/2002):

As stated in the original Exception, KPMG Consulting's three concerns with the Interop environment are:

1. Interop does not generate post-order responses in the same manner in which they are created in production,
2. Interop does not provide flow through,
3. Production data must be used in Interop.

To address the first and third concerns, Qwest stated that the SATE environment will produce automated post order responses with the release of SATE 9.0, which will be available to CLECs on January 28, 2002. SATE also provides CLECs with a test deck of data that is used exclusively for testing purposes, eliminating the need for live, production data. Qwest has asserted that it will allow a CLEC to begin certifying IMA EDI using both the SATE and Interop testing environments, and that the process for utilizing both environments will be documented in the next version of the EDI Implementation Guide, slated for release on January 21, 2002. Based on the anticipated SATE enhancements, and the assertion that a CLEC will be able to use both SATE and Interop as a unified testing environment to certify its IMA EDI interface, KPMG Consulting believes that Qwest is attempting to address theses two issues with the combined capabilities of the testing environments. Once Qwest makes the aforementioned documentation publicly available, and once SATE 9.0 is implemented, KPMG Consulting will review the documentation and make a further determination regarding the issues identified in this Exception.

For the second concern, Qwest stated in its December 21, 2001 response, *"Qwest will add flowthru capability to SATE in two phases. The first phase is scheduled to be implemented on February 20, 2001. This phase will include POTS and UNE-P POTS flowthru for Western region LSRs. The second phase will include flowthru for all other flowthru eligible products, including POTS and UNE-P POTS, in the Central and Eastern regions. The second phase is scheduled to be implemented prior to May 20, 2002."*

Based on its response, and on the fact that a CLEC will be able to use a combination of SATE and Interop on a scenario-by-scenario basis to certify its IMA EDI interface, KPMG Consulting believes that Qwest plans to address the issue of flow through capabilities within SATE. However, until such proposed enhancements are implemented, the current test environment does not provide a CLEC with an accurate representation of the production environment's flow through capabilities. Therefore, KPMG Consulting recommends that this issue remain open, as stated in Exception 3077, until the proposed enhancements are fully implemented in SATE.

KPMG Consulting recommends that Exception 3029 remain open, pending a review of the revised documentation regarding testing environment options for CLECs.

Qwest Response to KPMG 2nd Supplemental Recommendation (01/23/2002):

In the 12/21/01 response, Qwest committed to updating the *IMA EDI Implementation Guide* with:

- New SATE functionality
- The process to follow if a CLEC wants to utilize both the SATE and Interoperability environments

Qwest completed the updates to the *IMA EDI Implementation Guide* on 01/22/02 (pp. 28-34). The updated document can be accessed on Qwest's Wholesale web site at: http://www.qwest.com/wholesale/ima/edi/document.html. The associated industry notification was issued on 1/22/02 with the subject line, "9.0 Release Implementation Guide, FAQ, IMA EDI Corrective Procedures and Error Codes Document and the FBDL EDI Corrective Procedures and Confirmation/Error Codes."

In addition, Qwest completed updates to the *VICKI Path Document*[4] on 1/21/02. The updated document was provided as an attachment to the industry notification issued on 1/21/02 with the subject line, "Documentation – SATE Data Documents, VICKI Path Document and Data Request Form 012102."

Qwest Supplemental Response (01/30/02):

Qwest committed to the following action item in the 12/21/01 response:

[4] Previously referred to as the *SATE VICKI data document* in the 12/21/01 response.

"Qwest would like to clarify the availability of the automated post-order processing functionality in SATE. This functionality will be available for use by the CLECs on January 28, 2001 after the installation of the new version of SATE on January 26, 2001."

The IMA EDI Stand Alone Test Environment (SATE) 9.0 was successfully deployed during the weekend of January 26, 2002. This release is now available to the CLECs for use in their EDI testing. SATE's release includes Virtual Interconnect Center Knowledge Initiator (VICKI). VICKI will provide automation of SATE's post-order processing.

The associated industry notification was issued on 1/28/02 with the subject line, "SATE 9.0 Deployed Successfully."

KPMG 3rd Supplemental Recommendation (02/04/2002):

In its December 21, 2001 response, Qwest stated that it would update the *EDI Implementation Guide* to include language that would clarify, in detail, how CLECs would be able to utilize both the Interoperability environment and SATE for a single implementation of IMA EDI. Qwest updated the *EDI Implementation Guide*, and released the new version publicly on the Qwest Wholesale Web site as of January 21, 2002.

According to Qwest, a CLEC now has three test environment options for testing and certifying products before entering production:

1. Stand Alone Test Environment (SATE)
2. Interoperability environment (Interop)
3. Combination of SATE and Interop

The third option, the combined use of SATE and Interop as a single testing environment, has been established by Qwest to overcome the previously identified limitations of Interop as an independent EDI testing option. As stated in its October 19, 2001 response, Qwest does not plan to invest further resources into the Interop environment, but plans to devote all future test environment development efforts towards SATE. Furthermore, Qwest stated in its previous responses that SATE features would overcome the deficiencies of Interop, which have been identified by KPMG Consulting in this Exception. Therefore, Qwest asserted in its December 21, 2001 response, "With the implementation of the next release of SATE, the guide will be updated to include new SATE functionality and the process if a CLEC wanted to utilize both environments."

KPMG Consulting reviewed the new version of the *EDI Implementation Guide*. KPMG Consulting found only one reference that explicitly addresses the use of both SATE and Interop for testing during a single EDI implementation. The passage states:

"A CLEC may choose to use one or both of Qwest's two testing environments. If a CLEC chooses to use both environments during a single implementation or migration, the CLEC should indicate on the scenario summary which environment will be used to test each scenario. Additionally, the CLEC should ensure that the appropriate connectivity set-up is completed for both environments."[5] [Italics added]

KPMG Consulting could identify no other reference(s) to the new process for using both test environments. Additionally, Qwest added several flowcharts to the *EDI Implementation Guide* that depict the various processes during an EDI implementation. The flowcharts for progression testing make no reference to the

[5] EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL), Section 2, Implementation Activities – Progression Testing Phase, Released on January 21, 2002, Page 28.

fact that both SATE and Interop can be used in concert. In fact, the flowcharts display the two testing environments as separate, distinct options for the CLEC.

As the option of using both environments for a single implementation is a new process for both CLECs and Qwest, KPMG Consulting would expect the new process, and all of its impacts, to be documented in detail. Such documentation should include, at a minimum, the following subjects:

- Full description of all steps in the new process, highlighting deviations from the normal progression testing process;
- Detailed description of how a CLEC can seamlessly transition between the two environments during testing;
- Requirements for using both environments;
- Limitations when using both environments;
- Pros and cons for choosing each of the testing options.

Based on the review of the documentation, KPMG Consulting does not believe that Qwest has adequately documented how the new combined SATE/Interop testing process will function.

KPMG Consulting recommends that Exception 3029 remain open until Qwest adequately documents the combined test environment process.

Qwest Response to KPMG 3rd Supplemental Recommendation (02/12/2002):

Upon further evaluation Qwest will enhance its documentation to address functionality of the combined SATE and Interop testing process. Qwest is currently evaluating the specific changes and will make the updated EDI Implementation Guide available by 2/18/02.

Qwest Supplemental Response (02/19/2002):

In regards to flow through capability in SATE, the phase one addition as originally described in Qwest's 12/21/01 response, has been rescheduled for a 2/25/02 implementation. The first phase will include POTS and UNE-P POTS flow through for Western region LSRs.

In addition, the updates to the EDI Implementation Guide for combined SATE and Interoperability testing, as referenced in Qwest's 02/12/02 response, were completed on 02/18/02. The associated industry notification was issued on 02/18/02 with the subject line, "EDI Implementation Guidelines, Version 9.1"

More specifically, in KPMG's Fourth Supplemental Response, KPMG provided several recommendations for updates to the IMA EDI Implementation Guide regarding the option of using both the SATE and Interoperability environments during a single implementation. Each of the bullet points below, with text in italics, represents KPMG's recommendations. In the text below each bullet point, Qwest has provided detail about the updates made to the guide that addresses KPMG's recommendations.

- *KPMG Comment: Full description of all steps in the new process, highlighting deviations from the normal progression testing process*

Qwest Response: The method for using both the Interoperability and SATE environments for a single Progression Test phase is integrated with the Implementation process and therefore documented throughout the EDI Implementation Guide. The process flows for the impacted processes have been updated to reflect these changes. Specific highlights include:

- In the Implementation Activities section, beginning on page 8, the definition of Progression Testing includes introductory information on using both environments.
- In the Establishing a Dedicated Circuit section, beginning on page 20, Qwest has clarified that the same circuit can be used to connect to the production environment, the interoperability environment, and SATE simultaneously.
- Additionally, the process flow diagram in this section indicates the steps that must be repeated if the CLEC is not using the same IP address to test in both environments.
- In the Scenario Summary and Template Development and Approval section, beginning on page 23, Qwest restructured the opening section to indicate the activities to be performed during this process depending upon the testing phase and environment utilized. Specifically, a new paragraph was added to describe which documents were required when testing occurs in both the Interoperability environment and SATE.
- In the Progression Testing Phase section within Scenario Summary Creation – Progression, on page 39, Qwest clarified that the CLEC must indicate in which environment a scenario will be tested on the Scenario Summary.
- Throughout the document, references that once read 'Interoperability or SATE' were changed to read 'Interoperability and/or SATE', as appropriate.

- *KPMG Comment: Detailed description of how a CLEC can seamlessly transition between the two environments during testing*

Qwest Response: The responsibility for submitting any CLEC transaction to a Qwest environment is the responsibility of the CLEC through the use of the appropriate environment-specific IP Address. This responsibility is no different if the CLEC chooses to utilize more than one test environment. As a result, Qwest has chosen to address this in the EDI Implementation Guide as follows:

- In the Implementation Activities section for Progression Testing overview, beginning on page 8, in the second paragraph Qwest states:

  "If the CLEC chooses to test in both environments as part of a single Progression Testing Phase, the details of such an arrangement will be determined on the regularly scheduled CLEC implementation calls and reflected in the project plan... During testing, it is the CLEC's responsibility to navigate between the two environments."

- *KPMG Comment: Requirements for using both environments*

  - Qwest Response: The requirements are integrated with the Implementation process and therefore documented throughout the EDI Implementation Guide. Specific highlights are provided in Qwest's response to the first bullet listed above.

- *KPMG Comment: Limitations when using both environments;*

Qwest Response: There are no specific limitations imposed by Qwest around a CLEC using both environments for Progression Testing. However, there are certain items that a CLEC should be aware of when planning to use both environments. As stated on page 8 of the Implementation Guide, "...certain activities, such as connectivity, may have to be repeated for each environment. During testing, it is the CLEC's responsibility to navigate between the two environments."

- *KPMG Comment: Pros and cons for choosing each of the testing options*

Qwest Response: In the Progression Testing Phase section, Qwest included a summary overview of the products and functionality that each environment provides (see Chart 2, page 33). As indicated in the chart, which is reproduced below, Qwest identifies the functionality supported by the 9.0 Interoperability and 9.0 SATE environments (including flow through, response generations, and test data). Based upon this information, each CLEC must determine which environment best meets the needs for their testing.

Chart 2 SATE vs. Interoperability Functionality

SATE	**Interoperability**
Flow Through	No Flow Through
Automated Responses	Manual Responses
Provided Test Data	CLEC must use valid Qwest data
Common Products Supported (See page 31)	All IMA products supported

Based upon the changes to the published EDI Implementation Guide, Qwest believes that it has sufficiently documented the combined test environment process, specifically addressing the points raised in KPMG's Fourth Supplemental Recommendation on 02/04/2002.

Qwest Supplemental Response (02/25/2002):

Qwest stated the following in the 2/19/02 response:

> *"In regards to flow through capability in SATE, the phase one addition as originally described in Qwest's 12/21/01 response, has been rescheduled for a 2/25/02 implementation. The first phase will include POTS and UNE-P POTS flow through for Western region LSRs."*

Qwest completed implementation of phase one SATE flow through capability on 2/25/02. The associated industry notification was issued on 2/25/02 with the subject line, "Deployment of SATE 9.0 Flowthrough, Phase 1."

Attachments: None

Qwest CEMR Log Co-Provider Actual Activity

Qwest Confidential Information
Co-Provide Actual Activity
(Excluding Qwest & P-CLEC Activity)
Transaction Count Analysis
For the Months Specified

non Design Services	Aug'01 - Jan '02		Jan '02		Dec '01		Nov '01		Oct '01		Sep '01		Aug '01	
Trans	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
cancel	74	0.3%	11	0.2%	17	0.3%	15	0.3%	16	0.4%	13	0.5%	2	0.1%
close														
create	11,003	44.1%	2,033	34.8%	1,879	35.8%	2,135	45.4%	2,257	53.3%	1,431	54.0%	1,268	55.8%
delh	2,239	9.0%	383	6.6%	379	7.2%	527	11.2%	376	8.9%	275	10.4%	299	13.2%
delh	51	0.2%	5	0.1%	5	0.1%	4	0.1%	15	0.4%	7	0.3%	15	0.7%
dleh	1,260	5.1%	207	3.5%	317	6.0%	339	7.2%	230	5.4%	115	4.3%	52	2.3%
lr	786	3.2%	165	2.8%	173	3.3%	138	2.9%	155	3.7%	102	3.8%	53	2.3%
mn	9,450	37.9%	3,019	51.6%	2,463	47.0%	1,513	32.2%	1,174	27.7%	701	26.5%	580	25.5%
modify	86	0.3%	23	0.4%	13	0.2%	27	0.6%	14	0.3%	6	0.2%	3	0.1%
osschi														
osslog														
Grand Total	24,949	100.0%	5,846	100.0%	5,246	100.0%	4,698	100.0%	4,237	100.0%	2,650	100.0%	2,272	100.0%

CLEC Order volumes

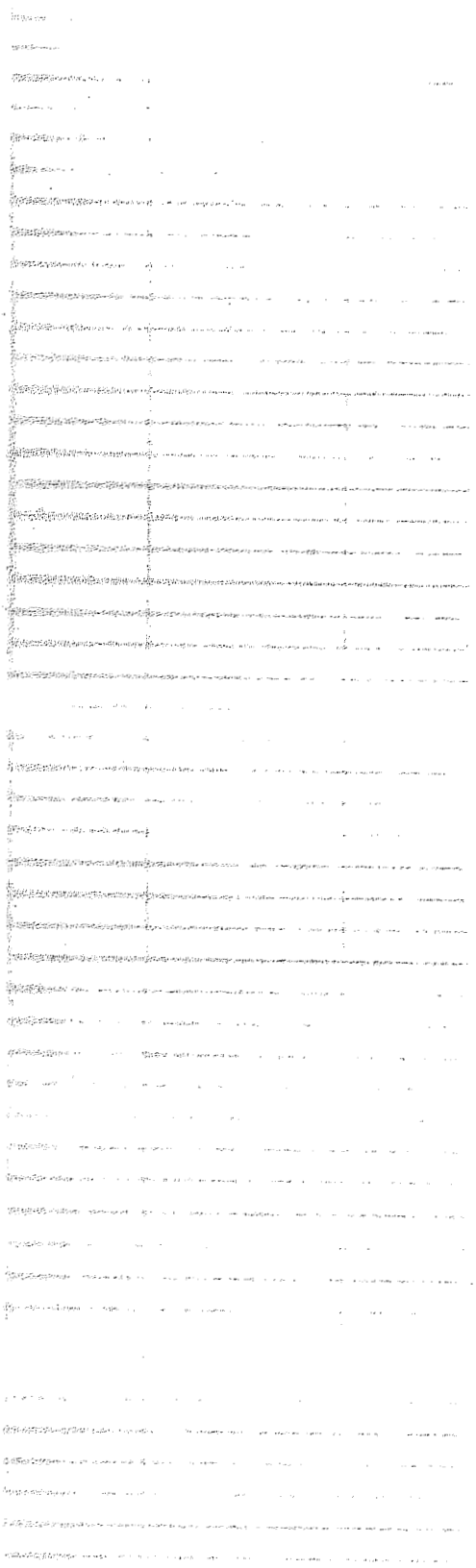
(05/01/01 – 04/30/02)

Qwest CLEC Order volumes (05/01/01 – 04/30/02)

SOURCE	PRODUCT	TOTAL
IMA 5.0 EDI	CENTREX	6
IMA 5.0 EDI	LNP	9
IMA 5.0 EDI	RESALE (POTS, UNE_P_POTS)*	484
IMA 5.0 EDI	UNBUNDLED LOOP (LSNP, Shared Loop, UL)*	43
IMA 6.0 EDI	CENTREX	49,956
IMA 6.0 EDI	COMPLEX	192
IMA 6.0 EDI	INP	1
IMA 6.0 EDI	LISTINGS	5,340
IMA 6.0 EDI	LNP	50,461
IMA 6.0 EDI	LSNP	21,193
IMA 6.0 EDI	POTS	26,633
IMA 6.0 EDI	SHARED LOOP	3,412
IMA 6.0 EDI	UL	20,335
IMA 6.0 EDI	UNE_P_POTS	7,778
IMA 7.0 EDI	COMPLEX	3
IMA 7.0 EDI	LISTINGS	11
IMA 7.0 EDI	LNP	23,328
IMA 7.0 EDI	LSNP	6,502
IMA 7.0 EDI	POTS	11,157
IMA 7.0 EDI	SHARED LOOP	11,469
IMA 7.0 EDI	UL	25,570
IMA 7.0 EDI	UNE_P_POTS	164
IMA 8.0 EDI	CENTREX	66,461
IMA 8.0 EDI	COMPLEX	388
IMA 8.0 EDI	LISTINGS	4,250
IMA 8.0 EDI	LNP	96,330
IMA 8.0 EDI	LSNP	44,816
IMA 8.0 EDI	POTS	68,581
IMA 8.0 EDI	SHARED LOOP	7,295
IMA 8.0 EDI	UL	34,119
IMA 8.0 EDI	UNE_P_POTS	5,757
IMA 9.0 EDI	LNP	622
IMA 9.0 EDI	LSNP	1,964
IMA 9.0 EDI	UL	4,457
Total		599,087

*Prior to IMA Release 6.0 there were no subproduct codes used to track Resale orders and Unbundled Loops. Thus, the totals seen here are aggregate and include IMA Release 5.0 orders.

Qwest CLEC Order volumes (05/01/01 – 04/30/02)



CLEC Pre-Order Volumes

(05/01/01 – 04/30/02)

Company	Year Total	2002	July	August	September	October	November	December	2003				
Total	1,027,209	57,475	67,297	84,768	77,447	77,903	92,025	81,499	128,142	94,692	63,428	103,035	129,538
AA - Appointment Availability	25,964	1,764	2,188	2,370	1,977	2,221	2,333	1,975	2,578	2,094	2,148	2,295	2,221
AS - Appointment Selection	23,036	1,487	1,905	2,115	1,628	2,004	2,171	1,809	2,456	1,969	2,063	1,431	1,607
AV - Address Validation	199,372	35,456	40,781	50,450	44,807	46,983	59,238	49,125	66,299	39,811	35,126	58,662	73,466
CFA - Connecting Facility Assignment	2,540	0	2	0	0	15	139	369	414	374	412	307	426
CSR - CSR Review	305,347	14,139	18,392	24,914	23,488	19,138	21,956	20,695	46,178	18,383	17,501	32,761	45,871
CT - Cancel Appointment or TN	237	0	0	0	0	4	54	19	38	31	37	43	32
DLR - Design Layout Record	0	0	0	0	0	0	0	0	0	0	0	0	0
FA - Facility Availability	59,943	4,566	3,781	3,577	4,815	4,582	5,098	6,711	6,769	4,173	4,929	6,909	4,933
LQ - Loop Qualification	0	0	0	0	0	0	0	0	0	0	0	0	0
LSRS/SOS - Service Order Status	2	0	0	0	0	0	0	0	2	0	0	0	0
LSTR - Listing Reconciliation	0	0	0	0	0	0	0	0	0	0	0	0	0
MP - Meet Point	0	0	0	0	0	0	0	0	0	0	0	0	0
RLD - Raw Loop Data	118	1	3	0	1	11	5	3	9	4	26	18	37
SA - Service Availability	11	1	0	0	1	0	6	0	3	0	0	0	0
TNA - Telephone Number Availability	5,824	17	198	751	489	531	546	397	755	495	547	568	530
TNS - Telephone Number Selection	4,815	15	136	591	361	414	487	355	652	418	469	486	431

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TI 827
OBSERVATION 3086 – SECOND SUPPLEMENTAL RESPONSE
Qwest OSS Evaluation

Initial Release Date: January 29, 2002
Second Supplemental Response Date: April 12, 2002

OBSERVATION REPORT

An observation has been identified during the POP Feature/Function Evaluation, Test 12.

Observation:

KPMG Consulting has identified a pattern in Qwest's Observation and Exception responses that refer to the need for additional training and/or training enhancements.

Background:

Qwest's responses to 75 Observations and Exceptions, raised by both KPMG Consulting and Hewlett-Packard Consulting (HPC), state that training initiatives and/or enhancements have been undertaken to remedy the issues raised. Of these 75 responses, 49 describe additional training measures that directly impact Interconnect Service Center (ISC) and Service Delivery Coordinator (SDC) personnel.

Issue:

As recently as January 2002, KPMG Consulting and HPC have identified issues in the POP Feature/Function Evaluation to which Qwest has responded by stating it would perform corrective actions in the form of additional training for the ISC and SDC to remedy the reported problems. However, as issues raised in "new" Observations and Exceptions continue to point to additional training needs for the SDC and ISC, KPMG Consulting believes that the adequacy of Qwest's ISC and SDC training programs may be insufficient. Below is a list of the Observations and Exceptions issued by KPMG Consulting and HPC for which Qwest stated ISC/ SDC training would occur.

Observations and Exceptions – SDC/ ISC

Exception #	Exception #	Exception #	Observation #
EXC 2006	EXC 2034	EXC 2073	OBS 2016
EXC 2010	EXC 2035	EXC 2075	OBS 2023
EXC 2013	EXC 2036	EXC 2081	OBS 2026
EXC 2017	EXC 2037	EXC 3020	OBS 2032
EXC 2019	EXC 2048	EXC 3061	OBS 2042
EXC 2024	EXC 2056	EXC 3078	OBS 2049
EXC 2026	EXC 2058	EXC 3101	OBS 2052
EXC 2027	EXC 2059		OBS 2053
EXC 2028	EXC 2063		OBS 2060

Exception #	Exception #	Exception #	Observation #
EXC 2029	EXC 2067		OBS 2068
EXC 2030	EXC 2068		OBS 2072
EXC 2031	EXC 2069		OBS 3001
EXC 2032	EXC 2071		OBS 3020
EXC 2033	EXC 2072		OBS 3077

Impact:

The inadequacy of Qwest's ISC and SDC personnel training may impede a CLEC's ability to obtain consistent and effective assistance, thereby negatively impacting its ability to conduct business operations.

Qwest Formal Response:

Qwest has reviewed the 49 Observations and Exceptions that are cited as training opportunities for the ISC Service Delivery Coordinators (SDCs). Qwest disagrees with KPMG's assertion that these Observations and Exceptions reflect inadequacies in the training provided to ISC personnel. Nor does Qwest agree that the frequency of training and quality assurance as a remedy in our Test Incident (TI) responses is indicative of a problem. As long as there are manual processes there will be some degree of error and, also, continuous opportunities for quality improvements. The Third Party Test has presented ISC employees with a wide variety of uncommon products, infrequent activities and, as a consequence, significant opportunities for training and quality assurance. Qwest's goal is to provide sufficient training and quality assurance to maintain the target quality level of its ISC employees.

Nonetheless, Qwest understands KPMG's concerns and has prepared a response that is divided into three parts. First, this response describes the programs that are currently in place to provide Training and ongoing Quality Assurance for the ISC (These programs were also discussed in the Focus O/E call on January 17, 2002.) Qwest's responses to Observations and Exceptions have not always differentiated between Training and Quality Assurance, (including coaching and MCCs.) Likewise, in this Observation, KPMG has combined TIs where group training was provided with TIs where individual coaching was offered. An overall assessment of Qwest's training for ISC staff must consider both Training and Quality Assurance since each has a distinct role in maintaining the target quality level of the ISC staff.

Second, this response presents the results of Qwest's analysis of the Observations and Exceptions KPMG has referenced. Not surprisingly, this analysis shows a preponderance of process failures related to mistakes by individual SDCs. These mistakes warrant the kind of targeted, individualized intervention that is part of an ongoing quality assurance. The Test Incidents where Qwest indicated that training or quality assurance was provided

as a remedy were associated with 324 orders submitted between 06/01 and 12/01, During that same period Qwest processed 4817 P-CLEC orders, which indicates that Qwest handled over 93% of all orders without the need to provide training or quality assurance. Qwest does not believe that it is unreasonable to provide training or quality assurance for less than 7% of all order activity. In fact, Qwest believes that the data demonstrates that, overall our training program provides a solid foundation for ISC personnel. Based on information shared by HP and KPMG during a Focus O/E call on 2/7/02, it is clear that the blindness requirement of the test makes it impossible for Qwest to know what the actual numbers are both for the number of orders in error and for total number of orders. Nonetheless, Qwest believes that the number of orders associated with Os and Es where Training or Quality Assurance is a remedy is relatively small. In addition, Qwest believes that their analysis of the Os and Es referred by KPMG reveals no underlying deficits in either its Training or its Quality Assurance program.

Third, in this response Qwest will document recent quality initiatives (both new measures and new interventions) initiated during the past six months, some of which have been undertaken as a result of concerns raised by these Observations and Exceptions. Ongoing quality initiatives are necessary because of the complex and dynamic environment in which SDCs work. SDCs in the ISC are responsible for processing orders that include many products and a variety of activity types. This is particularly true for the P-CLEC orders, which exercise a wider range of functionality than any of Qwest's commercial CLECs.

With regard to the specific confidential information, provided by KPMG Qwest has determined that seven of the forty-nine Observations and Exceptions are not pertinent to the discussion of ISC training. Details regarding these seven TIs are provided below.

Test	Source ID	Reason Not Included
12	E2063	No specific training identified. Job aides, PCAT, User Guide updated to reflect system fix. This should not be a part of the training TI list.
12	E2067	PCLEC received a reject in error because a database flag did not work correctly. The TI reference to MCC from 9/24 is only to state that the rep handled the order according to the MCC, not as a remedy. This should not be a part of the training TI list.
12	E2072	This TI is about gaps in the HiCap training Qwest provides to CLECs. As a result of the TI, there were documentation changes and a Communicator but no training of ISC employees. This should not be a part of the training TI list.

24	O2016	This TI describes "training issues" as contributing to the delay in PCLEC certification. Training, however, is not provided as a remedy for the Test Incident. "How to cancel orders' is addressed through the question log. No reference to coaching, group training, or MCC is made. This should not be a part of the training TI list.
24	O2023	This is a process update to the handling of non-fatal errors. The TI describes the importance of keeping training materials up to date. This should not be a part of the training TI list.
12	O2026	Like E2072, this TI documents shortfalls in the AVQ training that Qwest provides to CLECs. This should not be a part of the retraining TI list.
24	O2042	This is related to documentation and process updates for digital certificates. No reference to training, coaching or MCC. This is not related to retraining and should not be included in this list.

I. Training and Quality Assurance Overview

ISC Training Delivery

The Wholesale Training team has developed suggested training paths for the different job positions within Wholesale Service Delivery. For SDCs, these paths identify the basic training required for all SDCs and also provide specialized product or functional training by unique job description. The Courses, designed by the training team to meet measurable objectives for each role, combine self-paced, web-based delivery with trainer-led delivery.

Trainers are resident in ISC Centers, reporting into the central Training Delivery Manager to assure consistency between trainers and matrixed into center management to assure responsiveness to SDCs in individual centers. Eight of the nine Wholesale trainers are former Wholesale SDCs. The trainers receive feedback from SDCs, Coaches and Center management regarding both the effectiveness of their courseware and their delivery.

Qwest's expectation is that initial, up-front training for SDCs will be followed with additional training prompted by system releases, process changes and/or product changes:

- For System releases, a course developer will develop the courseware for the Order Processing Centers, Help Desk and Call Center. Qwest uses a train- the-trainer model with trainers from the decentralized Training & Development team conducting the training in each center.

- For significant or complex Process changes trainers will receive their training from the process specialist and then conduct the training in the appropriate center(s). In addition, the initial training courseware will get updated with the most current information.

- For significant Product changes and new Product introductions, trainers will receive training from the Product Management team Trainers then train the appropriate center(s). Initial product training is then updated to reflect current product information.

ISC Quality Assurance and Continuous Improvement

In addition to the initial training that is provided, the center, as any operations organization, provides support structures for the employee and monitors performance to ensure quality service is provided and to identify opportunities for continuous improvement. Training provides the foundation knowledge and skills for executing a particular role but all ISC employees need ongoing support and monitoring to assure that they meet the target objectives for their role. Results from monitoring lead to interventions, examples of which are presented later in this response.

Support for employees includes a number of resources.

- "Nesting": As new employees leave training, a "nesting" period is provided where the new employee is paired with an experienced employee until a level of confidence is achieved.

- Online Methods and Procedures: The SDCs can access online M & Ps in InfoBuddy to answer questions that arise during the course of their workday. New processes, products and system releases prompt changes to InfoBuddy to keep it current.

- Multi-Channel Communicator (MCC): The MCC is a tool that allows communication to be sent to broad audiences across the centers, as well as staff organizations. These communications can include new processes, process changes, or process reminders. Coaches routinely review MCCs in team meetings. Training courseware developers also review MCCs to ensure that, if necessary, their content is incorporated in course revisions.

- Management Team: Questions can be directed to members of the center management team. These managers will respond to questions and will work with the process organization as needed.

II. The Forty-two Observations and Exceptions

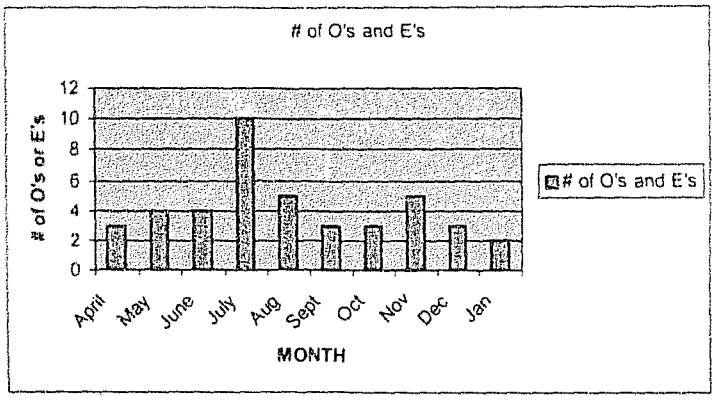
Characteristics of the Observations and Exceptions

KPMG and HP issued the Observations and Exceptions referenced in this Observation to Qwest over ten months, between April 4, 2001 and January 4, 2002. In order to evaluate

our responses and, specifically, to determine if there is a persistent, troublesome pattern of retraining in particular areas, Qwest has categorized the Test Incidents raised by KPMG in the table below. Twenty-eight of the forty-two test incidents reveal process glitches. Nine of these twenty-eight have been characterized as "disorderly' orders and another twelve can be attributed to mistakes by individual SDCs.

Training Test Incident Classification		
Process	**28**	**66.7%**
SDC Process	12	28.6%
Disorderly	9	21.4%
HelpDesk	2	4.8%
ASR FOC	1	2.4%
Centrex21	1	2.4%
Dark Fiber	1	2.4%
Disconnect	1	2.4%
USOC	1	2.4%
Documentation	**4**	**9.5%**
HiCap	1	2.4%
ISDN/PRI	1	2.4%
NC/NCI Codes	1	2.4%
Process	1	2.4%
HelpDesk	**4**	**9.5%**
ISDN/PRI	2	4.8%
SDC Process	2	3.0%
SystemFix	**3**	**7.1%**
Add Edits	1	2.4%
Disorderly	1	2.4%
No SOC	1	2.4%
PIDs	**3**	**7.1%**
PO-5B	2	3.8%
PO-3B	1	2.4%

In reviewing the distribution of Observations and Exceptions over the ten month timeframe, Qwest finds, with two exceptions - an even distribution month to month of Os and Es among SDCs and among the categories in the classification. The two exceptions – which may be a function of the Third Party Test - occurred in July and December: nine of the ten "disorderly" orders were submitted in July and four of the six Help Desk problems (including two out of three ISDN/PRI orders) were submitted in November.



Characteristics of the Remedies

The remedies that Qwest implemented to respond to the issues raised by these TIs are listed below. In the table below, the number is the number of TIs in the sample that had a particular remedy; the % is the % of the 42 TIs that had a particular remedy.

Remedies			
MCC or Internal Communicator	27	64.3%	
Documentation Change	24	57.1%	
Process Change	22	52.4%	
Individual Coaching	20	47.6%	
Group Training	12	28.6%	
System Change	12	28.6%	
MCC Issued along with process and/or documentation being updated	18	66.7%	percentage out of total number of TI's that had MCCs issued
Training and Individual Coaching Occurred together	3	10.3%	percentage out of total number of TI's that had training or coaching

Which remedy is used depends on whether the problem is reoccurring or isolated, and whether fixing it involves changes to multiple components (systems and documentation; process and documentation) or, simply, re-emphasizing and re-explaining existing systems, documentation and processes.

- MCCs are the most common intervention – 27 of the 42 TIs prompted an MCC. If MCCs merely communicate information, like "don't forget to do something", training isn't involved.
- MCCs, documentation changes, and process changes are more common than either individual coaching or group training.
- Often, multiple remedies are implemented to resolve an Observation or Exception. Root cause analysis may prompt clarifying changes to application documentation and M & P documents as well as MCCs. (Reviewing the closed Observations and Exceptions that KPMG has associated to this Observation, Qwest finds that it is as common to provide two or three remedies as one.)
- Individual coaching is more common than group training.
- Group training is associated with apparently widespread error patterns ("disorderly" orders), system fixes, Help Desk problems and with new products (Dark Fiber, ISDN/PRI and HiCap.) Patterns of repeating errors prompt re-training, based on MCCs and existing training materials. System fixes require updated documentation and, if they are complex or unusual, may also require group training. New products require new training materials that describe the ordering and provisioning requirements.

Group Training as a Remedy		
Process	**7**	**16.7%**
Disorderly	4	9.5%
Dark Fiber	1	2.4%
HelpDesk	1	2.4%
SDC Process	1	2.4%
HelpDesk	**2**	**4.8%**
ISDN/PRI	1	2.4%
SDC Process	1	2.4%
Documentation	**1**	**2.4%**
HiCap	1	2.4%
SystemChange	**1**	**2.4%**
No SOC	1	2.4%
PIDs	**1**	**2.4%**
PO-3B	1	2.4%

System Changes

Qwest continues to enhance its systems to provide additional safeguards to reduce or eliminate human error. As noted in responses to twelve of the O & Es referenced in this Observation, Qwest has implemented system changes that prevent the possibility of the same error occurring in the future. Of the 324 orders that were not processed correctly, system enhancements have already addressed the issues on 57 or 18.2% of that volume. With every release of its systems, Qwest identifies additional changes that will support process compliance.

III. New Quality Initiatives

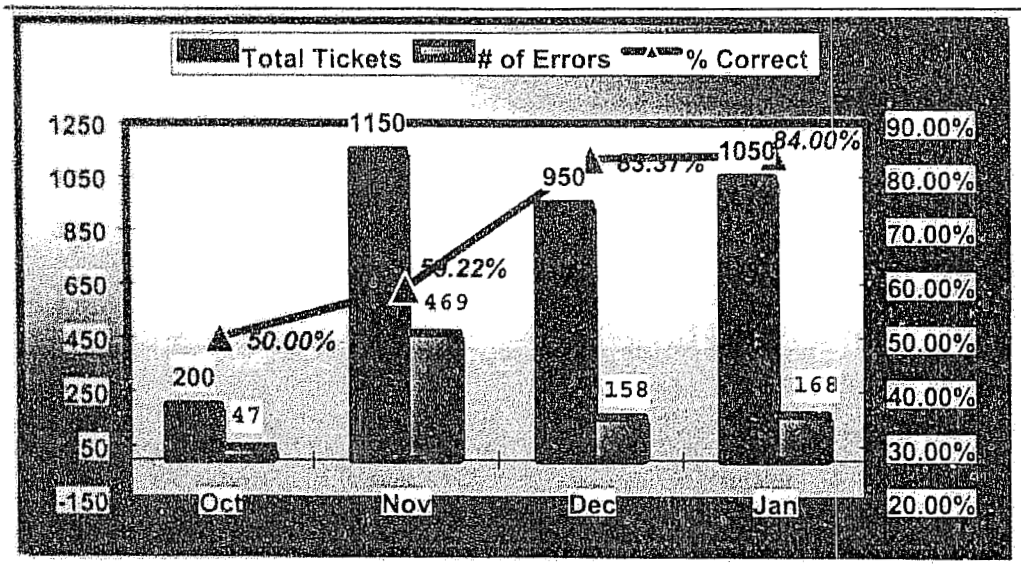
Starting in September, Qwest began additional measurement and monitoring activities to make sure that the benefits of training and coaching remedies are maintained over time and, also to proactively identify error trends that need to be addressed through coaching and re-training.

Performance Monitoring

The actual monitoring process varies based on the functional responsibility of the SDCs. In "Performing Trend Analysis" a document prepared for Team Leaders and Center Coaches in Sierra Vista and CSIE Centers in Minneapolis and Denver, Qwest describes how the results of monitoring are linked to corrective actions. For instance, the number of times an error occurs determines whether there will be an MCC, coaching or training. This document will be provided to KPMG through the Data Request process.

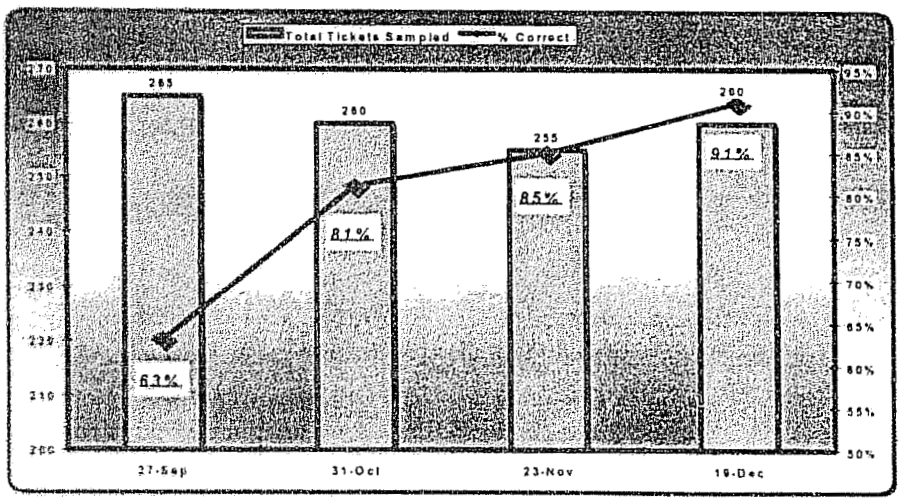
ISC Help Desk: Sierra Vista Call Center

Sierra Vista is the initial point of contact for customers calling the help desk. The center handles calls regarding pre-order, order, service orders, order status and CSR inquiries. The Sierra Vista center uses call monitoring and ticket reviews to ensure quality. Beginning in late September, the center has been monitoring 50 calls per day and providing immediate feedback when the process is not correctly followed. See "Total Number of Tickets Sampled" below for a report on the effect of sampling at Sierra Vista between September and December.



ISC Help Desk: Customer Service, Inquiry and Education (CSIE) centers

Customer requests are routed to the centers from the Sierra Vista Call Center. Since September these centers have also used call monitoring and ticket reviews to ensure quality. Center coaches perform 5 observations per month on each of their SDC's customer calls. Center coaches also sample a minimum of 5 tickets per month per SDC. Feedback is provided to the SDCs on these reviews. The graph shows the results of CSIE ticket sampling.



Since October the Denver Center has been providing targeted IMA phone training for CLECs with orders that fail flow-through. SDCs train CLECs about the correct way to

complete orders. This initiative demonstrates a different approach to quality assurance. It has two benefits: it reinforces the SDC's own training and it reduces order errors. The content of the training is based on the volume and type of errors that Qwest receives from each CLEC.

ISC Order Typing Centers

In the typing centers, the coaches have been reviewing 10 orders per week/per representative focusing on a variety of issues, such as

- correct application date
- correct decision to reject or FOC, and
- accurate reflection of the services requested on the LSR.

Feedback is provided to the representatives as a result of these reviews.

In all of these centers, the coaches look for common errors that indicate a misunderstanding of the process. This information can then be shared across the centers and addressed in partnership with the process and training teams as appropriate.

Summary

In summary, Qwest acknowledges the number of Observations and Exceptions related to ISC processes in which training or quality assurance is part of the remedy. However, Qwest believes that the percent of error as measured against the number of orders processed does not support the conclusion that Qwest's training processes are inadequate. In fact, Qwest believes that its Training program, complemented by its Quality Assurance initiatives have demonstrated responsiveness to the Observations and Exceptions raised during the test. As KPMG stated in a call on January 17, 2002, human error is to be expected in manual processes. Qwest agrees and has taken and continues to take proactive steps to limit the volume of those errors.

Attachment(s): None

AT&T Comment:

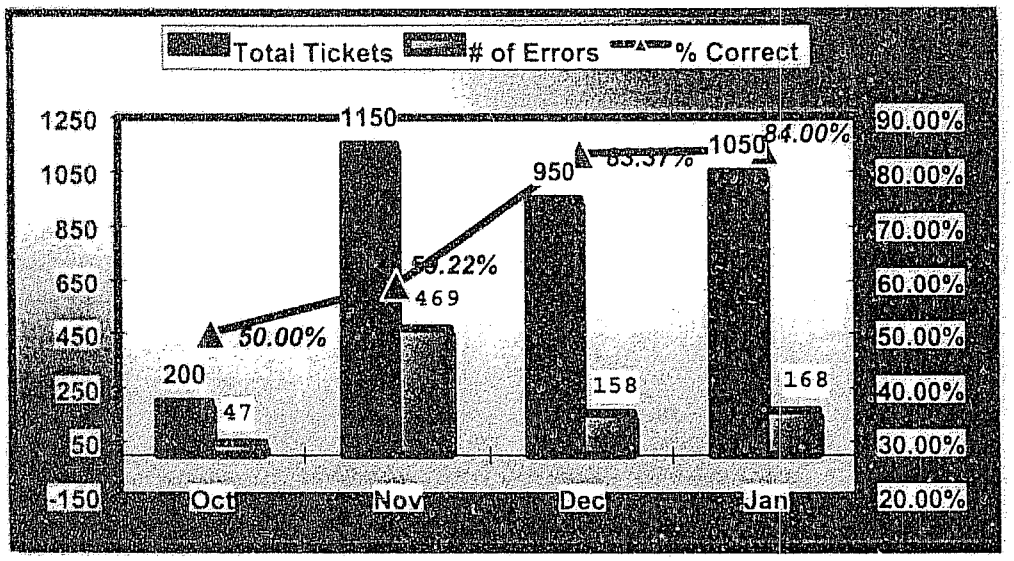
In its remarks about the extent of manual processing that has brought about the Observations and Exceptions at issue in this Observation on the general subject of training and coaching, Qwest states: "The Test Incidents where Qwest indicated that training or quality assurance was provided as a remedy were associated with 324 orders submitted between 06/01 and 12/01, During that same period Qwest processed 4817 P-CLEC orders, which indicates that Qwest handled over 93% of all orders without the need to provide training or quality assurance. Qwest does not believe that it is unreasonable to provide training or quality assurance for less than 7% of all order activity."

AT&T believes that the statistic calculated is incorrect. The fact that Qwest's response to the incidents involved 324 orders should consider the number of orders that were processed manually, or that while submitted electronically were subject to manual processing. The percentage of orders that are at issue here should be divided by the number of orders that were manually processed, and not total orders, many of which were untouched by Qwest personnel. If calculated appropriately, the need for training and quality coaching would be demonstrably larger, perhaps twice or three times the statistic that Qwest relies on to suggest a reasonable level of problem; its 7% number.

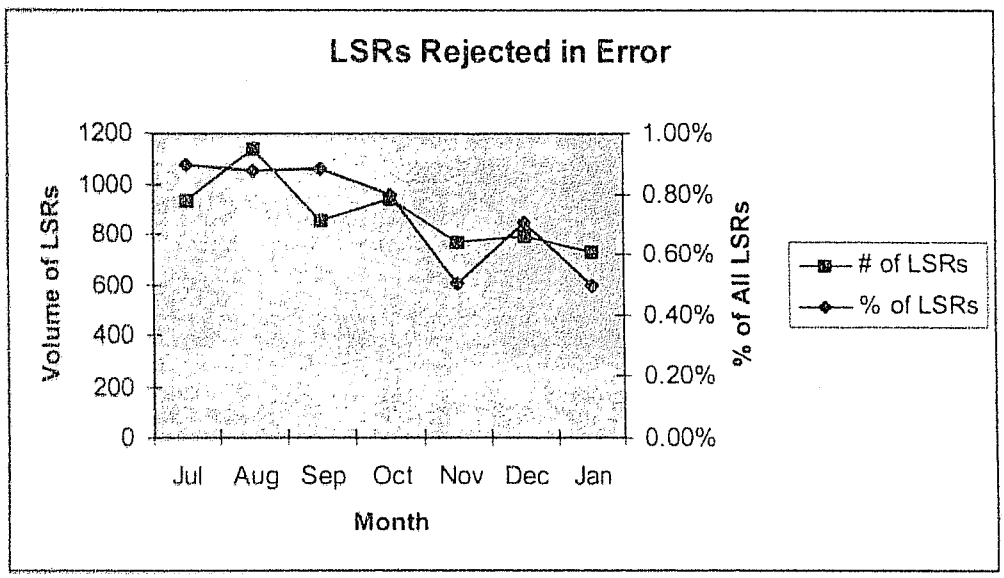
Qwest Supplemental Response (03/07/02):

Qwest has considered the feedback provided during the O&E call held last month as well as the input provided by the ROC Steering Committee. Specifically, the Steering Committee suggested that Qwest "identify ongoing reporting mechanisms that the Commissions and the CLEC community can use to identify and monitor the long term effectiveness of Qwest's overall effort to reduce the frequency of problems caused by human error." As a result, Qwest is willing to begin voluntary quality reporting to the state commissions in two areas. Qwest has reviewed its internal metrics and identified the following process measures that demonstrate the effectiveness and efficiency of manual handling of CLEC orders and inquiries by Qwest SDCs. Qwest's results on these measures will reflect the effectiveness of training and quality assurance for Qwest SDCs.

The first indicator will identify the percentage of accurate and complete Help Desk tickets created by Service Delivery Coordinators in the ISC Call Center. This information is gathered by analyzing a sample of completed Help Desk tickets each day to assure all required data is filled out and that it is consistent with the problem identified. The result will reflect the number of Help Desk tickets in the sample created without error divided by the total number of tickets analyzed each month. . The following chart, which was also provided in Qwest's initial response, provides historical detail for this indicator.



The second measure will identify the percentage of LSRs for which Qwest rejected the LSR in error and then subsequently provided an FOC. This measure addresses both flowthrough-eligible and non-flowthrough-eligible LSRs. The following chart provides historical detail for this measure.



Qwest will provide this data on a monthly basis to the individual state commissions upon request starting April 2002.

In addition, on a quarterly basis, Qwest is willing to provide reports of internal reviews reflecting two areas of ordering quality. The first review will assess the accuracy of the due dates provided to the CLECs on FOCs and the due dates placed on the Qwest service orders. The second review will track the accuracy of reporting reasons for due date changes made to service orders. For designed services, the KIR ([K]Correction Issuance Reason) code will be validated; and, for orders following the non-designed flow, the missed appointment code will be reviewed,. Qwest will make this information available to individual state commissions upon request starting second quarter 2002.

Attachment(s): None

KPMG Consulting's First Response (03/21/02):

Training and Quality Assurance Overview

KPMG Consulting has reviewed Qwest's February 6, 2002 response to Observation 3086, and requests that Qwest provide the following documents:

- Measurable objectives for each role that are used to design training courses for ISC personnel.
- Examples of training feedback provided by SDC's, Coaches and Center Management to Trainers.
- Course outlines to be used in the development of additional training for systems releases, significant or complex process changes and significant product changes and new product introductions.
- Copies of relevant MCCs issued over the past four months.

In addition, KPMG Consulting requests that Qwest clarify the "nesting" process for new hires (i.e., what are the standard timeframes for the nesting period? How is the "level of confidence" measured?)

New Quality Initiatives

KPMG Consulting requests that Qwest provide the following information:

- A timeline which shows the date when each Quality Initiative described in Qwest's above response was implemented and/or modified;
- Examples of the data (and its supporting documentation) used to devise the graphical illustrations presented in Qwest's response;
- Organizational chart for training personnel and their responsibilities (center locations, products, etc.);
- Monthly quality statistics for the past four months;
- Ticket sampling statistics for the past four months;
- Quality check list;

- Call monitoring form; and
- Procedural Investigation form.
- Examples of historical and recurring performance discrepancies derived from compiled reporting data;
- A detailed description and supporting documentation of the call/order writing review process; and
- An example of corrective action resulting from these reviews, and the correlating "remedy" based on the corrective action matrix.
- A description of the process in place to train and monitor the effectiveness of its coaches.

In addition to reviewing the requested documents, KPMG Consulting will perform additional interviews and observations to analyze the effectiveness of the training and related enhancement procedures employed by Qwest.

KPMG Consulting concludes that this Observation should remain open pending receipt and analysis of the above documentation requested from Qwest, and results of further interviews and observations.

KPMG Consulting's Second Supplemental Response (04/12/02):

KPMG Consulting has reviewed Qwest's analysis of seven of the forty-nine TIs cited in this Observation and finds that two, E2063 and O2042, were incorrectly identified as being pertinent to the issue of training. KPMG Consulting maintains that the following are relevant to this observation: E2067, E2072, O2016, O2023, O2026.

KPMG Consulting has conducted additional testing activities in order to verify and validate the components of Qwest's February 6, 2002, response related to Qwest processes and procedures for training, quality assurance and new quality initiatives. KPMG Consulting reviewed documentation provided by Qwest and conducted interview and observation sessions at the following Qwest Interconnect Service Center (ISC) locations: Denver, Minneapolis, Sierra Vista, AZ, and Phoenix. KPMG Consulting's findings are summarized below:

Training and Quality Assurance

Training

In its February 6 response, Qwest described its training delivery process. KPMG Consulting interviewed several members of the Wholesale Training Team and reviewed related training documentation provided by Qwest. Examples of the training paths provided by Qwest indicate that courses are in place for both Service Delivery

Coordinators (SDCs) and their managers. Typical SDC training includes subjects such as general process overviews, training on the systems required for the SDC's role, and specialized procedural training such as complex order design.

KPMG Consulting also reviewed Qwest procedures for providing additional training for system releases and process or product changes. As an example, KPMG Consulting reviewed the training process used to train SDCs for the recent IMA 9.0 release. Course materials included detailed documentation of system changes and their impacts broken down by product and region.

Continuous Improvement

In its February 6 response, Qwest described several methods of support available to employees after initial training. KPMG Consulting interviewed supervisory staff at the ISCs and verified that the "nesting" process for new employees, the availability of online Method & Procedure documentation, and the Multi-Channel Communicator (MCC) dissemination process are in place at each ISC location.

New Quality Initiatives

KPMG Consulting has also reviewed the quality initiatives implemented since September 2001 and described by Qwest in its February 6 response.

Performance Monitoring

KPMG Consulting conducted interviews and documentation reviews to verify that the "Performing Trend Analysis" process described by Qwest has been implemented in the Sierra Vista, Denver and Minneapolis ISC locations.

KPMG Consulting reviewed a recent example of trend analysis at the Sierra Vista ISC. In this example, Qwest managers identified a recurring pattern of help desk tickets with incorrect call type, reason code, sub reason code, etc. The trend analysis indicated that corrective action was needed to provide guidelines for completing tickets. Based on the results of the trend analysis, an InfoBuddy document titled "Call Center Database Ticket – IMA" was created and distributed by the process team to describe new ticket procedures at the Sierra Vista call center. A notice announcing the availability of this document was distributed to the call center representatives via MCC. A trend analysis conducted after the creation of the "Call Center Database Ticket – IMA" document showed that the accuracy rate for help desk tickets increased from 65% to 74%.

ISC Help Desk: Sierra Vista Call Center

KPMG Consulting reviewed the call monitoring and ticket review processes in place at the Sierra Vista Call Center.

The center is equipped with facilities that allow QA representatives to actively monitor "live" calls and simultaneously view the computer screens of the representatives handling the calls. KPMG Consulting observed QA representatives monitoring calls and actively providing feedback and instructions to the call center representatives.

Process specialists in Denver perform the ticket review process for wholesale delivery and call handling. A sample of 50 tickets is reviewed daily for accuracy. Errors are tracked on the Sierra Vista Ticket Sampling Spreadsheet. Procedures are in place that require the Denver and Sierra Vista management teams to engage in daily conference calls to review results of ticket reviews.

ISC Help Desk: Customer Service, Inquiry and Education (CSIE) Centers

KPMG Consulting has reviewed the ticket review and call monitoring processes in place at the Denver and Minneapolis CSIE centers. At the Denver ISC, KPMG Consulting found that call tickets are reviewed using a 12-point checklist. Coaches are required to review a minimum of five tickets from each SDC each month. In addition, call monitoring is performed using a checklist of call handling procedures. Trend analysis to identify patterns in ticket discrepancies was implemented in January. Patterns are identified using reports collected from the Minneapolis and Sierra Vista locations as well.

At the Minneapolis ISC, KPMG Consulting verified that tickets are reviewed using the same 12-point checklist. One ticket for each SDC is pulled daily for review (five per SDC each week). The coaches include these results in a weekly trend analysis report that includes scores for individual and team performance. This report is submitted to the Process Specialist at the Denver ISC for use in trend analysis as described above.

KPMG Consulting also reviewed the process Qwest uses to provide targeted IMA phone training to CLECs. Qwest tracks CLEC order errors in a spreadsheet that is sent to the CLEC for review. The CLEC can then contact a Qwest representative to review order errors.

ISC Order Typing Centers

KPMG Consulting has also reviewed Qwest's order typing review and feedback process.

At the Minneapolis ISC, KPMG Consulting found that procedures are in place for reviews of all complex orders for accuracy using a 21-point quality assurance checklist. Coaches track orders using a report called the "Daily Status Check," which lists all orders submitted each day. The "Daily Status Check" is then used by the coaches to compile a

weekly performance trend analysis. This analysis is used to determine whether any trends are present that may require corrective action.

At the Phoenix ISC, KPMG Consulting found that the order typing review and feedback process is conducted by volunteer Service Delivery Coordinators (SDCs) who are chosen based on a demonstrated knowledge of systems and a proven record of reliability. The SDCs review 10% of orders per day/per representative using a quality assurance checklist and provide feedback daily.

At the Sierra Vista location, KPMG Consulting found that dedicated QA representatives conduct the order typing review and feedback process. The QA representatives review three orders per week/per representative. For new order typists, 100% of orders are reviewed for accuracy until the typist has achieved at least 85% accuracy for four weeks. Order typists are given feedback in the form of monthly report cards.

Summary

KPMG Consulting has conducted interviews with Qwest training staff and ISC managers, on-site observations at several ISC locations, and reviewed supporting documentation to verify the training and quality assurance procedures described by Qwest are in place and are followed. KPMG Consulting finds that these procedures sufficiently address the concerns raised in this observation.

Qwest's March 7 Supplemental Response

KPMG Consulting did not review Qwest's proposed performance measures as part of the testing activities described above. At the request of the ROC TAG Steering Committee, KPMG Consulting will address the issue of performance measures for manual order processing in a separate document unrelated to this observation.

Based on the results of additional testing activities described above, KPMG Consulting recommends that this observation be closed.

Nebraska Transcript of Proceeding, May 29, 2002.

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

IN THE MATTER OF QWEST CORPORATION FILING ITS NOTICE OF INTENTION TO FILE SECTION 271(C) APPLICATION WITH THE FCC AND REQUEST FOR COMMISSION TO VERIFY QWEST CORPORATION'S COMPLIANCE WITH SECTION 271(C)	) DOCKET C-1830

TRANSCRIPT OF PROCEEDING, taken before Mary Lou Dubbelde, Registered Professional Reporter, General Notary Public within and for the State of Nebraska, beginning at 1:45 p.m., on the 29th day of May, 2002, at the Nebraska Public Service Commission, 300 The Atrium, 1200 N Street, Lincoln, Nebraska.

** ** ** **

COMMISSIONERS:

Frank E. Landis, 1st District
Anne C. Boyle, 2nd District
Lowell C. Johnson, 3rd District
Gerald L. Vap, 5th District

COMMISSIONER LANDIS: We're all here. We're joined this afternoon by Mary Trivvy from AT&T. She's joining us on a phone bridge from

Denver.

Is there anyone else on the phone bridge? Okay.

This is application 1830. I'm Frank Landis, and joining me on the bench here in Lincoln to my left is our chairman, Commissioner Anne Boyle, to my immediate right, Commissioner Lowell Johnson, and my far right is Commissioner Jerry Vap.

Mary Lou Dubbelde is our court reporter this afternoon once again, has been here before helping us out.

And we're joined by Mr. Gene Hand who's the director of our communications department, Dr. Buster Griffing who is the consultant to this commission on the 1830 docket, and Mr. Chris Post, senior counsel with counsel for the commission that's handling this docket.

Why don't we go -- this is a workshop, and I think what -- Michael, you're going to put on a report here. Perhaps we could just go around the room, speak out loudly so that Mary Lou can get your name in the record. Let's just go around and see

who's here this afternoon. Starting at the back, Gayland.

MR. ALUKONIS: Gayland Alukonis from Qwest. The last name is A-L-U-K-O-N-I-S, first name is G-A-Y-L-A-N-D.

MS. BAKUNAS: Marie Bakunas, MTG, B-A-K-U-N-A-S.

MR. LOGSDON: Rob Logsdon,

L-O-G-S-D-O-N, with Cox Communications.

MR. SANDOS: Jim Sandos, S-A-N-D-O-S, for Qwest.

MS. HIGLEY: Lucy Higley, H-I-G-L-E-Y, with Qwest.

COMMISSIONER LANDIS: We're going around the room now just putting our names on the records.

MS. VINJAMURI: Jill Vinjamuri, Kutak Rock, LLP on behalf of Qwest Corporation.

COMMISSIONER LANDIS: We will need it spelled.

MS. VINJAMURI: V-I-N-J-A-M-U-R-I.

MR. LANPHIER: Bob Lanphier with Qwest, L-A-N-P-H-I-E-R.

MR. CRAIN: Andy Crain from Qwest.

MS. WOODCOCK: I'm Beth Woodcock,

W-O-O-D-C-O-C-K, with Perkins Coie, that's C-O-I-E, representing Qwest.

COMMISSIONER LANDIS: And at the witness stand is Michael Weeks?

MR. WEEKS: Weeks like weeks in a month.

COMMISSIONER LANDIS: That's the introductions for everyone that's here.

Chris -- I know our counsel wants to make as an exhibit here, Mary Lou, the final report which Dr. Griffing has, so we're going to make that exhibit --

MR. POST: We'll actually make the exhibit that Mr. Weeks has in his hand because that's the one that he prepared and he's going to be discussing just to make sure we have the actual physical copy as presented by KPMG in the record. You can make that Exhibit 1.

COMMISSIONER LANDIS: That will be Exhibit 1.

Anything else, Chris, that we need to get into the record today?

MR. POST: I don't think so at least at this point. I would just remind the commissioners and Mr. Weeks that this is a realtime

reporter, so to the extent we can speak not necessarily slow or the normal but slowly and succinctly so that we can get it appropriately reported that would be great.

And as I understand it, Commissioners, it's basically for Mr. Weeks to present the OSS report to the commission and staff, and commissioners will be interrupting with questions if that's okay with you.

COMMISSIONER LANDIS: That's what my notes indicate, Chris. So for clarification there will be no cross-examination of Mr. Weeks. This is basically if any of the commissioners have questions or any of our staff, feel free to hop in at any time. But other than that we're not going to subject you to cross-examination here, Mr. Weeks.

We've got everybody on the record, I think

we've offered the exhibit, so if you would care to go ahead and start the presentation, we would appreciate it, Mr. Weeks.

The record should reflect that Mr. Jon Bruning who represents Cox Cable has entered the hearing room.

MS. TRIVVY: Commissioner Landis, do you have my appearance as well?

COMMISSIONER LANDIS: Thank you, Mary. I'm sorry, I thought I had you on the record but perhaps I didn't. Mary Trivvy representing AT&T is joining us.

MR. POST: T-R-I-V-V-Y.

COMMISSIONER LANDIS: From Denver. Okay. Mr. Weeks.

MR. WEEKS: Very good. It's a pleasure to be here this afternoon and to present the final report for the ROC OSS test to the Nebraska commission. It's been a long time coming. I think we're all glad that we're at this juncture in the test.

What I would like to do is make sure that I answer your questions today. I do have some materials that I am prepared to share with you, but I would very much like to understand what it is you would like to know that I haven't said. So either ask clarifying questions or ask questions on topics that I have not carefully covered.

The report itself is in excess of 700

pages. It is broken down into differer
if you will, or sections of the report
introductory materials, Section 2 in p
function the purpose of an executive s

wanted to hit the highlights of the t
will. By its nature it's intended to be a
overview. It does not go into great detail about
all the things that are good about what Qwest did,
and there are a lot of good things that Qwest did
during the course of this test.

It instead tends to emphasize that which
are still maybe issues that are in question or
problems that remain because those tend to be the
things in our experience in these matters that get
the focus during the live hearings and so on.

So what I propose to do is go through each
test section with you and talk with you about what
we saw fundamentally, how the company's performance
was and answer any questions you might have about
the problem areas and the things that are
outstanding, or the areas in which we were not able
to come to a conclusion for one reason or another.
We'll talk about those as we go through that.

Section 12 is probably when most people
think about OSS testing, kind of the core of what
comes to people's minds initially. It is about
pre-ordering, ordering and provisioning. Those
activities that a CLEC needs to do in order to
understand information about what their potential

CONTINUATION

[7]

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Hewlett-Packard Company's

SATE New Release Test Summary Report –

9.0 Transaction Test for

Qwest IMA EDI SATE,

Version 2.0, March 29, 2002

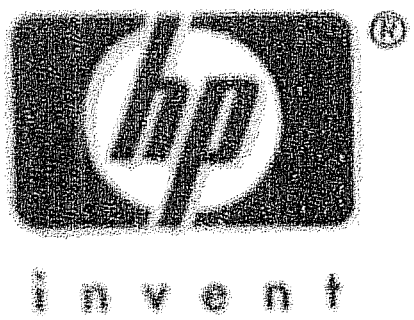
("HP SATE New Release Test Summary Report")

SATE New Release Test Summary Report

9.0 Transaction Test

For Qwest IMA EDI SATE

Arizona Corporation Commission



invent

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1.0 Overview

1.1 Background

As an extension to the Arizona 271 testing effort, Qwest commissioned HP to evaluate its IMA EDI Stand Alone Test Environment (SATE). HP's primary objective was to provide the Arizona Corporation Commission (ACC), Qwest and the CLEC community with an evaluation of SATE that is unbiased, factual and representative of the experience that a CLEC would face in using SATE for interoperability testing to establish an IMA EDI interface with Qwest. In addition, HP's objective was to determine whether the SATE provides an adequate means of testing and support to CLECs seeking to compete in the Arizona marketplace.

HP completed this assessment of the adequacy of Qwest's IMA EDI SATE to facilitate the efforts of Co-Providers to test their OSS EDI interfaces. This evaluation was concluded and the Final version of the Evaluation Report was delivered on December 21, 2001. This report included HP's assessment of "adequacy" based on reviewing and testing eight underpinnings of SATE upon which the CLECs are reliant. One of those eight underpinnings was the accommodation of New Release Testing within the SATE. The Adequacy criteria was documented as follows:

> *"Accommodation of New Release testing: HP will evaluate Qwest's documentation and observe Qwest's compliance to their stated expectation to provide Co-Providers with an updated SATE at least one month prior to the corresponding production release of IMA."*

HP conducted this evaluation and concluded that the evaluation of the implementation of the SATE Release 8.1 did not provide an indication of the results of an implementation of a typical major release of IMA EDI. The implementation of the point release did not allow HP to consider all characteristics of a SATE implementation as it comes available one month in advance of a production implementation of a new IMA EDI release.

Upon the conclusion of the January 28, 2002 workshop covering HP's SATE Summary Evaluation Report, Version 3, Release Date 12/21/2001 (Summary Report), the ACC Staff, and its consultant, DCI, directed HP to conduct an evaluation of a new SATE Release, using Version 9.0 of Qwest's IMA Release as the test object. This body of work was in line with Recommendation 7 of the Summary Report, and also driven by comments provided by CLECs during the workshop. In determining the scope and approach for this evaluation of a new release, HP relied on the PID PO-19 (Draft Version October 5, 2001) as a guide and evaluation criteria.

In accomplishing its objective and developing this report, HP performed the following general steps:

- Developed a Release 9.0 Documentation distribution timeline
- Performed an assessment of the changes to IMA EDI for 9.0 as it compares to 8.1
- Developed a Question Log that details any HP questions / concerns
- Developed and Implemented HP EDI mapping and LSR Order Entry changes
- Established a Transaction Test Scenario Summary
- Established Connectivity with a new Trading Partner Relationship specifically for New Release Testing
- Executed the Transaction Test cases
- Documented Test Case Outcomes
- Provided rate of accuracy when actual outcomes are compared to the expected results
- Provided an overall evaluation of SATE New Release Testing for 9.0

Hewlett-Packard (HP), as part of its scope of responsibility to evaluate the Qwest IMA SATE, provided Preliminary and Final Summary Evaluation Report detailing its findings with respect to the adequacy of the current IMA EDI SATE.

Per HP's Summary Evaluation Report, released on 12/21/01, HP submitted its findings related to criteria that would establish the level of SATE adequacy. These criteria included Process, Documentation, Accuracy and Consistency of Test Responses, Use of CLEC Input, Mirroring the Production Environment, Accommodation of New Release Testing, and the overall CLEC Acceptance and Meeting CLEC Needs.

1.2 Purpose of the Document

The purpose of the SATE New Release Test Summary Report is to provide a description of the processes that HP used in conducting the SATE New Release evaluation, and to communicate the findings and recommendations to the ACC, Qwest, and the CLEC community.

1.3 Scope

The scope of this document is to report the results that HP discovered during the course of this evaluation. These results are from the findings that were uncovered as a result of executing the SATE New Release Test Approach (9.0).

The scope of this document includes the New Release Testing transaction-testing details that support the SATE Additional Services proposal. It covers the EDI Pre-Order, Order and Post-Order functions that are required to test the most current release of the SATE Data Document and the IMA EDI Disclosure Document for IMA EDI Release 9.0. This document does not define the approach for, or attempt to evaluate any of the processes or documentation that are specific to SATE as provided by Qwest.

1.4 Audience

This document is intended for use by the ACC, Qwest, CLEC members of the TAG and other interested third parties to understand HP's evaluation of Qwest's SATE for New Release Testing.

1.5 Document Structure

The structure of this document is based in part on the Institute of Electrical and Electronics Engineers (IEEE) Standard for Software Test Documentation (IEEE std 829-1983) ©1983.

The following table shows the different sections of this document and the information contained within that section. In addition it will serve as a guide to reading this document.

Table 1 – Document Structure

Section	Title	Description
1.0	Overview	General background information, and general information concerning this report.
2.0	Executive Summary	Contains the Executive Summary.
3.0	Transaction Testing Evaluation	Contains the results from the execution of the SATE New Release Test Approach 9.0 Transaction Test, and overall assessment of the SATE in meeting testing needs for CLECs in Arizona for New IMA EDI Releases.
4.0	Issues	Contains a description of the Issues Management process used, and the results of logging issues for this New Release Testing evaluation.

Section	Title	Description
Appendix A	Issues Tracking Log	List of issues that have been formally presented to Qwest and the community in compliance with the formal issues management process.
Appendix B	Issues Summary	Table of Issues by New Release Testing Phase Each issue is categorised by type of issue along with the issue status at the time this report is delivered.
Appendix C	New Release Transaction Test Results Reporting Summary	Results from the New Release Transaction Test.
Appendix D	Phase I - SATE 9.0 HP9 Transaction Scenario Summary – Regression Testing	This is an EXCEL spreadsheet that includes a row for each LSR that was processed through the SATE during the Regression Test. Each row tracks the date sent and the response date received. Additionally if an error occurred the error date is indicated. The HP EDI team updated this spreadsheet as the EDI LSR's were sent and the EDI responses were received on HP's Test Harness.
Appendix E	Phase I - SATE 9.0 HP9 Transaction Scenario Summary – Progression Testing	This is an EXCEL spreadsheet that includes a row for each LSR that was processed through the SATE during the Progression Test. Each row tracks the date sent and the response date received. Additionally if an error occurred the error date is indicated. The HP EDI team updated this spreadsheet as the EDI LSR's were sent and the EDI responses were received on HP's Test Harness.
Appendix F	Phase I - SATE 9.0 HP9 Scenario Testing Comments – Regression	This is an EXCEL spreadsheet that includes a row for each Regression Test Scenario. This document records an entry for each activity that occurred as the transaction was processed in the Interoperability environment. The conversation and explanations received from Qwest are noted in this log. Each scenario is assigned the appropriate status as follows: • Blank=Not executed • 1=Scenario Completed • 2=Scenario in Process • 3=HP Researching • 4=Qwest Researching

Section	Title	Description
Appendix G	Phase I - SATE 9.0 HP9 Scenario Testing Comments – Progression	This is an EXCEL spreadsheet that includes a row for each Progression Test Scenario. This document records an entry for each activity that occurred as the transaction was processed in the Interoperability environment. The Conversation and explanations received from Qwest are noted in this log. Each scenario is assigned the appropriate status as follows: • Blank=Not executed • 1=Scenario Completed • 2=Scenario in Process • 3=HP Researching • 4=Qwest Researching
Appendix H	The SATE New Release Testing Open Question Log	Questions that are the result of documentation and process reviews as well as anything that came about during the execution of the transaction test itself. This Question Log was maintained each week with updates made according to input provided by both Qwest and HP.
Appendix I	The SATE New Release Testing Closed Question Log	Question that were resolved by Qwest and HP over the elapsed time of the New Release Testing.
Appendix J	SATE Negotiated Project Schedule for Progression Testing	As part of the Qwest established process a project schedule is negotiated with the co-provider. This appendix is the HP/Qwest Negotiated Project Schedule for the initial New Release SATE Transaction Test - Phase I
Appendix K	SATE 9.0 Regression Testing Usage Plan	HP's projection for SATE usage in the Regression Testing mode.
Appendix L	SATE 9.0 Trading Partner Relationship worksheet	HP' s updated Trading Partner worksheet required specifying IMA EDI Release 9.0 EDI envelope set up.
Appendix M	Phase II - Business Rules Testing Scenario Summary	This is an Excel spreadsheet that lists the scenarios utilized to test for business rule changes and/or additions for Release 9.0 as the business rule changes are documented in Appendix F, Appendix E and the Disclosure Documentation.
Appendix N	Business Rules Testing Working Papers: Part 1 - Appendix F of IMA Disclosure Documentation Part 2 - Appendix E of IMA Disclosure Documentation	This is HP' s working paper used to determine what changes made to business rules for IMA EDI 9.0 apply to the SATE. This analysis document was used to prepare the business rules testing scenarios.
Appendix O	Phase II - Business Rules Testing	This is an Excel spreadsheet that includes a row for each Progression Test Scenario. This

Section	Title	Description
	Progression Testing Comments Log	document records an entry for each activity that occurred as the transaction was processed in the Interoperability environment. Conversation and explanations received from Qwest are noted in this log. Each scenario is assigned the appropriate status as follows: • Blank=Not executed • 1=Scenario Completed • 2=Scenario in Process • 3=HP Researching • 4=Qwest Researching
Appendix P	Phase II - Business Rules Testing Regression Testing Comments Log	This is an Excel spreadsheet that includes a row for each Regression Test Scenario. This document records an entry for each activity that occurred as the transaction was processed in the Interoperability environment. Conversation/ explanations received from Qwest are noted in this log. Each scenario is assigned the appropriate status as follows: • Blank=Not executed • 1=Scenario Completed • 2=Scenario in Process • 3=HP Researching • 4=Qwest Researching
Appendix Q	Phase III Expected Results Verification for Stability and Regression Testing Scenario Summary and Comments Logs. This Appendix will include 4 documents: • Part 1 Regression Scenario Summary, • Part 2 Progression Scenario Summary, • Part 3 Regression Comments and • Part 4 Progression Comments.	These spreadsheets are formatted identical to those of Phase I for scenario summary and comments log activity. Phase III was conducted as a Stability test and full regression of Phase I to determine the level of change in the environment between the beginning and end of the New Release testing period.
Appendix R	SATE 9.0 Errors Lists	These are the Business Process Layer Errors Lists published for the new IMA Release 9.0 that were used to build the Phase II business rules test and provide validation of those test results.
Appendix S	SATE 9.0 IMA EDI Disclosure Publications	This is a link to the IMA EDI Release 9.0 Disclosure documentation that HP used to determine EDI mapping changes and Business rules edit changes required for New Release Testing.

Section	Title	Description
		http://www.qwest.com/disclosures/netdisclosure409.html.
Appendix T	SATE 9.0 Production Mirror Impasse Response	This is HP's response to the Production Mirror Impasse issue.
Appendix U	SATE 9.0 Scenarios that utilized VICKI Paths	This is a spreadsheet that details the Phase I and Phase III scenarios that were executed using VICKI response paths.
Appendix V	SATE 9.0 Functionality Tested	Products and activities tested in SATE New Release Test for SATE 9.0 IMA EDI Release
Appendix W	Release 9.0 Documentation distribution timeline	This is the history of all documents released to the community for 9.0 during the life of the SATE New Release Test. These documents were utilized as part of this testing.
Appendix X	PO-19 SATE New PID 03Oct01 - Final Draft	Performance measurement document used as the basis for establishing the benchmark for this test.
Appendix Y	SATE Data	SATE Data
Appendix Z	Data Request	Data Request made by HP for Qwest's CLEC usage.

1.6 References

The following documents are referenced as part of this New Release Testing, 9.0 Transaction Test Summary Report:

Table 2 – References

Document	Release Date	Version
HP's Draft Proposal to the ACC for SATE Testing - Additional Services	February 13, 2002	
Qwest IMA EDI Implementation Guidelines	January 21, 2002	9.0
Qwest IMA EDI 9.0 Data Document for SATE	January 28, 2002	2
Qwest IMA EDI 9.0 Data Document for SATE	January 29, 2002	3
Qwest IMA EDI 9.0 Data Document for SATE	February 4, 2002	4
Qwest IMA EDI 9.0 Data Document for SATE	February 20, 2002	4a
Qwest IMA EDI 9.0 Developer Worksheets	January 21, 2002	
Qwest IMA EDI 9.0 Network Disclosure Documentation	January 21, 2002	
Qwest IMA EDI 9.0 Error List - BPL Errors	January 30, 2002	2
Qwest IMA EDI 9.0 Error List - Legacy System Errors	February 4, 2002	2
Qwest IMA EDI 9.0 Error List - BPL Errors	February 25, 2002	3
Production Mirror Impasse Statement	March 14, 2002	
PO-19 SATE New PID 03Oct01Final Draft	October 03 2001	Final Draft
IMA-EDI Stand Alone Test Environment White Paper	May 25, 2001	1.0

2.0 Executive Summary

As explained in the background (Section 1.1), HP issued its Summary Evaluation Report on December 21, 2001. In section 2.1.6 of that document, HP reported the following finding for the SATE accommodation of new release testing for the implementation of new IMA EDI releases:

> *"HP evaluated the SATE's adequacy for new release testing by evaluating pre-release testing for IMA 8.01. Qwest's process for SATE new release testing appeared to be an exception to Qwest's normal point release implementation. Point releases normally do not affect the EDI or BPL layer, however, release 8.01 did provide the implementation of new BPL edits. This evaluation is* ***inconclusive*** *because HP was not able to fully verify that the SATE is adequate for* ***new release testing.****"*

HP included in its Summary Evaluation Report the following recommendation that was aimed at ensuring that the SATE adequately supports CLEC new release testing.

> *"Recommendation 7 - To ensure that the SATE is adequate for full release testing, HP recommends that IMA SATE release 9.0 be tested. This release is expected to take place February 2002."*

Upon the conclusion of the January 28, 2002 workshop covering HP's SATE Summary Evaluation Report, Version 3, Release Date 12/21/2001 (Summary Report), the ACC Staff, and its consultant, DCI, directed HP to conduct an evaluation of a new SATE Release, using Version 9.0 of Qwest's IMA Release as the test object. This body of work was in line with Recommendation 7 of the Summary Report, and also driven by comments provided by CLECs during the workshop.

In response to the ACC directive, HP developed a test plan that relied on the PID PO-19 (Draft Version October 5, 2001) as a guide and evaluation criteria. Based upon its initial evaluation of PO-19, HP divided the Sate New Release Test into 4 Phases:

- Phase I - Expected Results Verification
- Phase II - Business Rules Testing
- Phase III - Expected Results Verification for Stability and Regression Testing
- Phase IV - Production mirror Testing

The wording in the PID, as agreed to by the community, specifically defines the scope used to measure the level of accuracy, expected of a New Release test of SATE as follows: *'Includes one test transaction for each scenario published in the IMA EDI Data Document - for the Stand Alone Test Environment (SATE)'.*

HP performed this test in **Phase I** of the HP New Release Test of SATE 9.0. Phase I provides the information necessary to meet the requirements of the PID formula calculation which results in the percentage unit of measure. This percentage is compared to the benchmark established by HP for the purpose of this evaluation as a level of accuracy. Refer to Section 3.3.4 on page 17 for the benchmark rationale.

HP performed **Phase II** - Business Rules testing - per the interpretation of the PID language that suggests there be strict adherence to business rules published in the most current IMA EDI Disclosure Documentation for each release and the associated Addenda. Although no benchmark has been established in PID PO-19 for this measurement, HP believes that that this measure is important in establishing the level of accuracy in business rule implementation of SATE for new releases as indicated in the PID language "*strict adherence to business rules*". Refer to Section 3.3.4 on page 17 for the benchmark rationale.

Phase III - Expected Results Verification of Stability and Regression Testing - of the HP New Release Test of SATE 9.0 was a re-test of Phase I and was performed to show stability in the environment during the month that SATE was available to the community prior to the new IMA Release being introduced into production. Although no benchmark has been established in PID PO-19 for this measurement, HP believes that that this measure is important in establishing the stability and

accuracy of SATE for new releases to fulfill the spirit of this PID as stated in its purpose "*Evaluates Qwest's ability to provide accurate production-like tests to CLECs*". Refer to Section 3.3.4 on page 17 for the benchmark rationale.

Phase IV - Production Mirror Testing - was originally included in the scope of the HP New Release Test Approach, based upon HP's initial understanding of PO-19. However, further analysis of the definition and record associated with PO-19 caused HP to determine that the PID is not intended to assess production likeness and, in fact, the PID did not support Production Mirror Testing. Therefore, HP did not perform this test. (Please refer to Section 3.6.2 for a more detailed discussion).

2.1 Findings

HP has completed the New Release Test of the most current IMA EDI implementation that was brought to SATE on January 28, 2002. HP has determined that the Qwest SATE is adequate to support New Release Testing by a CLEC. HP's conclusion is based upon the following results:

- The SATE provides the CLEC with data and functionality to test its interface for all products being used by CLECs on Qwest's IMA EDI environment. The data provided in the available scenarios represent transactions that would result in a successfully completed LSR in production, as specified in the IMA EDI Disclosure Document.
- The SATE provides the CLEC with the ability to test its interface up to 30 days in advance of the production release of the corresponding Qwest IMA EDI Release.
- Although the SATE processes and documentation continue to be enhanced through Qwest's internal process and input from the CLECs in the SATE User Group, the Qwest EDI Implementation team continues to provide the support required to aid a CLEC in developing it's interface to a new IMA EDI Release.
- CLECs appear to be successful in using SATE and many CLECs appear to be migrating to using the SATE rather than Qwest's Interoperability environment as indicated by the Data Request Returned by Qwest on March 27, 2002. See Appendix Z for this Data Request.

HP employed a phased approach to this testing as documented in the HP SATE New Release Testing Approach document (9.0).

Each Phase of this test was developed per HP's interpretation of the PID PO-19 SATE measurement. The PID-PO19 served as a guide to the level of testing that was conducted to ensure an objective and impartial result was achieved.

- Phase I testing focused on the verification of the expected results for all scenarios made available within the SATE Data Document approximately 30 days in advance of a new IMA EDI release being deployed into production.
- Phase II testing focused on the validation of business rules changes that came about with the new IMA EDI 9.0 release.
- Phase III testing focused on the validation of consistency in results for all scenarios available within the SATE Data Document over the 30-day testing period for a new release.

PHASE I

The Phase I testing outcome produced a 93% level of accuracy in expected results. While this result does not meet the PO-19 benchmark of 95% the margin of shortfall is small. In addition, HP has observed a clear trend across release 7, 8 and 9.0 testing is showing that Qwest should achieve the 95% accuracy rate with the next implementation of IMA EDI changes into SATE.

Therefore, HP concludes that overall for Phase I test result is Adequate, as no re-test necessary.

PHASE II

HP conducted this phase of testing to determine if the new business rules that were documented in the IMA EDI Disclosure Document for Release 9.0 in Appendix E and Appendix F were made available in the SATE approximately 30 days in advance of those new or updated business rules were rolled into the production IMA EDI environment. In conducting this analysis, HP categorized unexpected responses into two categories – those measured by PO-19, and those that are not measured by PO-19.

Phase II performance, as measured by PO-19, indicates that 97% (96.6) of transactions yielded expected results in terms of EDI Mapping, Data Attributes, and Workflow. HP believes that this level of performance is adequate to support CLEC new release testing.

Table 3 – Results Summary

Category		Total	Fail	% Success
EDI Mapping		122	2	98%
Data Attributes		122	2	98%
Workflow		122	9	93%
Environment Constraints	N/A			

PHASE III

HP conducted this phase of testing to assist in verifying the stability in the SATE for the period of time that would allow a CLEC to prepare for the new release production implementation. HP was looking for consistency in the outcomes of each scenario available in the SATE while comparing the test results for each scenario from PHASE I to the outcome of the same scenario when executed in Phase III. Phase I took place approximately 28 days prior to the production availability of the new release; and Phase III took place just 5 days before production implementation of this 9.0 release. This comparison of Phase I to Phase III outcomes provides the understanding of how reliable the testing environment is approximately 30 days in advance of the production deployment.

Additionally, Phase III allowed HP to evaluate the results as a full regression test to ensure that any Data Document changes, made by Qwest as corrective actions based on Phase I results, were implemented successfully with no impact to the overall outcome of all scenarios available in the SATE.

HP has observed a positive result when evaluating the stability and the consistency of results for the period of approximately 30 days. The Phase III testing found a 95% accuracy rate overall which meets the diagnostic benchmark established by HP for the purpose of evaluating this phase of the new release test.

During this engagement, HP identified issues associated with documentation, test account data, EDI mapping and business rules implementation. HP followed the Formal Issues Management process and documented these issues accordingly. Qwest has initiated corrective actions for most of the issues identified to date. Additionally, HP only realized minor schedule impacts to its overall transaction evaluation as a result of the problems identified.

2.2 Recommendations

HP has developed recommendations aimed at ensuring that the SATE remains adequate for supporting new releases of the IMA EDI interface. This will ensure that Qwest provides an environment that supports certification and new release testing to serve Arizona CLEC's needs on an ongoing basis. The specific issues and recommendations are as follows:

1. All issues that have a status of "Closed-Unresolved" or "Open" as of the distribution of this document be incorporated into the SATE User Group and CMP process.
2. Supporting documentation be provided to more clearly clarify the calculations and measurement process of PID PO-19.
3. Qwest should consider asking CLECs to submit data requests for negative scenarios and BPL edits for key transactions. Qwest provide a clearly defined process to ensure timely resolution of production mirror issues encountered by CLECs during post SATE certification.
4. Qwest include scenarios in data document reflecting all business rule changes identified in the New Release change summary documentation.

3.0 Transaction Testing Evaluation

3.1 Overview

HP evaluated the ability of Qwest's IMA EDI SATE to support IMA EDI Release of V9.0 as a new release. HP relied on its understanding of the Performance Indicator Definition (PID) PO-19 to guide the criteria and approach for evaluating this release. The transaction test evaluation provided the data used to assess the adequacy of Qwest's IMA EDI SATE to facilitate CLECs in testing its EDI interfaces.

The evaluation of Qwest's SATE for a new release focuses on several aspects:

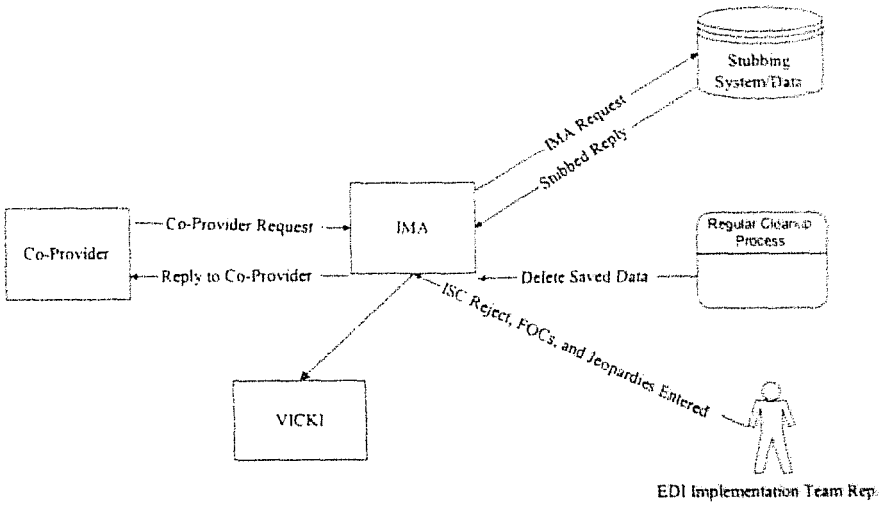
- **Availability of Test Environment** - The testing environment has to be made available to the CLECs in advance of the new release going into production on the OSS systems. Qwest has stated that this availability is made approximately 30 days in advance of the new release going into production.
- **Stability of the Testing Environment** - Does the documentation and systems remain stable from the introduction of the new release in the testing environment to the date the new IMA release becomes available in the production IMA-EDI environment.
- **Performance of New Release** - Does SATE support a New Release of IMA EDI in terms of EDI Mapping and documented Expected results, as measured by the conditions of PO-19.

3.2 Architecture

This New Release Testing approach is focused on verification of Qwest's documented EDI and business rules changes for IMA EDI Release 9.0. More precisely this transaction test focuses on only those changes as a result of the Qwest implementation of Release 9.0 that affect the available scenarios within the current SATE release 9.0 data document.

The following diagram, taken from Qwest's White Paper on "The IMA EDI Stand-Alone Test Environment", dated May 25, 2001, Version 1.0, has been modified by HP to show the interaction of VICKI in the SATE. The original diagram was presented in Qwest's SATE White Paper to describe the logical components that are part of the SATE architecture. These same components will be included in this New Release testing event.

NOTE: This approach does not include a comprehensive evaluation of the VICKI enhancement. HP has used the VICKI response technique to accelerate the transaction testing.



The following modules were tested by HP during the transaction test evaluation:

- The IMA Module (including an EDI Translator)
- Stubbing System Module

Below is a description of each module as it is documented in the Qwest White Paper[1].

IMA Module (including an EDI Translator) - This is an actual version of IMA configured to direct requests to the Stubbing System instead of the back-end systems it normally calls. It runs all the edits to determine whether the detailed fields within a transaction are valid. The only modifications made especially for this version are listed below:

- Certain edits are turned off. These edits in no way affect acceptance of a function performed by a CLEC. These edits are most often used to determine whether an LSR requires Manual Handling before service orders are sent.
- The SATE uses generic CLECs that can be used by different actual CLECs over time. The SATE version of IMA is therefore configured to hold identification information for these generic CLECs.
- Other minor changes determined during detailed design.

Stubbing System Module - IMA will be accessing this system using the same Application Programming Interfaces (APIs) that the Production version of IMA uses when calling back-end systems.

The system, in most cases, returns responses to IMA using data-driven stubs. For example, CLECs send requests to IMA to find the address associated with a given telephone number. In production, IMA sends a request to the Fetch 'n' Stuff system, which in turn sends a request to PREMIS to gather such information. In the SATE however, the request is sent from IMA to the Stubbing System. There, the request is parsed and the telephone number is looked up in a database. If the number is found, the preset response specified for that number is sent back to IMA. If it is not, a generic "No Match " response is sent to IMA.

[1] NOTE: the Qwest White Paper is no longer supported as it has been incorporated into the EDI Implementation Guidelines – for Interconnect Mediated Access (IMA) and Facility Based Directory Listings (FBDL); however this specific architecture information was not carried forward.

This basic stub process is replicated for calls to most of the stubbed back-end systems. In some cases, however, an external system is not called, but instead a database is accessed. For instance, in Production, calls to the Loop Qualification Database (one of the systems that is stubbed) are made via SQL Query. Therefore, for this case, the Stubbing System simply has a database view which matches the view called in production and the underlying tables are populated with SATE specific data.

Regular Cleanup Process - Since Co-Provider IDs can be passed from one Co-Provider to another in the SATE; the environment is flushed of all transactional data on a monthly basis. This data includes reserved appointments, telephone numbers, and the LSRs entered by Co-Providers.

VICKI (Virtual Interconnect Center Knowledge Initiator) - With VICKI, Qwest will automate transactions that are automated in production, and leave manual processes that are currently manual in production. Events will be technically created in the following manner:

- **FOCs** - VICKI then uses a Flow Through Service emulator to create an FOC based on production FOC examples for that Product, Activity, and Supp Type Combination.
- **All Status Updates and Completions** - VICKI sends CRM like messages. In the case of Completions, these are based on production Completions examples for that Product, Activity, and Supp Type Combination.
- **Second FOCs for a specific LSR, Manual Rejects, Non-Fatals, and LSR Level Jeopardies** - These are still manually created from the FOM in the exact same manner as in production.

3.3 Purpose of Evaluation Methods

Transaction tests were performed to validate that the SATE can provide CLECs with a stable environment to test new release changes as prescribed by the Arizona PO-19 SATE Performance Measurement. HP analyzed the information provided in the Qwest Release 9.0 documentation to establish an assessment of the EDI and Business Rules changes, and determine the extent of testing necessary to verify the IMA EDI 9.0 release is available within SATE. Additionally HP performed an evaluation of the accuracy of the outcomes generated by SATE per Qwest's implementation of the expected release changes in the SATE for use by the CLEC community and independent vendors for New Release Testing. This includes the competence of SATE to react to LSR's providing results that are consistent with those scenarios and their expected results as they are provided in the 9.0 Data Document.

HP conducted a three-phase test that is correlated to the SATE Performance Measurement PO-19 specifications. The three phases address language provided by PO-19. These transaction test phases are:

- **Phase I** - Expected Results Verification
- **Phase II** - Business Rules Testing
- **Phase III** - Expected Results Verification for Stability and Regression Testing

The outcome of the three phases of transaction testing provided the percentage of accuracy in transaction outcomes when compared to the Release 9.0 Data Document and the percentage of successfully implemented business rules changes identified that affect SATE scenarios.

Each testing phase is described below.

3.3.1 Phase I - Expected Results Verification

HP executed every test bed scenario that is represented in the Stand - Alone Test Environment as the PID PO-19 has guided for the SATE New Release of IMA EDI.

"Includes one test transaction for each scenario published in the IMA EDI Data Document – for the Stand Alone Test Environment (SATE)."

As documented in the PID this set of transactions were executed:

"when a full or point release of IMA is installed in SATE. These transactions will be executed within five business days of the numbered release being originally installed in SATE. This five business-day period will be referred to as the "Testing Window."

Pass / Fail Criteria
HP determined the success or failure of each of the Phase I test scenarios based on the expectations described in the PID.

"The successful execution of a transaction is determined by the Qwest Test Engineer according to:

- *The expected results of the test scenario as described in the IMA EDI Data Document – for the Stand Alone Test Environment (SATE) and the EDI disclosure document.*
- *The transactions strict adherence to business rules published in Qwest's most current IMA EDI Disclosure Documentation for each release and the associated Addenda"*

A scenario **"Passed"** the Phase I test if the actual results received were the same as the expected results documented in the most current SATE 9.0 Data Document.

A scenario **"Failed"** the Phase I test if the actual results received were different to the expected results documented in the most current SATE 9.0 Data Document.

3.3.2 Phase II - Business Rules Testing

This test evaluated those business rules that have changed in SATE due to the new IMA-EDI Release 9.0. HP derived a list of test scenarios based on Appendix F - Release 9.0 Change Summary; Appendix E updated Additional IMA edits for 9.0 to Qwest's IMA EDI 9.0 Disclosure Documentation, and the Qwest IMA-EDI 9.0 Disclosure Documentation.

These scenarios were executed in SATE to determine if the business rules documented in the most current IMA-EDI Network Disclosure documentation have been implemented successfully into the SATE test bed.

This test made use of the current IMA EDI Business Process Layer Error List and the current IMA EDI Legacy Systems error list as a comparison to the response provided for the each transaction submitted.

The following PID language was the basis of this testing phase:

"The transactions strict adherence to business rules published in Qwest's most current IMA EDI Disclosure Documentation for each release and the associated Addenda."

Pass/Fail Criteria
HP determined the success or failure of each of the Phase II test scenarios based on the expectations described in the PID.

A scenario **"Passed"** the Phase II test if the actual results received were the same as the expected results documented by HP in the Business Rules Scenario Summary Worksheet.

A scenario **"Failed"** the Phase II test if the actual results received were different from the expected results documented by HP in the Business Rules Scenario Summary Worksheet.

3.3.3 Phase III - Expected Results Verification for Stability and Regression Testing

HP executed a second transaction test to demonstrate the stability of the SATE from the point the new release is implemented in the test environment, 30 days in advance of the IMA production implementation, until the time the release is deployed to production.

This Phase of testing was executed 5 days prior to the production release was deployed. The same transactions and the same pass/fail criteria for Phase I apply to this phase of testing.

Additionally this test phase addressed those transactions that failed the Phase I testing. HP anticipated that any failures captured in the Phase I testing would be corrected by the time Phase III was executed. This Phase served as a Full Regression test, to ensure that any corrective actions taken by Qwest would not have any adverse affects to any other test scenario outcomes.

Pass/Fail Criteria
HP determined the success or failure of each of the Phase III test scenarios based on the same criterion as Phase I.

A scenario **"Passed"** the Phase III test if the actual results received were the same as the expected results documented in the most current SATE 9.0 Data Document.

A scenario **"Failed"** the Phase III test if the actual results received were different to the expected results documented in the most current SATE 9.0 Data Document.

3.3.4 Benchmark

HP established its benchmark using PID PO-19 for guidance. As of the date of this report, no consensus has been reached in Arizona on a performance benchmark. HP recommended a benchmark of 95% in December 2001, and in its SATE New Release Test Approach 9.0 Transaction Test document. HP also considered the discussions in the Regional Oversight Committee (ROC) test for Qwest. The ROC Executive Steering Committee ruled on an impasse resolution and adopted the benchmark of 95 percent for the states under the ROC jurisdiction.

3.3.4.1 Community's Perceptive on the ROC's Benchmark

January 28/2002 ROC Steering Committee Resolution

> *"By a unanimous vote of nine (9) to zero (0), with one abstention, the Steering Committee (SC) determined that the benchmark to be used for the ROC PO-19 PID should be 95% beginning in March 2002 and should be revisited within six months of that time.*
>
> *The SC considered the following key aspects in its determination:*
> - *A benchmark of 95% does not seem unreasonable based on current results*
> - *Implementation of this interim benchmark starting in March 2002 coupled with a 6-month review allows time for enhancements to the SATE platform to reach maturity and stability before a final benchmark is established*
> - *A 95% benchmark in the interim should encourage Qwest to not release future upgrades of SATE until such time as the release is performing at least to a 95% level of accuracy, thus furnishing the CLECs with reasonable assurance of a stable platform*

Voting on the issue: All states in attendance except Minnesota that abstained. North Dakota, New Mexico and Wyoming were not represented on the call."

3.3.4.2 HP's Perspective on the PO-19 Benchmark

HP adopted the 95% benchmark for reporting on findings for all phases of this test, as described in the HP SATE New Release Test Approach 9.0 Transaction Test document. The rationale for this benchmark included the fact that this benchmark was passed with a unanimous vote on the ROC and thus enjoys a wide acceptance within the Qwest territory, and that it is the last proposed benchmark for Arizona.

In preparing for the execution of the new release test, HP observed several issues in applying the meaning of the PID as an absolute standard:

- There currently exists no consensus on the benchmark for PID PO-19 in Arizona. It remains at impasse.
- This benchmark for PID PO-19 will be implemented in March 2002 for the ROC.
- The PID PO-19 formula that provides a basis for computing the Phase I results, uses a cumulative value of test results from all the currently supported IMA EDI releases (IMA EDI releases 7.0, 8.0 and 9.0). The accumulation of results from multiple releases is outside the scope of this evaluation.
- PO-19 measures accuracy of expected responses from scenarios defined in the SATE Data Document. These scenarios are to be tested during the 5-day "testing window", that is within five days after the new release is introduced in SATE. PO-19, therefore, can not be used as an absolute standard for the results for Phase III of this project.
- PO-19, as currently defined, measures transaction functionality, field characteristics, and transaction format for a set of scenarios defined in the SATE Data Document. It does not provide a way to measure the consistency of scenario content and legacy messages between SATE and production.

Based on the points above, HP has applied the following interpretation for the use of a benchmark for the SATE New Release Test:

- HP has applied the 95% benchmark for all three phases of this New Release Test.
- HP has applied the 95% benchmark in February as HP was tasked to perform the SATE New Release Test based on the PID PO-19 in February and SATE 9.0 was being implemented within the January/February time frame.
- As HP was tasked to test the SATE release for the 9.0 Version of IMA EDI, it has applied the PID PO-19 formula for the new release only, and not cumulative across all the supported releases in SATE as the formula in the PID is written.
- HP believes that each new release should individually meet the 95% benchmark. In lieu of an approved benchmark for Expected Results Verification, HP looked to standards for a quality measurement that have wide acceptance in the industry. HP has determined that a large body of software development organizations pursue a quality goal between 95% or 97.5%. HP chose the 95% benchmark due to the consensus vote for the SATE measurement across the ROC community, and because it is the last proposed value for the Arizona benchmark.
- HP believes that a benchmark of 95% is reasonable for Phase II. In lieu of an approved benchmark for Business Rules Testing, HP looked to standards for a quality measurement that have wide acceptance in the industry. HP has determined that a large body of software development organizations pursue a quality goal between 95% or 97.5%. HP chose the 95% benchmark due to the consensus vote for the SATE measurement across the ROC community in relation to the Expected Results Verification, and because it is the last proposed value for the Arizona benchmark. HP sees no reason to utilize a standard greater than what has been set for Expected Results Verification when evaluating Business Rules.

- HP believes that a benchmark of 95% is reasonable for Phase III considering that the purpose is to measure the Stability in Expected Results and assurance that Qwest has successfully implemented changes that are verifiable through Regression Testing. Since this test is a repeat of Phase I – Expected Result Verification with the exception of the timing, it is justifiable to utilize the same benchmark.

3.4 Methodology

This New Release transaction testing followed the general principles established in the Qwest EDI Implementation Guide (http://www.uswest.com/wholesale/ima/edi/document.html). It did not evaluate any transactions that fall outside of the available data supported within Release 9.0 of the SATE. It considered all IMA EDI Release 9.0 documentation that had been provided by Qwest.

The HP New Release Test of SATE did not include the "CLEC Experience" as it would occur if all parties followed the processes established for a CLEC start up or any of the processes specific to the use of SATE; rather, HP executed this transaction test in the role of an objective third party and trusted advisor to all parties – Qwest, ACC and the CLEC community.

The HP Test Harness supported an order entry tool and an EDI translation tool that allowed the entry and formatting of LSR's as prescribed by the Qwest pre-order and ordering rules for IMA EDI 9.0.

Once the orders were translated into the standard EDI format according to the Qwest 9.0 release specifications, they were sent on to SATE. Responses received from Qwest provided the basis for comparison to the Qwest IMA EDI 9.0 SATE Data Document for expected responses. This data was collected using the same technology that was used for the Arizona 271 OSS Test.

An Issues Management process was utilized to identify and manage resolution of New Release Transaction test issues across Phase I, Phase II and Phase III. Details of this process are provided in the SATE Issues Management Process found under separate cover.

A public call was held weekly to review the status of the New Release Transaction testing with all parties. All documentation and assistance made available to HP by Qwest for use by HP in the development and/or establishment of the IMA EDI 9.0 interfaces to the SATE have been made available to all participants to verify that HP has not being given special treatment.

3.5 Scenarios

HP executed the scenarios as they are presented in the IMA EDI SATE 9.0 Data Document, and listed in Appendix V of this plan.

HP employed the use of VICKI for response generation. This was done to eliminate the constraint of being able to receive FOC responses for only the first 10 transactions per day. HP did not undertake a comprehensive test of VICKI. HP utilized 10% of the available VICKI paths. Although the comment logs do document the use of VICKI on applicable scenarios, there is no relevance to the outcomes of this use, as HP did not maintain statistics specific to VICKI as part of this New Release Test of 9.0.

3.6 Variances

The following items have been addressed by HP during the SATE New Release Testing, yet represent variances to what was planned in the SATE New Release Test Approach 9.0 Transaction Test document.

3.6.1 SATE Data Documents

The purpose of Phase III was intended to evaluate the status of SATE five days prior to Release 9.0 being deployed into Production. In anticipation of the roll out of SATE Flow through capabilities, Qwest released an updated SATE Data Document v9.05. This release of the Data Document presented a large number of account data changes to facilitate the Flow Through capability. This significant Data Document change impacted the purpose of the Phase III testing. HP and Qwest compromised on a "special" release of the SATE Data Document v9.04a to allow HP to move forward with Phase III testing with the same account data that was utilized in Phase I. Although HP realizes the Data Document that rolled out with the Production deployment of IMA EDI Release 9.0 was significantly different than used in Phase III testing, HP believes that the special release of 9.04a allowed HP to compare the variance in results of Phase I to those of Phase III.

3.6.2 Phase IV Production Likeness Testing

HP originally included the production mirror test in the scope of the HP New Release Test Approach. This was due to HP' s interpretation of the language in PID PO-19. However, HP did not perform the Production Mirror phase of testing for the following reasons:

- HP was made aware that it's interpretation of PID PO-19 was contrary to the decisions that had taken place at a TAG meeting on September 27, 2002 where the production mirror language was rejected[2].
- HP revisited the results of the SATE Release 7.0 Evaluation and found that the execution of Phase IV, as written in the SATE New Release Test Approach 9.0 Transaction Test document would not have provided additional detail on the overall accuracy of production mirroring because it would only be testing the new release portion of a SATE release.

3.6.2.1 Production Mirror not accepted by Community

HP proposed modification to the PID PO-19 in reference to the inclusion 'production-mirror' test. Those PID changes, as proposed by HP, were subsequently rejected by the community in December 2001[3]. The following language from PID PO-19 indicates that the CLEC community and Qwest agreed to test the mirroring between SATE and the IMA EDI Disclosure Document.

> *"The successful execution of a transaction is determined by the Qwest Test Engineer according to:*
>
> - *The expected results of the test scenario as described in the IMA EDI Data Document – for the Stand Alone Test Environment (SATE) and the EDI disclosure document.*
> - *The transactions strict adherence to business rules published in Qwest's most current IMA EDI Disclosure Documentation for each release and the associated Addenda"*

HP revisited the need to perform the Phase IV Production Likeness testing in conjunction with HP's Recommendation 7 based on comments generated after review of HP's SATE New Release Test Approach 9.0 Transaction Test document. Per the following understanding, HP removed the

[2] The production mirror test has been raised to impasse with the ACC Staff, and is still under consideration at the time of this report.

[3] HP was asked in December of 2001 to provide comments to the PID. HP did so and included the following comment to the Description of PO-19: "The identical transactions (to those used to measure accuracy of the SATE), will be executed in production when the new release is installed in production." HP provided these comments and the comments were subsequently rejected by the community.

Production Mirror test from the scope of the SATE New Release Test Approach 9.0 Transaction Test document:

- The PO-19 measurement never provided for a measurement of Production Mirror accuracy

Finally, the HP New Release Test of SATE 9.0, listed as Recommendation 7 in the SATE Summary Evaluation Report - Final Version 3.0 dated 12/21/01, does not require the completion of a production mirror test to maintain the 'adequate' rating as summarized by HP. The recommendations as provided in the by HP Final Evaluation of the Qwest IMA EDI SATE are intended to ensure that the Qwest IMA EDI SATE remains adequate for the CLEC's needs going forward, not as a contingency for adequacy.

3.6.2.2 HP's SATE 7.0 Production Mirror Test

HP conducted a production mirror test during original SATE Transaction Evaluation. This test was based on functionality that HP had been certified to order through HP's Arizona 271 Interconnection. The functionality that was tested included: Address Validation, Customer Service Record Query, Service Availability Query, Facility Availability Query, Connecting Facility Availability Query, POTS, Un-Bundled Loop and UNEP-POTS. During the test, HP reported that 32 LSR pairs were submitted to the SATE 7.0 release and IMA EDI 7.0 Production Release. The results of the LSR's submission in SATE and subsequent production submission were compared for transaction functionality, field characteristics, transaction format and content. Based on those criteria, 7 discrepancies were detected. Of the seven discrepancies, only one related to the Qwest prescribed EDI format. The remainder was inconsistent based on behavior and content. HP provided an overall rating of the 7.0 Production Mirror to be inconclusive based on the unavailability of list detailing the errors in the SATE legacy back-office systems. Due to the lack of the Legacy Systems Edit List, HP created Recommendation 4 that requested Qwest publish variances between SATE and production business edits to ensure that CLECs are fully aware of any such discrepancies so that a CLEC may effectively develop its business processes in the simulated environment.

HP has completed additional analysis on the data that has been collected for SATE 7.0 where HP performed a production mirror test. HP has synthesized the results of the Phase IV production mirror testing into the following broad categories:

- Formatting
  - EDI mapping compliance
  - Data field attributes compliance
- Behavior
  - Legacy system generated messages
  - BPL layer messages
  - Responses

Table 4 – Error Count

Category	Error Count in SATE 7.0 Production Mirror Test
EDI Mapping and Data Attributes	1
BPL Message Discrepancies	2
Legacy Message Discrepancies	2

The above table shows HP's analysis for the single occurrence of an issue with EDI mapping and Data Field Attributes. Most issues HP encountered during the SATE 7.0 production mirror test were in the area of Behavior where HP noted that there was insufficient documentation available for the Legacy and BPL messages or there was a mismatch in message content received from SATE and

Production. The execution of Phase IV, as written in the SATE New Release Test Approach 9.0 Transaction Test document would not have provided additional detail on the overall accuracy of production mirroring, as it would only have tested new functionality added in release 9.0.

Due to the results of the 7.0 Production Mirror test indicating an inconclusive result only due to lack of available SATE information, HP can identify little reason to repeat a production mirror test.

3.7 Summary of Results

This section describes the results and analysis of transaction data collected in this evaluation. The evaluation and opinion of these results are covered in the Section 3.8 Evaluation.

3.7.1 Availability of New Release in SATE

HP was able to verify the presence of Release 9.0 in SATE on January 30, 2002. This represents the release being available 28 days before the production release of IMA EDI 9.0 was deployed. HP validated this availability by performing a connectivity test. Qwest indicates that Release 9.0 was available on January 28, 2002 in SATE. HP had a kick off meeting on January the 28th as per documented process. Qwest approved all the paperwork by the 29th of January, which brought HP to the capability of testing on the 30th of January. HP did not encounter any outage related problems with SATE during this evaluation.

3.7.2 Performance Measures

Each phase provides a conclusion as to the original percent of unexpected results in relation to the total number of scenarios executed. Additionally, the percentage of re-tested transactions that initially had unexpected results which later met expected outcomes after corrective action was taken by Qwest is provided. The re-test results do not contribute to the overall evaluation of each test phase.

For Phases I through III, HP submitted a total of 667 scenarios, which represents approximately 2,500 transactions (each scenario may generate several transactions, depending on the scenario. For example, a Pre-Order query is considered as one transaction, as is the query response from SATE). For the 667 scenarios, 636 include the original scenarios developed as part of HP's test case matrix, and the other 31 are re-tests of scenarios that did not return the expected responses.

Table 5 - SATE New Release Test Report provides a summary of each transaction test evaluation method with the following details:

Phase - The column labeled *Phase* identifies the Evaluation Method utilized to generate the related transaction test information.

The phases are categorized as follows:

- Phase I - Expected Results Verification
- Phase II - Business Rules Testing
- Phase III - Expected Results Verification for Stability and Regression Testing

Total Scenarios - The total scenarios represent the sum of scenarios executed within each environment. Each scenario can account for anywhere from two to twelve transactions.

Total Unexpected Results - The total unexpected results represent the sum of scenarios that produced a "fail" or unfavorable outcome. A scenario was considered to "Fail" if the scenario produced a response that did not match the expected result in the data document or HP's expected result.

% Error - The percentage of error is calculated as the total unexpected results divided by the total scenarios executed.

Total Retest Complete - This represents the total number of scenarios that were successfully re-tested. The scenarios that were candidates for re-test are represented in the Total Unexpected Results column.

% Retest Successfully - This represents the percentage of re-tests that were successful as compared to the number of total scenarios with unexpected results. This percentage is calculated as the total retest complete divided by the total unexpected results.

Table 5 - SATE New Release Test Report

Release 9.0 Testing Phase	Total Scenarios	Total Unexpected Results	% in Error	% Successful	Total Retest Complete	% Successful after Retest
Phase I - Expected Results Verification						
Initial Transaction Execution: Began 1/31/02 - Ended 2/7/02 Re-tests Ended 2/15/02						
ding Partner – HP9						
Regression	96	10	10.42	89.58	9	98.96
Progression	158	8	5.06	94.94	8	100.00
sub-total	254	18	7.09	92.91	17	99.61
Phase II – Business Rules Testing						
Initial Transaction Execution: Began 2/13/02 – Ended 2/15/02 Retests Ended 2/28/02						
Regression	60	4	6.67	93.33	1	95.00
Progression	62	13	20.97	79.03	0	79.03
sub-total	122	17	13.93	86.07	1	86.89
Phase III – Expected Results Verification for Stability and Regression Testing:						
Initial Transaction Execution: Began 2/18/02 – Ended 2/22/02 Re-tests Ended 2/27/02						
Regression	96	7	7.29	92.71	6	98.96
Progression	164	7	4.27	95.73	7	100.00
sub-total	260	14	5.38	94.62	13	99.62
Total Results	636	49	7.70	15.72	31	97.17

3.7.2.1 Phase I Test

For Phase I, HP submitted a total of 96 regression scenarios and 158 progression scenarios giving a total of 254 scenarios. Regression scenarios were used to verify expected results for products HP is

already certified for ordering within IMA EDI version 7.0. Progression scenarios were used to verify expected results for products that HP is not certified for ordering within IMA EDI Version 7.0.

For this test, 18 scenarios returned unexpected responses when compared to the expected results as documented in the SATE Data Document 9.0. These unexpected responses correspond to an accuracy ratio of approximately 93% when compared to the total number of scenarios executed.

In this test, HP encountered the following types of issues:

Table 6 – Test Issues

	Type of Issue	Formal Issue Tracking Number	Status
Formal Issues			
	Business Rules		
		2033	Closed Unresolved
Candidate Issues			
	Business Rules		
		9030	Closed
	EDI Mapping		
		9023	Closed
		9018	Closed
		9026	Closed
	Environment		
		9029	Closed
		9025	Closed
		9015	Closed
		9020	Closed
		9021	Closed
		9027	Closed

HP submitted one formal issue that has been closed with an unresolved status. HP was able to retest a total of 17 scenarios, which resulted in a final accuracy ratio of 99.61%.

3.7.2.2 Phase II Test

For Phase II, HP submitted a total of 60 regression scenarios and 62 progression scenarios giving a total of 122 scenarios. Regression scenarios were used to verify expected results for products HP is already certified for ordering within IMA EDI version 7.0. Progression scenarios were used to verify expected results for products that HP is not certified for ordering within IMA EDI Version 7.0.

For this test, 17 scenarios returned unexpected responses when compared to the results that HP expected based on the Appendix E and Appendix F change summaries of the IMA EDI Disclosure Documents for IMA EDI Release 9.0 changes. These unexpected responses correspond to an accuracy ratio of approximately 86% when compared to the total number of scenarios executed.

In this test, HP encountered the following types of issues:

Table 7 – Phase II Test Issues

	Type of Issue	Formal Issue Tracking Number	Status
Formal Issues			
	Business Process		
		2037	Close Unresolved
	Business Rules		
		2034	Closed Unresolved
		2039	Closed Unresolved
		2042	Closed Unresolved
	Documentation		
		2040	Closed
		2043	Closed
		2044	Closed Unresolved
	EDI Mapping		
		2036	Closed
	Environment		
		2035	Closed
		2038	Closed
		2041	Closed Unresolved
		2045	Closed Unresolved
Candidate Issues			
	EDI Mapping		
		9028	Closed

HP submitted 12 formal issues, 1 is still open, 4 are closed and 7 are closed with an unresolved status as of the publication of this report. HP was able to retest a total of 1 scenario, which resulted in an accuracy ratio of 86.89%.

HP did further analysis on those scenarios that did not return the expected response in order to determine what component of the business rules caused the error. HP considered the broad scope of business rules to be made up of multiple sub-categories. In conducting this analysis, HP categorized unexpected responses into two categories – those measured by PO-19, and those that are not measured by PO-19. Our analysis is as follows:

Performance Measured by PO-19

- **EDI Mapping**: These set of rules define the syntax and the form of information that is being exchanged between two collaborating entities. These rules dictate the type of message to be used for what purpose (e.g. 850, 855, 860, 865, 836). The components and order of the segments that each message contains and the details that would allow one to uniquely represent the type of data to be contained by a segment. (e.g. The DTM segment is used to tag data that is a date). There are rules that that dictate the literal that would be used to represent a completion date versus a jeopardy date versus a sent date.
    - **Compliance to the disclosure document**: This sub-category classifies errors caused by implementation not conforming to what has been defined in the IMA EDI disclosure documentation

- **Compliance to TCIF guidelines**: This sub-category classifies errors caused by implementation by not conforming to TCIF and X12 standards

- **Data Attributes**: This type of business rule defines the domain of each field that is going to be used in sending and receiving information between two systems. It deals with data types, masks, length and number of occurrences.
  - **Consistency with OBF**: These rules govern data attribute exceptions in implementation to what has been defined by the OBF.
  - **Consistency with Disclosure**: These rules govern data attribute exceptions in implementation to what has been defined by Qwest in their IMA EDI Disclosure documentation.
- **Workflow**: Workflow defines the expectation of messages that are exchanged between a CLEC and Qwest during the process of order fulfillment. These messages have a cause and effect relationship as well as an expectation of turnaround time. (e.g. A 997 is received by the CLEC when they transmit an 850 the CLEC expects an 855 transaction within a certain time period dictated by the product being ordered).
  - **Pre-Order Responses**: Errors in the expected responses received during the preordering process.
  - **Functional Acknowledgement Responses**: Errors in expected responses received to acknowledge receipt and well formedness of message (e.g. 997)
  - **Post Order Responses**: Errors in expected responses received after an order has been issued

Performance Not Measured by PO-19

- **Product Consistency Edits**: These types of business rule definition deals with declaring boundary conditions, inclusion and exclusion conditions and behavior. This type of business rule interacts with what is contained in the data rather than how it has been formatted. It is this edit that usually modifies the flow of an order and causes appropriate business events. (e.g. an action of A is used for a New while an Action of W is used for an Assume. Both these orders could follow a different path during order fulfillment).
  - **Behavior**:
    - **Data Edits**: Errors caused because of invalid values that are contained within a data field. (e.g. the state specified in a service address should fall within the list of states where Qwest is tariff to do business for a particular product).
    - **Cross data edits**: Errors caused because of incompatible data contained in fields that are related. (e.g. a state is mandatory when a street address is specified).
  - **Error list implementation**: Errors caused due to lack of clarity on what errors are caused under what conditions.
  - **Legacy system simulation**: Errors caused because of inconsistent behavior by legacy systems
- **Environment Constraints**: These are rules that govern the pricing and discount models, the availability expectations as well as the special handling agreements that are negotiated between Qwest and a CLEC. These sub-categories do not apply to this analysis.
  - **Implementation Constraints**
  - **Business constraints**
    - SLA
    - Standard interval
    - Tariff rules
    - Availability
  - Capacity

Table 8 – Scenario Responses shows the breakdown of unexpected responses within these sub-categories. HP utilized the Phase II scenario summary worksheets in combination with the Phase II Comments logs to support these findings. Please note that only scenarios that have been reported in the Phase II Comments log as Original errors are included in this detailed analysis.

Phase II performance, as measured by PO-19, indicates that 97% (96.6) of transactions yielded expected results in terms of EDI Mapping, Data Attributes, and Workflow. In the area of product consistency, which is not measured by PO-19, HP observed a level of unexepected results of approximately 14% (13.9).

Table 8 – Scenario Responses

Scenarios with unexpected responses		EDI Mapping		Data Attributes		Workflow			Product Consistency Edits			
Number	Description	Compliance to Disclosure Document	Compliance to TCIF guidelines	Consistency with OBF	Consistency with Disclosure Document	Pre-Order Responses	Functional Acknowledgement Response	Post-Order Responses	Behavior-Data Edits	Behavior-Cross Data Edits	Error List Implementation	Legacy System Simulation
[illegible]	Unbundled ADSL by Address – Bad Response	X										
[illegible]	Address Validation by Address – Good					X			X			X
[illegible]	Availability Query - Bad Response	X									X	
[illegible]	CSRQ - CSR by TN and Address Good Response					X			X			
[illegible]	Loop Level Data by Address – Bad Response					X					X	
[illegible]	Loop Level Data by Address – Bad Response					X					X	
[illegible]	Loop Level Data by Address – Bad Response					X					X	
[illegible]	Loop Level Data by Address – Bad Response									X	X	
[illegible]	POTS New Installation								X	X	X	
[illegible]	POTS Change Multiple Line Accounts	X								X		
[illegible]	New loop installation								X	X	X	
[illegible]	Centrex Plus Conversion of POTS Account to Centrex Common Block								X	X	X	
[illegible]	UNE-P POTS Conversion w/ DL - Single Line	X							X	X		X
[illegible]	UNE-P POTS Outside Move										X	
[illegible]	Straight Line Change LAL								X			
[illegible]	Straight Line Change LXL								X	X	X	
	Totals:	4	0	0	0	0	0	0	5	7	10	2
		4		0		0			24			

3.7.2.3 Phase III Test

For Phase III, HP submitted a total of 96 regression scenarios and 164 progression scenarios giving a total of 268 scenarios. Regression scenarios were used to verify expected results for products HP is already certified for ordering within IMA EDI version 7.0. Progression scenarios were used to verify expected results for products that HP is not certified for ordering within IMA EDI Version 7.0.

For this test, 14 scenarios returned unexpected responses when compared to the expected results as documented in the SATE Data Document 9.0. These unexpected responses correspond to an accuracy ratio of approximately 95% when compared to the total number of scenarios executed.

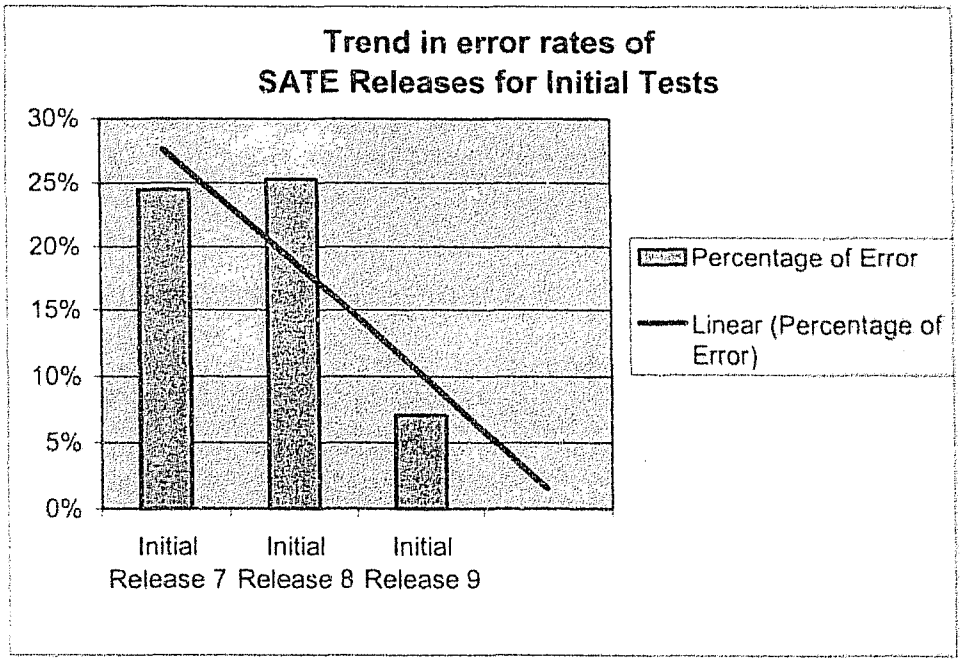
In this test, HP encountered the following types of issues:

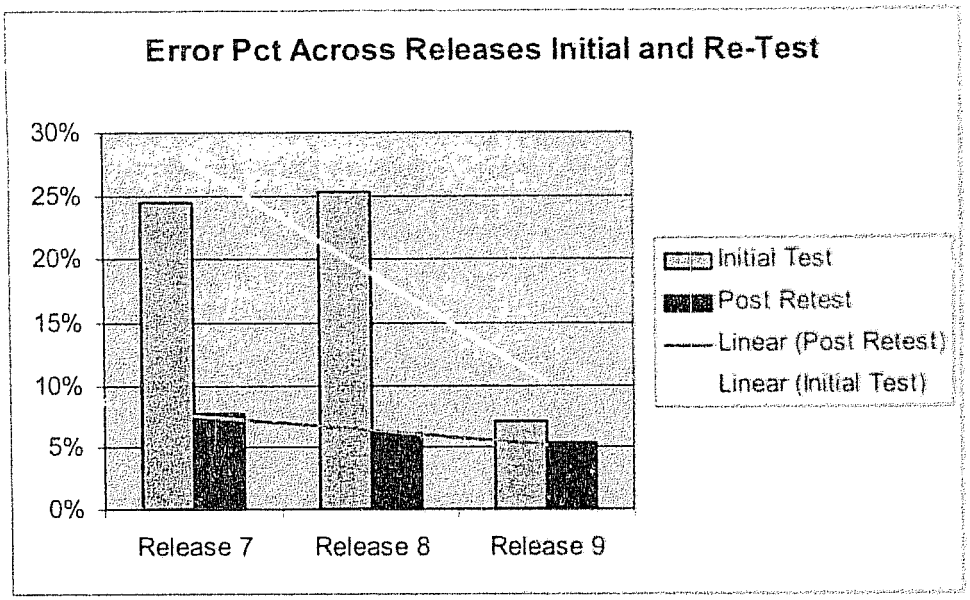
Table 9 – Phase III Issues

	Type of Issue	Formal Issue Tracking Number	Status
Candidate Issues			
	Business Rules		
		9022	Closed
	Environment		
		9016	Closed
		9024	Closed
		9014	Closed
		9017	Closed
		9019	Closed

HP submitted no formal issues for this phase. HP was able to retest a total of 13 scenarios, which resulted in a final accuracy ratio of 99.62%.

HP also analyzed the trend in the change to the accuracy percentage utilizing historical data that shows the error percentage by release for transaction testing of the scenarios available in SATE for releases 7.0, 8.0 and 9.0 (data for releases 7.0 and 8.0 taken from previous evaluation by HP, and included as part of the HP SATE Summary Evaluation Report issued on December 21, 2001). As shown below, the verification of expected results across releases shows that there is a positive trend in the level of accuracy which indicates that the implementation of future releases of IMA EDI into the SATE should provide a better than 95% level of accuracy.





3.7.3 Use Of VICKI

HP did make use of VICKI (Virtual Interconnect Center Knowledge Initiator) for portions of this evaluation. HP's intent was not to test the full functionality offered by this new feature, but to use it to accelerate the test (allows HP to receive automatic transactions from SATE that were manually generated before this feature was added). The following table summarizes the use of VICKI throughout Phase I and Phase III testing. The following defines the different headings:

- **VICKI Path Number** – The Qwest defined path used in VICKI (set of responses produced from chronological system events)
- **Remarks** – Description of the specific VICKI Path.
- **Number of times the VICKI path was used** – Represents the number of scenarios for Phase I and III that used this specific Path.

Table 10 – VICKI Paths

VICKI Path Number	Remarks	Number of times the VICKI path was used
1	Test: Non-Fatal then Reject	30
13	Test: Double FOC	1
30	Prod: FOC Jeopardy	16
31	Prod: FOC Jeopardy	1
39	Prod: Hold Jeopardy	13
40	Test: Hold Complete	15
46	Prod: Hold Complete	1

VICKI Path Number	Remarks	Number of times the VICKI path was used
Total		77

The following table summarizes the use of VICKI responses by SATE product.

Table 11 – VICKI Responses by SATE Product

Product	VICKI Path Number	Remarks	Number of times VICKI was used
CEX	1	Test: Non-Fatal then Reject	4
	30	Prod: FOC Jeopardy	4
	39	Prod: Hold Jeopardy	3
	40	Test: Hold Complete	4
DL	1	Test: Non-Fatal then Reject	3
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	3
	46	Prod: Hold Complete	1
LNP	1	Test: Non-Fatal then Reject	2
	13	Test: Double FOC	1
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	1
	40	Test: Hold Complete	2
POTS	1	Test: Non-Fatal then Reject	2
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	1
POTS	40	Test: Hold Complete	2
SHL	1	Test: Non-Fatal then Reject	2
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	1
	40	Test: Hold Complete	2
UBL	1	Test: Non-Fatal then Reject	2
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	1
	40	Test: Hold Complete	2
UCEX	1	Test: Non-Fatal then Reject	2
	31	Prod: FOC Jeopardy	1
	39	Prod: Hold Jeopardy	2
	40	Test: Hold Complete	1
UDL	1	Test: Non-Fatal then Reject	3
UDLNP	1	Test: Non-Fatal then Reject	7

Product	VICKI Path Number	Remarks	Number of times VICKI was used
UNEP	1	Test: Non-Fatal then Reject	3
	30	Prod: FOC Jeopardy	2
	39	Prod: Hold Jeopardy	1
UNEP	40	Test: Hold Complete	2
Total			77

HP was able to use VICKI on 77 scenarios, and encountered no issues related to VICKI.

3.7.4 Commercial Usage

During the course of this evaluation, HP submitted a data request to Qwest to determine the extent of commercial usage of SATE by CLECs in developing their EDI interfaces for new releases of IMA EDI. HP received the following information:

- Two CLECs used SATE to successfully develop to 7.0. Three CLECs have used SATE to successfully develop to 8.0; One Service Bureau has used SATE in 8.0 to test on behalf of five CLECs. Including the service bureau, eight CLECs have used SATE to successfully implement 8.0. No CLECs have yet been placed into production on 9.0.
- Four CLECs are currently using SATE to develop to 8.0. One CLEC is currently using SATE to develop to 9.0. No CLECs are currently using SATE 7.0 to develop to IMA 7.0.

3.8 Evaluation

This section addresses the evaluation of the adequacy of SATE in assisting CLECs in developing for new releases for the IMA EDI production environment. The table below was taken from the SATE New Release Test Approach 9.0 Transaction Test document, and provides a basis for evaluating the results measured in this evaluation. The overall assessment is based on the combination of the individual criteria, and the materialness of the issues when compared with HP's understanding of PID PO-19.

Table 12 – Evaluation

Criteria	Results[1]	Summary
HP will confirm the 9.0 SATE test data is valid per the results of the Phase I testing. Phase I - Expected Results Verification Is the Scenario Data supplied as documented in the Release 9.0 SATE Data document available to the community as it is intended to	U	Based on the results of Phase I testing the rating of Unsatisfactory is warranted. When using the formula of PO-19 for New Release testing of the Release 9.0 Data Document the results were 92.9%. When compared to a benchmark measure of 95% there is a variance of a negative 2.1% level of accuracy. HP realizes that this measure, as defined in PO-19, is

[1] S = Satisfactory
U = Unsatisfactory
I = Inconclusive - Re- test Required
N = Not available - Test In Progress

Criteria	Results[1]	Summary
be per the specifications provided? Is the outcome of the execution of the Release 9.0 SATE provided scenarios equal to the expected results as they are documented in the Release 9.0 SATE Data Document?		this measure, as defined in PO-19, is meant to apply to all releases currently available in SATE, while this result is for the accuracy of release 9.0 scenarios only. HP was also able to verify that release 9.0 of SATE was available for use 28 days before deployment in the IMA EDI production environment. Please see HP Recommendations in Section 2.2
HP will confirm that the 9.0 SATE business rules are consistent with the rules published in the Qwest IMA EDI 9.0 Network Disclosure Documentation, Appendix F and Appendix E. This verification will be accomplished through Phase II - Business Rules Testing • Does the SATE capture Business Process Layer edits and Back-office Legacy system errors that may be caused by LSR ordering mistakes as they are documented in the Qwest error lists provided for Release 9.0? • Does the SATE employ the updated business rules edits as provided in the IMA EDI 9.0 Release documentation?	U	HP conducted this test based on its interpretation of the PID PO-19 language that calls for strict adherence to business rules. HP's current understanding of the PID PO-19, as it is written, does not provide any formula to draw inference of the level of adequacy for business rules validation. HP has provided the results obtained per the execution of scenarios where expected results were based on business rules that changed due to the implementation of Release 9.0. This was determined by analysis of the Release 9.0 Disclosure Documentation. The results show an 87.3% (after re-test) level of accuracy for the scenarios executed. Based on the initial benchmark or 95%, this criteria is given an unsatisfactory rating. Phase II performance, as measured by PO-19, indicates that 97% (96.6) of transactions yielded expected results in terms of EDI Mapping, Data Attributes, and Workflow. HP believes that the level of performance is adequate to support CLEC new release testing. In the area of product consistency, which is not measured by PO-19, HP observed a level of unexpected results of approximately 14% (13.9). These unexpected responses were not used by HP in its determination of adequacy and are included for information purposes only.

Criteria	Results[1]	Summary
		See HP Recommendations in section 2.2.
HP will confirm the results of a scenario in SATE will match the results of a similar scenario in IMA EDI 9.0 production. This will be verified through Phase IV – Production Likeness Testing. • Does the SATE react to transactions with the same results they would receive if submitted in the IMA EDI 9.0 Production environment?	N/A	HP planned to conduct this test based on its interpretation of the PID PO-19 language that calls for production likeness. HP's current understanding of the PID PO-19, as it is written, does not provide any formula to draw inference of the level of adequacy for production mirror validation. HP did not conduct this test. See HP Recommendations in section 2.2
HP will confirm the SATE returns consistent responses. This will be verified throughout Phase II and Phase IV of New Release testing. • Do transactions submitted in SATE 9.0 produce consistent responses when the same transaction is executed in SATE across the testing phases? • Do transactions submitted to the SATE for Release 9.0 produce consistent responses for like transactions in Production IMA EDI Release 9.0?	N/A	Due to the fact that Phase IV was never performed, this evaluation criteria is not applicable to this New Release Test of 9.0. See HP Recommendations in section 2.2.
HP will confirm that the IMA EDI SATE 9.0 supports all transactions described in the SATE supporting documentation. • Are the scenarios supported in the 9.0 SATE inclusive of the products and activities that are required to support the business processes of a CLEC's operations in AZ? • Are new products and services made available through the implementation of the new IMA EDI release 9.0 made available in SATE?	S	SATE does support the products required by a CLEC doing business in the state of Arizona. This is based on evidence supported by Qwest's response to HP's data request HP DEC01-001. Furthermore, Qwest demonstrated the ability to add new functionality to SATE with this new release of 9.0 as shown through the implementation of the new Pre-Order LQQ - Loop Qualification Query/Response.
HP will confirm the 9.0 SATE	S	An overall result of Satisfactory is

Criteria	Results[1]	Summary
Accurately supports all post-order transactions and functional acknowledgements. • Do the SATE responses get created per the expectations set by the documented time frame? • Do the SATE responses received provide expected outcomes? • Do the SATE responses received provide comprehensive messages w[illegible] warranted by the test sce[illegible]? • Does the SATE accurately support all pre-order and post-order transactions and functional acknowledgements?	S U S S	warranted as HP did confirm that all pre-order, post order and functional acknowledgments that are available in SATE are adequately supported. This is documented further through the Transaction Test scenario summaries that show the send and receive dates of those transaction types across all of the testing phases completed. There is one exception to this overall evaluation of Satisfactory. That is in relation to the second criteria question. Phase I testing has provided results that indicate the expected outcomes documented in the Data Document were not always accomplished. See HP Recommendations in section 2.2
HP will determine whether the SATE adequately accommodates new release testing. Based on the ranking applied, and the comments provided in the summary column: HP will determine if the overall transaction functionality provided by SATE is adequate for CLEC New Release Testing.	S	The Phase I testing outcome produced a 93% level of accuracy in expected results. While this result does not meet the PO-19 benchmark of 95% the margin of shortfall is small. In addition, HP has observed a clear trend across release 7, 8 and 9.0 testing is showing that Qwest should achieve the 95% accuracy rate with the next implementation of IMA EDI changes into SATE. Although the transaction results for Phase II did not meet the benchmark specified for this evaluation, HP believes that SATE demonstrated better that 95% accuracy in scenarios that dealt with transaction functionality, field characteristics, and transaction format. HP concludes that Qwest has provided a 95% accuracy when comparing expected results to the actual results during the Phase III transaction test. This has provided a strong indicator that SATE is maturing as expected in supporting an environment for CLEC interconnection testing.

3.9 Summary of Activities

This New Release transaction test utilized a new HP trading partner ID - HP9 that was defined specifically for this test. . HP utilized an internal SATE test environment that supported an order entry tool and an EDI translation tool that allowed the entry and formatting of LSR's as prescribed by the Qwest pre-order and ordering rules for IMA EDI 9.0. Once the orders were translated into the standard EDI format according to the Qwest 9.0 release specifications, they were sent on to SATE. Responses received from Qwest provided the basis for comparison to the Qwest SATE Data Document expected responses. This data was collected using the same technology that is currently used for the Arizona 271 OSS Test.

An Issues Management process was utilized to identify and manage resolution of New Release transaction test issues that may potentially cause a negative evaluation. Details of this process are provided in the SATE Issues Management Process found separately.

A public weekly call was held to review the status of the New Release testing with all parties. All documentation and assistance made available to HP by Qwest for use by HP during the New Release test of SATE will be made available to all participants to verify that HP was not being given special treatment.

All New Release transaction test results have been captured in a number of Microsoft Excel worksheets. They are all enclosed as appendices to this report. The transaction test results have been captured on these worksheets and provided to the community each week. These worksheets include Qwest's standard Scenario Summary worksheets as well as HP's standard Transaction Test Scenario Comments Log. A Scenario Summary worksheet exists for each Phase of the Transaction Test as well as a corresponding scenario Comments Log. The Scenario Summary worksheet lists each scenario that was submitted with the date the LSR was sent to Qwest, and the date a corresponding response was received by HP. The Comments Log also lists each scenario with the outcome status. If the outcome was not successful then HP enters a comment on the log that details the transaction processing events and the unexpected results. Qwest reviews the Comments Log, and the appropriate action is taken to bring resolution to the unfavorable result. Those scenarios that remained unresolved on the Comments log at the end of a testing Phase were moved to the formal Issues process. The Comment log is updated to explain the movement of the tracking of the item to the formal Issues process.

The following worksheets exist and have been included as appendices to this report: Phase 1 Summary Regression

- Phase 1 Summary Progression
- Phase 1 Comments Regression
- Phase 1 Comments Progression
- Phase 2 Summary Regression
- Phase 2 Summary Progression
- Phase 2 Comments Progression
- Phase 2 Comments Regression
- Phase 3 Summary Regression
- Phase 3 Summary Progression
- Phase 3 Comments Regression
- Phase 3 Comments Progression

4.0 Issues

4.1 Overview

As part of its SATE Evaluation Plan, HP developed an Issues Management Plan to address the issues encountered during this engagement. The purpose of this plan was to provide the ACC, Qwest, and the CLEC members of the TAG a vehicle for tracking issues identified by HP, and understand the methodology used by HP in identifying and resolving issues. This section briefly describes the methodology used by HP, and the results of executing this plan.

4.2 Methodology

As described in HP's Issue Management Plan, an issue was assumed to be a gap between the actions of the Qwest documented processes and applications and stakeholder expectations. Issue Management was the process used to close that gap by analyzing the problem and determining the proper corrective action. It consisted of identifying, documenting, tracking, prioritizing, resolving, and communicating to project stakeholders the issues that arose during the overall HP evaluation.

Issues were tracked to the four Evaluation Domains: Documentation, Co-Provider Input, Process and Transaction. Transaction issues were further broken down into the following sub-categories:

- Regression/Progression: Issues related to this sub-test of the overall transaction test.
- Negative: Issues related to negative testing.
- Production Mirroring: Issues related to testing the production mirroring functionality of SATE
- Business Rules: Issues related to unexpected responses due to business rules.
- EDI Map: Issues related to unexpected errors with EDI Mapping.
- Documentation: Issues uncovered during transaction testing that did not match Qwest documentation.

During the course of the evaluation, questions or problems were noted by the HP team, and logged on a Question Log. This log was used as a way of tracking candidate issues, and communicating them to Qwest. Inputs to this log could have come from several sources: reading Qwest documentation; analyzing transaction responses; questions raised during weekly calls with Qwest; questions raised during process interviews with Qwest; or analyzing CLEC and Qwest input on SATE design.

The severity of issues were classified according to the following definitions:

- Low severity issues were those that did not impact the completion of a transaction test scenario, or the completion of any of the specific review or the overall evaluation. Examples of low severity issues could have included:
  - Editorial issues with documentation
  - Completeness of an Individual CLEC (Co-Provider) interview
- Medium severity issues were those that impacted the completion of a transaction test scenario, but did not impact the completion of other transaction test scenarios or any of the specific review or the overall evaluation. Examples of medium severity issues could have included:
  - Ability to complete test scenarios for a certain product type
  - Unable to open or print a document.
  - Unable to schedule interviews for a process evaluation.
  - Process failures based on the expectations set by documentation.
  - Unexpected Transaction errors.
- High severity issues were those that impacted the completion of the transaction test, the completion of a specific review, and the completion of the overall evaluation. Examples of high severity issues could have included:

- EDI Interface down for a period of time impacting the ability to enter test transactions
- T1 Lines not working impacting the ability to enter test transactions
- New revisions to SATE environment requiring development/upgrades to HPC interface.
- Digital Certificate, IA/IA, Firewall or other security barriers that cause interconnection delays
- IMA EDI SATE Stub environment producing inconsistent or no responses as expected per the IMA EDI disclosure documentation
- IMA EDI SATE application changes required as noted by Qwest's internal change request generation.

Issues were also tracked according to its status throughout its resolution. The following status categories were used:

- Candidate: A problem or question that has been identified and logged as a potential issue.
- Open: A candidate issue that has been clarified as an issue.
- Under Investigation: An issue that has a defined corrective action plan, and is being worked on by Qwest.
- Resolved: An issue that has been corrected according to Qwest's corrective action plan, and being verified by HP.
- Verified: An issue that has been resolved and the correction verified by HP.
- Impasse: An issue that has reached impasse, and transferred to ACC staff for resolution.
- Closed: An issue that has been resolved and verified by HP, and closed.
- Closed – Unresolved: An issue that has been resolved verified and closed but unresolved. If there were open questions or comments against closing the issue, and HP was not able to come to agreement before the end of the evaluation, HP changed the status of the Issue in the Issues tracking system to Closed – Unresolved.

4.3 Results

The following table summarizes the issue candidates identified and tracked by HP via the HP Formal Issue Process during this engagement. Please see Appendix A for complete details on each issue candidate.

Table 13 – Candidate Issues

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
9014	Transaction Test	Phase 3 Regression testing of the 9.0 Data Document using the scenarios for AAQ6, AAQ7, and AAQ8 did not return the expected responses.	02/21/02: HP submitted request and received did not receive the expected response. The ABTIME was missing from the AAR. This is not a new error as it was present in the first transaction test and HP did not identify the error. 02/22/02: HP: This item remains open. HPC will prepare a formal issue management document. 02/25/02:Qwest: This is fixed in the current version of the data document. 02/26/02: HP: Ver 9.07 of the Data Document no longer includes the ABTIME in the expected results.

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
0015	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenario for AVQ7 did not return the expected response.	01/31/02: HP submitted transaction and received the expected response type. However, the SATE 9.03 Data Document indicates that X Fireside Drive will also return "FLR 2" and the LD2/LV2 combination for "FLR 2" was not returned in the AVR response. 02/01/02: Qwest: CR 37059 was created to resolve this issue. 02/07/02: Qwest: Distributed the SATE Data Document 9.0 v05. 02/07/02: HP: Retested and received expected response. 02/08/02: Qwest: 37059 is targeted to be placed into production SATE this weekend and to be available to test on Monday.
0016	Transaction Test	Phase 3 Progression testing of the 9.0 Data Document using the scenarios for CEN3 and CEN4 did not return the expected responses.	02/20/02: HP submitted PON=R9PB-CENC-00301 and received the FA. Expecting VICKI path [39]. Received error: "EU Form:Location and Access Section 2:Address validation failed". The scenario has been re-checked and the discrepancy cannot be identified as this same scenario was successful in Phase I testing and the address data matches the v9.04 Data Document. This appears to be an error. 02/21/02: HP received the newly distributed SATE v9.04a Data Document. 02/21/02: HP corrected the VICKI remark path and resubmitted PON=R9PB-CENC-00302. (The Phase I scenario did not contain a VICKI path.) Received the FA. Expecting VICKI path [39]. Received error: "EU Form:Location and Access Section 2:Address validation failed". HP confirmed that the address data matches the v9.04a Data Document. This appears to be an error. 02/21/02: HP sent e-mail inquiry to Qwest. 02/21/02: Qwest: Use MPLS in the city field instead of Minneapolis. CR 38026 was created to fix the data document.

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			02/22/02: HP: Retested using this corrected data (TID=152750 PON=R9PB-CENC-003-A). Expecting VICKI path [39]. Received FOC and SU. Expecting 865JEOP. 02/25/02: Qwest: This is fixed in the current version of the data document. 02/27/02: HP: This has been corrected in the 9.07 ver of the Data Document.
9017	Transaction Test	Phase 3 Regression testing of the 9.0 Data Document using the scenario for CSR11 did not return the expected response.	02/18/02: HP submitted request and received the expected response. However, the CITY data value was followed by a trailing comma which is not depicted in the SATE v9.04 Data Document. This is not a new error as it was present in the first transaction test and HP did not identify the error. 02/21/02: Qwest: CR 38050 was entered to remove the comma from the system data. 02/27/02: HP: This has been corrected.
9018	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenario for CSR2 did not return the expected responses.	02/01/02: HP submitted transaction and received expected response type. However, the CSRR appears to have mixed-up the MTX02 data values of RSID, PIC, PCA and LPIC: N9|JH|RSID|FFID MTX||5123 N9|JH|PIC|FFID

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			N9|JH|PCA|FFID MTX||R28 N9|JH|LPIC|FFID N9|JH|EDT|FFID Request that Qwest evaluate the CSRR EDI mapping for the USOC FFIDs. 02/05/02: Qwest: Advised that a CR has been opened to address this issue: CR 37072. 02/06/02: Qwest: Advised that the fix for CR 37072 was completed. 02/07/02: HP: Re-submitted transaction and received the expected response.
9019	Transaction Test	Phase 3 Regression testing of the 9.0 Data Document using the scenario for CSR9 did not return the expected response.	02/18/02: HP submitted request and received the expected response. However, the SATE 9.04 Data Document depicts that in addition to the data described, a message is also returned: "Message Returned:All requested WTNs/ECCKT were found on the CSR returned". This message was not present in the response. This is not a new error as it was present in the first transaction test and HP did not identify the error. 02/22/02: HP: This item remains open. HPC will prepare a formal issue management document. 02/27/02: HP: The message was removed from the data document.
9020	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenarios for FAQ10 and FAQ5 did not return the expected responses.	02/01/02: HP submitted the transaction and received the expected response. The one exception that should be noted is the that the error message received did not match the error listed in the data document. The Data Document indicates "· Unable to locate specified Address· OSS Gateway: VERIFY STREET NAME Message[0] Verify Street Name entry.· Address Validation is not an EXACTMATCH". HPC received "OSS Gateway: Error caught by data source Message[0] OSS Gateway: Error caught by data source Message[0] ERROR:No exact match was found for the address provided.".

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			02/04/02: Qwest: This was fixed as part of the errors analysis that Qwest has performed in recent days. The data document to be published this evening contains the updated error messages, including the messages received for these transactions. 02/05/02 Qwest: Distributed SATE Data Document 9.0 v04 on the evening of 2/4/2002 that corrected this Data Document error. 02/07/02: HP: Retested and received the expected response.
9021	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenarios for FAQ7 and FAQ8 did not return the expected responses.	02/01/02: HP submitted the transaction and received the expected response. The one exception that should be noted is the format of the ECCKT on the first line. The Data Document indicates "5094875000", HP received "509 487-5000". 02/07/02: Qwest: Distributed the SATE Data Document 9.0 v05 and advised to retest writeups from 02/04/2002. 02/07/02: HP: Retested and received the same response containing: "509 487-5000". The Data Document indicates "5094875000". 02/13/02: Qwest: FAQ7 and FAQ8 will be fixed in the 9.05 data document. 02/15/02: HP: This has been corrected in the 9.05 data document.
9022	Transaction Test	Phase 3 Progression testing of the 9.0 Data Document using the scenarios for LQQ1, LQQ2 and LQQ5 did not return the expected responses.	02/18/02: HP submitted request and did not receive the expected response. Sent the same scenario that was successful during the first transaction test, yet this test returned an error: "Invalid combination of MS, TOS, NC, and NCI". This is a new error. 02/21/02: Qwest: LQQ1, 2, 5: CR 39043 has been entered to resolve this issue. 02/25/02: Qwest: Event Notification 5864384. Description of Trouble: In the developer worksheet for Loop Qualification Query, LQQ-10, NCI, the valid values are

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			shown as 02QB5.00A, 02QB5.01A, 02QB5.00C, and 02QB5.01C. These values are incorrect, and as a result the error "Invalid combination of MS, TOS, NC and NCI" is issued on an Unbundled ADSL LQQ in IMA EDI Release 9.0. Work Around: LQQ-10, NCI should be populated with 02QB9.00A, 02QB9.01A, 02QB9.00C, or 02QB9.01C. 02/27/02: HP: Changed the NCI code and received the expected results.
023	Transaction Test	Phase 1 Progression testing of the 9.0 Data Document using the scenarios for LQQ2, LQQ4 and LQQ6 did not return the expected responses.	02/04/02: HP submitted request and did not receive the expected response. Received the error "OSS Gateway: Error caught by data source Message[0] ERROR No information was found for this address." 02/07/02: Qwest: Advised that the query may not be valid. 02/08/02: HP: Corrected query and resubmitted. Received errors: "STATE required when TNADDRCKTIND is A" and "CALA or ZIP required". Both STATE and CALA were transmitted on the query. 02/08/02: Qwest: Indicated that the PO1 loops must follow the sequence outlined in the EDI Mapping Example. 02/08/02: HP: Updated map to move the PO1-ADSL loop to write after ADDRQ. Resent INQNUM 020208151764. Received the same error. 02/08/02: Qwest: Will continue to research. 02/11/02: Qwest: Notified HP that CR number 37384 has been opened to address this error. 02/12/02: Qwest: Notified HP that CR number 37384 will be deployed this evening and HP can test the transaction tomorrow. 02/13/02: HP: Retested (INQNUM=020213151780) and received expected response.

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
9024	Transaction Test	Phase 3 Progression testing of the 9.0 Data Document using the scenarios for LQQ3 and LQQ4 did not return the expected responses.	02/18/02: HP submitted request and received the expected response except that the values received for LLG do not match the data document. Per the EDI mapping example in Chapter 14 of the IMA 9.0 Disclosure on page 12, LLG is mapped to the MEA03 data field. The returned MEA03 value for the 5 LLG values was '6.6' and 4 each of '0' in the response. The SATE 9.04 Data Document incorrectly depicts the Gauge Code and Loop Length (which is mapped to MEA04 per the mapping example) as being the data values for LLG. The Gauge Code and Loop Length are not identified as data fields in Appendix A of the IMA 9.0 Disclosure. This is not a new error as it was present in the first transaction test and HP did not identify the error. 02/25/02: HP: HP has relooked at this issue. The Data Document indicates that an LLG = 17G0.0000kft. A value of 17 is not listed in the Data Dictionary. Since the LLG can repeat 5 times this may be an oversight in the Data Dictionary. The Data Document depicts the Measurement Value MEA03
9025	Transaction Test	Phase 1 Progression testing of the 9.0 Data Document using the scenarios for RLDQ7, RLDQ8, RLDQ19 and RLDQ23 did not return the expected responses.	02/04/02: HP submitted request and received the expected response. One item is worth noting. The Data Document indicates that a BLDG A will be returned. HP did not receive that in the response. 02/07/02: Qwest: Distributed the SATE Data Document 9.0 v05. 02/07/02: HP: Retested and received expected response. 02/08/02: Qwest: CR 36933 has been entered to return the BLDG data. This is scheduled to be deployed this weekend and to be available to test on Monday.
9026	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenario for TNAQ2 did not return the expected response.	02/01/02: HP submitted the transaction and received the expected response. One item is worth noting. The CUSTOMIND was a blank in the third phone number. This created a syntactically incorrect response from Qwest. The Business Rules indicate that acceptable values are

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			Y and blank. However the field, in EDI, is mapped to a PID08. The PID08 is an ID table, therefore a blank is not an acceptable response. The business rules indicate that the CUSTOMIND is returned if the TNRES is present. HP received the TNRES. The segment(s) in question are listed below. SLN|MIXED|3|A|1|EA SI|TI|RV|299-901-4570 PID|X||TI|CUSTOMIND|||SO-RSQ| 02/06/02: Qwest: Advised that the fix for this will be deployed on 02/07/2002 and this can be re-tested on 02/08/2002. 02/08/02: HP: Retested (INQNUM=020208151748) and received the same situation where the PID08 value returned a blank: PID|X||TI|CUSTOMIND|||SO-RSQ| SLN|MIXED|3|A|1|EA SI|TI|RV|299-901-6259 02/11/02: Qwest: Notified HP that the fix was deployed over the weekend. 02/
9027	Transaction Test	Phase 1 Regression testing of the 9.0 Data Document using the scenario for TNAQ3 did not return the expected response.	02/01/02: HP submitted the transaction and received the expected response. One item is worth noting. The Data Document indicates that one error message will be returned, HP received the one noted on the data document, and one additional one. The second error message was "OSS Gateway: Verify input. No available numbers satisfy all the valid input parameters No Telephone Numbers available for this query". 02/04/02: Qwest: This was fixed as part of the errors analysis that Qwest has performed in recent days. The data document to be published this evening contains the updated error messages, including the messages received for these transactions. 02/05/02: Qwest: Distributed SATE Data Document 9.0 v04 on the evening of 2/4/2002 that corrected this Data Document error.

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			02/07/02: HP: Retested and received the expected response.
9028		Phase 2 Regression testing of the 9.0 Data Document using the scenario for TNAQ3 did not return the expected response.	02/14/02: HP submitted query and received the expected error message, but also received the following error message. This message is not documented in Errors List: "TNAEASNUM 900«ERRMESG«Nearby telephone numbers (NTNUM),easy numbers (ECATEG),easy word numbers (EWORD), and consecutive blocks (CBLOCK)are mutually exclusive. Cannot request more than one of these types of numbers". The conflict with this error message is that the EDI mapping example on page 11 of chapter 9 of the IMA 9.0 Disclosure appears to require NTNUM to be mapped in order to transmit the value of ECATEG or EWORD. 02/25/02: Qwest: The SI segment where NTNUM, ECATEG, EDWORD and EJUST is horizontal SI arrangement. The order in how these fields come doesn't really matter. It doesn't force you to send the NTUNM in order to send ECATEG. For example, you can send the transactions this way SI|TI|RQ|ECATEG|ZZ|EWORD. This will be a valid transaction to send. 02/26/02: HP: The Disclosure Document does not indicate that the paired elements of the SI segment can be sent in any order. Since the TNNUM is not used if the ECATEG or EWORD is used, it may be better to depict them on separate SI segments. 02/26/02: HP: Corrected map, sent query and received the expected results.
9029	Transaction Test	Phase 1 - Regression testing of the 9.0 Data Document using the scenario for TNAQ4 did not return the expected response.	02/01/02: HP submitted the transaction and received the expected response. One item is worth noting. The Data Document indicates that one error message will be returned, HP received the one noted on the data document, and one additional one. The second error message was "OSS Gateway: System problem

Candidate Sequence Number	Domain	Candidate Issue Statement	Comments
			encountered. Call UHD/OSS No Telephone Numbers available for this query". 02/04/02: Qwest: This was fixed as part of the errors analysis that Qwest has performed in recent days. The data document to be published this evening contains the updated error messages, including the messages received for these transactions. 02/05/02: Qwest: Distributed SATE Data Document 9.0 v04 on the evening of 2/4/2002 that corrected this Data Document error. 02/07/02: HP retested and received the expected response.
9030	Transaction Test	Phase 1 Progression testing of the 9.0 Data Document using the scenario for UDLNP1 did not return the expected response.	02/05/02: HP submitted LSR with TID=151692 and received FATAL error "Could not check supplemental (Unknown product type)" 02/06/02: Qwest: Advised that the fix for this 860 problem is completed. 02/07/02: HP: Retested with TID=151712, ver=04. Requested and received the 855SU, 865FOC, 865JEOP and 865CN

For any 'Closed' candidate issues, HP has explained the reason for a candidate issue being closed above and in the Internal Issue Tracking Log.

IMA-EDI SATE VICKI Paths for the SATE,

Version 10.01

May 17, 2002

Qwest Communications, Inc.

IMA EDI VICKI Paths
for the Stand Alone Test Environment (SATE)
version 10.01

This document can be utilized for SATE release 8.0, 9.0 and 10.0 when testing post order transactions.

Date:
Friday, May 17, 2002

Prepared by:
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Abstract:

This document will assist CLECs, Third-Party Software Vendors and Service Bureaus in providing the necessary data needed to test software or implement the IMA EDI trading capabilities between their organization and Qwest. The information in this document is specific to the use of the IMA EDI interface to the Interconnect Mediated Access ordering systems and should not be construed as being applicable to other IMA EDI interfaces available from Qwest.

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Document Information

Document Owner

Qwest IMA EDI SATE Implementation Team

Document History

All revisions made to this document are listed here in chronological order.

Version	Date	Description
N/A	05/10/02	Draft Distribution
10.01	05/17/02	Initial Distribution

Overview

VICKI (Virtual Interconnect Center Knowledge Initiator) will allow a CLEC to submit a Local Service Request (LSR) in the Stand Alone Test Environment (SATE) and receive specific expected responses. The set of responses produced from chronological system events is known as a "Path". Paths are currently available for all SATE order transactions, except those listed in the Unsupported Product/Activity Combinations section of this document.

VICKI Path Document Release Management Process

An updated version of the VICKI Path Document for each currently supported SATE release will be posted to the Wholesale web site on the 15th of each month that does not have a scheduled release. A draft of the VICKI Path Document for a new release will be distributed to SATE Users five weeks before a major IMA release. An official release publication will occur four weeks prior to each major IMA release and the day of an IMA and SATE point release. If the 15th of the month is a weekend or holiday, the VICKI Path Document posting will occur on the previous business day. The VICKI Path Document will not be published 'out of cycle'. All CLEC impacting changes will be communicated in detail through a release notification. All CLEC impacting changes and fix dates will be included in the Change Summary of the VICKI Path Document for the next monthly publication.

VICKI Path Document Quality Assurance Process

Before each monthly posting, the VICKI Path Document will go through a Quality Assurance process to ensure the accuracy and appropriate function of the data. The System Test Team will test all SATE systemic changes that will impact the Document. All data-only updates to the Document will be reviewed by representatives of the individual SATE teams to ensure accuracy before it is published. In addition, a Performance Indicator Determination (PID) test is performed once a month to ensure that the VICKI Path Document and SATE systems are in sync.

VICKI Path Document Version Control

SATE supports all IMA releases simultaneously. The VICKI Path Document version numbers begin with the corresponding release being supported (8.XX), and the additional numbers indicate the new version of the Document (X.03) being released. A majority of the SATE changes that impact the VICKI Path Document are made for the current IMA release, and are changed retroactively in all other VICKI Path Document releases.

How to use this Document

Triggering a Path

To trigger a path listed in this document, a CLEC will submit an LSR for a product and activity, with the "REMARKS" field on the LSR form populated with the text shown in the "Remarks" column of the VICKI Path Document. To test supplemental responses, the SUP field must be populated as well. (Note: Any valid SATE LSR can be used with VICKI). The remarks text used to trigger the path must be surrounded by "[ ]" and must exactly match the text as shown in this document. For example, path 1 will appear as "[Test: Non-Fatal then Reject]". The path-triggering remarks can appear anywhere within the "REMARKS" field on the LSR form.

Each path includes a set of responses that a specific set of remarks will trigger. Each response is associated with a time delay interval, which indicates the time lapse between the initial LSR submission and the first response or between two subsequent responses. The time delay shown is calculated in SATE operational hours. Hours when the SATE system is not available for testing are not included in any time delay calculation. If the CLEC does not include path-triggering remarks on the LSR, the transaction will be processed without the generation of any automated post-order responses.

All paths that include a Jeopardy response will generate an automated Jeopardy notice. Jeopardy notices will be generated on the next occurring run cycle, either at 8:00am, 11:00am, 2:00pm and 5:00pm similar to production.

Types of Paths

Two types of paths are included in this document. The first are those with time delays conducive to testing, and have remarks that begin with "Test". The second are those with time delays that parallel production, and have

remarks that begin with "Prod". Qwest has based the paths, responses, and production time frames on actual production responses for similar LSRs. However, these responses and timeframes will be comparable to production but may not exactly match a similar LSR submitted to production due to the variability of the production environment. In production, response times can vary due to many factors including whether the transaction was processed manually or using flow through and levels of use of the system at the time of submission.

Available Automated Responses
In utilizing VICKI, automated responses available include FOCs, Status Updates, and Completions. If a desired path includes manually generated responses, such as a Jeopardy or Manual Reject, the response is still listed in this document, however, instead of a time delay, the phrase "Manually Generated" is shown. When a path ends in a manually generated response, the LSR will be included in a Qwest manual work queue to trigger the response to be sent to the CLEC.

Status Update Responses
Many paths include "Status Update" responses. To receive these responses, a CLEC must have the status update functionality active. If a CLEC does not receive Status Updates, the time between responses will include the time shown in the document for the status updates. For example, Response 3 of Path #45 is "Order Completed." This response is generated 22 hours after the FOC is sent and 30 minutes prior to the Completion. A CLEC who does not receive status updates will receive an FOC and 22 hours and 30 minutes later receive a Completion.

Supplementals
The SUP column in this document contains the supplemental type used for that path, which includes Cancel, Due Date Change and Other. Each VICKI path REMARKS field has been created to be used on either an 850 or an 860(SUP) transaction. For example, Path # 20 and #21 use the same REMARKS field text: "Test: FOC Reject". If this remarks text is placed on an 850 transaction, Path #20 would be used and an 855 response will be returned. However, if this remarks text is placed on a supplemental (860) transaction, Path #21 would be used

Response Detail

Due to the complexities of certain responses, the detail data on these transactions may not match the detail received on a production response for a similar transaction. The structure of the EDI response will mirror production. FOCs are provided with varying quantities of service orders. Also, with respect to the Service and Equipment detail of a Completion notice, VICKI is built to allow a CLEC to understand the EDI Map structure and content of a Completion. It does not return a Service and Equipment section specific to the CLEC's test LSR. If a CLEC desires a specific detail data in the Service and Equipment section to be returned, they can request it be added to VICKI via the Data Request Process.

Unsupported Product/Activity Combinations in VICKI

The following Product/Activity Combinations are not currently supported in VICKI, unless the path specifies "All Products". All unlisted activities for each of these products are supported by SATE.

- UNE-P POTS , ACT=W, Y & B
- UNE-P Centrex, All Activities except ACT=C (NOTE: Responses for supplemental LSRs are not supported for ACT=C)
- Centrex Plus/Centron, ACT=W
- Unbundled Loop, ACT=M
- Unbundled Distribution Loop, All Activities
- Unbundled Distribution Loop with Number Portabi[illegible], All Activities
- Unbundled Loop with Number Portability, All Activities[1]

For the above product/activity combinations, market demand is either non-existent or extremely minimal. Qwest will continue to monitor the production activity of these product/activity combinations and will add them to VICKI

[1] Any LSNP request with VICKI REMARKS will be placed into a manual work queue for manually processing of the desired response.

if activity increases. Additionally, a CLEC can use the Data Request Process to add any path necessary for their testing.

Product Abbreviations

Within the paths, product abbreviations are used to indicate the product. The abbreviations translate as follows:

- CEX = Centrex Plus and Centron
- LO = Listings Only
- LNP = Local Number Portability
- POTS = POTS
- SL = Shared Loop
- LS = Unbundled Loop
- UCEX = UNE-P Centrex Plus and UNE-P Centron
- UNE-P POTS = UNE-P POTS

IS

K	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
n-	All	Manual process: Time delay may vary	Manually generated 855 or 865 NON-FATAL	Manual process: Time delay may vary	Manually generated 855 or 865 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

K	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
n-	All	Manual process: Time delay may vary	Manually generated 855 or 865 NON-FATAL	Manual process: Time delay may vary	Manually generated 855 or 865 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

K	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
ect	All	Manual process: Time delay may vary	Manually generated 855 or 865 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

K	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
	All	Manual process: Time delay may vary	Manually generated 855 or 865 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

K	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
-	All	Manual process: Time delay may vary	Manually generated 855 or 865 NON-FATAL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	T
d n-Fatal	All	Manual process: Time delay may vary	Manually generated 855 or 865 NON-FATAL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
t ncel	I	Approx 1 min	865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
d ncel	I	Approx 1 min	865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
d ncel	I	Approx 1 hr	Manually generated 865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
Error ot	No	Approx 1 min	LSR Status Update "Error"	Manual process Time delay may vary	Manually generated 855 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
Error ot	No	Approx 15 mins	LSR Status Update "Error"	Manual process Time delay may vary	Manually generated 855 REJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
Error ot	No	Approx 1 min	LSR Status Update "Error"	Manual process Time delay may vary	Manually generated 855 NON-FATAL		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
d: Error n-Fatal	No	Approx: 15 mins	LSR Status Update: "Error"	Manual process: Time delay may vary	Manually generated 855 NON-FATAL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
:t ıble C	No	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 855 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
:t ıble C	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
d ıble C	No	Approx: 1 hr	855 FOC	Approx: 24 hrs	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 855 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	T
d. able C	No	Approx: 1 hr	855 FOC	Approx: 16 hrs	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 855 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
d: able C	2 or 3	Approx: 3 hrs	865 FOC	Approx: 34 hrs	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
d: able C	2 or 3	Approx: 1 hr	865 FOC	Approx: 16 hrs	Order Status Update: "HOLD"	Manual process: Time Delay may vary	Manually generated 865 FOC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
Error plete	No	Approx: 1 min	LSR Status Update "Error"	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update "Posted To Be Billed"	N/A	N/A	N/A	N/A	N/

ARK	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	Ti
plete	No	Approx: 1 min	LSR Status Update "Error"	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update "Order Completed"	Approx: 1 min	Order Status Update "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update "Posted To Be Billed"	Approx: 1 min	Order Status Update "Posted To Be Billed"	86

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	T
d: Error nplete	No	Approx: 45 mins	LSR Status Update: "Error"	Approx: 2 hrs	855 FOC	Approx: 40 hrs	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 15 mins	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
d: Error nplete	No	Approx: 1 hr	LSR Status Update: "Error"	Approx: 1 hr	855 FOC	Approx: 40 hrs	Order Status Update: "Order Completed"	Approx: 15 mins	Order Status Update: "Order Completed"	Approx: 15 mins	865 Completion	Approx: 15 mins	Order Status Update: "Posted To Be Billed"	Approx: 10 hrs	Order Status Update: "Posted To Be Billed"	N

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
t: FOC pardy	No	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	I

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7	
t: FOC pardy	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: FOC pardy	No	Approx: 1 hr	855 FOC	Approx: 22 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: FOC pardy	No	Approx: 1 hr	855 FOC	Approx: 34 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: FOC pardy	2 or 3	Approx: 3 hrs	865 FOC	Approx: 26 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: FOC pardy	2 or 3	Approx: 1 hr	865 FOC	Approx: 34 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
t: Hold pardy	No	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
t: Hold pardy	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Jeopardy"	: Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: Hold pardy	No	Approx: 1 hr	855 FOC	Approx: 26 hrs	Order Status Update: "Hold"	Approx: 30 mins	LSR Status Update: "Hold"	Approx: 2 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response
d: Hold pardy	No	Approx: 1 hr	855 FOC	Approx: 29 hrs	Order Status Update: "Hold"	Approx: 1 hr	LSR Status Update: "Hold"	Approx: 16 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Respons
d: Hold pardy	2 or 3	Approx: 3 hrs	865 FOC	Approx: 34 hrs	Order Status Update: "Hold"	Approx: 30 mins	LSR Status Update: "Hold"	Approx: 12 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Resp
d Hold pardy	2 or 3	Approx: 1 hr	865 FOC	Approx: 20 hrs	Order Status Update: "Hold"	Approx: 1 hr	LSR Status Update: "Hold"	Approx: 16 hrs	Order Status Update: "Jeopardy"	Time delay may vary	865 JEOPARDY	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Respons
t Hold nplete	No	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted to be Billed"	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Respon
t Hold nplete	No	Approx: 1 min	855 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order St Update "Posted Billed"

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
Hold plete	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted to be Billed"	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
Hold plete	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "Hold"	Approx: 1 min	LSR Status Update: "Hold"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted to be Billed"

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
Hold plete	No	Approx: 1hr	855 FOC	Approx: 30 mins	LSR Status Update: "Hold"	Approx: 22 hrs	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 15 mins	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
Hold plete	No	Approx: 1hr	855 FOC	Approx: 16 hrs	Order Status Update: "Hold"	Approx: 2 hrs	LSR Status Update: "Hold"	Approx: 16 hrs	Order Status Update: "Order Completed"	Approx: 1 hr	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 20 hrs	Order Status Update: "Posted To Be Billed"

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
d Hold nplete	2 or 3	Approx: 3 hrs	865 FOC	Approx: 34 hrs	Order Status Update: "Hold"	Approx: 15 mins	LSR Status Update: "Hold"	Approx: 22 hrs	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 3 hrs	Order Status Update: "Posted To Be Billed"	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
d Hold nplete	2 or 3	Approx: 1 hr	865 FOC	Approx: 16 hrs	Order Status Update: "Hold"	Approx: 2 hrs	LSR Status Update: "Hold"	Approx:16 hrs	Order Status Update: "Order Completed"	Approx: 1 hr	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 20 hrs	Order Status Update: "Posted To Be Billed"

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
:t nplete	No	Approx. 1 min	855 FOC	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
: nplete	No	Approx. 1 min	855 FOC	Approx. 1 min	Order Status Update: "Order Completed"	Approx. 1 min	Order Status Update: "Order Completed"	Approx. 1 min	865 Completion	Approx. 1 min	Order Status Update: "Posted To Be Billed"	Approx. 1 min	Order Status Update "Posted To Be Billed"	N/A	N/A

ARK	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
lete	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A	N/A	N/A

ARK S	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
plete	2 or 3	Approx: 1 min	865 FOC	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	Order Status Update: "Order Completed"	Approx: 1 min	865 Completion	Approx: 1 min	Order Status Update: "Posted To Be Billed"	Approx: 1 min	Order Status Update: "Posted To Be Billed"	N/A	N/A

IARK S	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
plete	No	Approx: 1 hr	855 FOC	Approx: 45 hrs	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 15 mins	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A	N/A	N/A

IARK S	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
plete	No	Approx: 1 hr	855 FOC	Approx: 40 hrs	Order Status Update: "Order Completed"	Approx: 1 hr	Order Status Update: "Order Completed"	Approx: 1 hr	865 Completion	Approx: 24 hrs	Order Status Update: "Posted To Be Billed"	Approx: 3 hrs	Order Status Update: "Posted To Be Billed"	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
plete	2 or 3	Approx: 15 mins	865 FOC	Approx: 8 hrs	Order Status Update: "Order Completed"	Approx: 30 mins	865 Completion	Approx: 15 mins	Order Status Update: "Posted To Be Billed"	N/A	N/A	N/A	N/A	N/A	N/A

MARKS	SUP	Time Delay 1	Response 1	Time Delay 2	Response 2	Time Delay 3	Response 3	Time Delay 4	Response 4	Time Delay 5	Response 5	Time Delay 6	Response 6	Time Delay 7	Response 7
plete	2 or 3	Approx: 1 hr	865 FOC	Approx: 40 hrs	Order Status Update "Order Completed"	Approx: 1 hr	Order Status Update: "Order Completed"	Approx:1 hr	865 Completion	Approx: 24 hrs	Order Status Update: "Posted To Be Billed"	Approx. 3 hrs	Order Status Update: "Posted To Be Billed"	N/A	N/A

APPENDIX A: CHANGE SUMMARY

Effective Date	PATH #	Column	Action	Description	Description II
				Cosmetic changes have been made to this document.	
05/20/02		VICKI Path Document Release Management Process	Add	An updated version of the VICKI Path Document for each currently supported SATE release will be posted to the Wholesale web site on the 15th of each month that does not have a scheduled release. A draft of the VICKI Path Document for a new release will be distributed to SATE Users five weeks before a major IMA release. An official release publication will occur four weeks prior to each major IMA release and the day of an IMA and SATE point release. If the 15th of the month is a weekend or holiday, the VICKI Path Document posting will occur on the previous business day. The VICKI Path Document will not be published 'out of cycle'. All CLEC impacting changes will be communicated in detail through a release notification. All CLEC impacting changes and fix dates will be included in the Change Summary of the VICKI Path Document for the next monthly publication.	

Effective Date	PATH #	Column	Action	Description	Description II
05/20/02		VICKI Path Document Quality Assurance Process	Add	Before each monthly posting, the VICKI Path Document will go through a Quality Assurance process to ensure the accuracy and appropriate function of the data. The System Test Team will test all SATE systemic changes that will impact the Document. All data-only updates to the Document will be reviewed by representatives of the individual SATE teams to ensure accuracy before it is published. In addition, a Performance Indicator Determination (PID) test is performed once a month to ensure that the VICKI Path Document and SATE systems are in sync.	
05/20/02		VICKI Path Document Version Control	Add	SATE supports all IMA releases simultaneously. The VICKI Path Document version numbers begin with the corresponding release being supported (**8**.XX), and the additional numbers indicate the new version of the Document (X.**03**) being released. A majority of the SATE changes that impact the VICKI Path Document are made for the current IMA release, and are changed retroactively in all other VICKI Path Document releases.	
05/20/02		Triggering a Path	Add	All paths that include a Jeopardy response will generate an automated Jeopardy notice. Jeopardy notices will be generated on the next occurring run cycle, either at 8:00am, 11:00am, 2:00pm and 5:00pm similar to production.	

Effective Date	PATH #	Column	Action	Description	Description II
Clarification		Supplementals	Change	T paths shown in this document with a SUP type of 2 or 3 assumes an FOC has already been sent on the LSR that is receiving the supplemental. When a supplemental transaction with a type of 2 or 3 is issued before an FOC has been received for the original request, the transactions sent by Qwest will be those of the non-SUP path with 855 transactions instead of 865. For example, using the "Test-FOC Jeopardy" path (Paths 29 and 30), if a supplemental type 2 request is issued after the FOC, path 30 will be triggered. If a supplemental type 2 request is issued prior to the FOC, path 29 will be triggered.	The SUP column in this document contains the supplemental type used for that path, which includes Cancel, Due Date Change and Other. Each VICKI path REMARKS field has been created to be used on either an 850 or an 860(SUP) transaction. For example, Path # 20 and #21 use the same REMARKS field text: "Test: FOC Reject". If this remarks text is placed on an 850 transaction, Path #20 would be used and an 855 response will be returned. However, if this remarks text is placed on a supplemental (860) transaction, Path #21 would be used
05/20/02		Unsupported Product/Activity Combinations in VICKI:	Add Footnote	Any LSNP request with VICKI REMARKS will be placed into a manual work queue for manually processing of the desired response.	
		Product Abbreviations	Change	• CEX = Centrex Plus and Centron • DL = Listings Only • LNP = Local Number Portability • POTS = POTS • SHL = Shared Loop • UBL = Unbundled Loop • UCEX = UNE-P Centrex Plus and UNE-P Centron • UNE-P POTS = UNE-P POTS	• CEX = Centrex Plus and Centron • LO = Listings Only • LNP = Local Number Portability • POTS = POTS • SL = Shared Loop • LS = Unbundled Loop • UCEX = UNE-P Centrex Plus and UNE-P Centron • UNE-P POTS = UNE-P POTS
Clarification	PATH #10	Product/Activity	Change	**POTS/All** **UBL/All** **CEX/All** **LNP/All** **UNE-P POTS/All**	**POTS/All** **LS/All** **CEX/All** **LNP/All** **UNE-P POTS/All**

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #11	Product/Activity	Change	P[illegible]S/All UBL/All CEX/All LNP/All UNE-P POTS/All	POTS/All LS/All CEX/All LNP/All UNE-P POTS/All
Clarification	PATH #12	Product/Activity	Change	POTS/All UBL/All CEX/All LNP/All UNE-P POTS/All	POTS/All LS/All CEX/All LNP/All UNE-P POTS/All
Clarification	PATH #13	Product/Activity	Change	POTS/All UBL/All CEX/All LNP/All UNE-P POTS/All	POTS/All LS/All CEX/All LNP/All UNE-P POTS/All
Clarification	PATH #14	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,V,T,L UBL/D,T,N,C,V LNP/Z,V SHL/C DL/R CEX/C,V UCEX/C UNE-P POTS /N,D,Z,C,T,L,V	POTS/All LS/D,T,N,C,V LNP/All SL/C LO/R CEX/C,V UCEX/C UNE-P POTS /N,D,Z,C,T,L,V
Clarification	PATH #15	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,V,T,L UBL/D,T,N,C,V LNP/Z,V SHL/C DL/R CEX/C,V UNE-P POTS /N,D,Z,C,T,L,V	POTS/All LS/D,T,N,C,V LNP/All SL/C LO/R CEX/C,V UNE-P POTS /N,D,Z,C,T,L,V
Clarification	PATH #16	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UCEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UCEX/C UNE-P POTS /N,D,C,L
Clarification	PATH #17	Product/Activity	Change	POTS/V,T SHL/C UBL/V CEX/V UNE-P POTS /V,Z,T	POTS/V,T SL/C LS/V CEX/V UNE-P POTS /V,Z,T

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #18	Product/Activity	Change	OTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS/N,D,C,L
Clarification	PATH #19	Product/Activity	Change	POTS/V,T SHL/C UBL/V CEX/V UNE-P POTS/V,Z,T	POTS/V,T SL/C LS/V CEX/V UNE-P POTS/V,Z,T
05/20/02	PATH #20		Remove	Entire Table	
05/20/02	PATH #21		Remove	Entire Table	
05/20/02	PATH #22		Remove	Entire Table	
05/20/02	PATH #23		Remove	Entire Table	
05/20/02	PATH #24		Remove	Entire Table	
Clarification		Path Heading	Change	PATH#25	PATH#20
Clarification	PATH #20	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V CEX/C UCEX/C DL/R UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All CEX/C UCEX/C LO/R UNE-P POTS/N,D,C,L
Clarification		Path Heading	Change	PATH#26	PATH#21
Clarification	PATH #21	Product/Activity	Change	POTS/V,T UBL/V UNE-P POTS/V,Z,T CEX/V	POTS/V,T LS/V UNE-P POTS/V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#27	PATH#22
Clarification	PATH #22	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V CEX/C UCEX/C DL/R UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All CEX/C UCEX/C LO/R UNE-P POTS/N,D,C,L
Clarification		Path Heading	Change	PATH#28	PATH#23
Clarification	PATH #23	Product/Activity	Change	POTS/V,T UBL/V UNE-P POTS/V,Z,T CEX/V	POTS/V,T LS/V UNE-P POTS/V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#29	PATH#24

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #24	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L,V,T UBL/D,T,N,C,V LNP/Z,V DL/R SHL/C CEX/C,V UCEX/C UNE-P POTS/N,D, C,L,V,Z,T	POTS/All LS/D,T,N,C,V LNP/All LO/R SL/C CEX/C,V UCEX/C UNE-P POTS/N,D, C,L,V,Z,T
Clarification	PATH#24	Time Delay 3	Change	Manual process: Time delay may vary	Time delay may vary
Clarification	PATH#24	Response3	Change	Manually generate 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#30	PATH#25
Clarification	PATH #25	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L,V,T UBL/D,T,N,C,V LNP/Z,VDL/R SHL/C CEX/C,V UNE-P POTS/N,D,C,L,V,Z,T	POTS/All LS/D,T,N,C,V LNP/All LO/R SL/C CEX/C,VI UNE-P POTS/N,D,C,L,V,Z,T
Clarification	PATH#25	Time Delay 3	Change	Manual process: Time delay may vary	Time delay may vary
Clarification	PATH#25	Response3	Change	Manually generate 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#31	PATH#26
Clarification	PATH #26	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS/N,D,C,L
05/20/02	PATH #26	Time Delay 3	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #26	Response 3	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#32	PATH#27
Clarification	PATH #27	Product/Activity	Change	POTS/V,T UBL/V SHL/C CEX/V UNE-P POTS/V,Z,T	POTS/V,T LS/V SL/C CEX/V UNE-P POTS/V,Z,T
05/20/02	PATH #27	Time Delay 3	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #27	Response 3	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#33	PATH#28

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #28	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS/N,D,C,L
05/20/02	PATH #28	Time Delay 3	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #28	Response 3	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#34	PATH#29
Clarification	PATH #29	Product/Activity	Change	POTS/V,T UBL/V CEX/V SHL/C UNE-P POTS/V,Z,T	POTS/V,T LS/V CEX/V SL/C UNE-P POTS/V,Z,T
05/20/02	PATH #29	Time Delay 3	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #29	Response 3	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#35	PATH#30
Clarification	PATH #30	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,V,T,L UBL/D,T,N,C LNP/Z,V SHL/C DL/R CEX/C,V UCEX/C UNE-P POTS/N,D,V,Z,C,T,L	POTS/All LS/D,T,N,C LNP/All SL/C LO/R CEX/C,V UCEX/C UNE-P POTS/N,D,V,Z,C,T,L
05/20/02	PATH #30	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #30	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#36	PATH#31
Clarification	PATH #31	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L,V,T UBL/D,T,N,C,V LNP/Z,V DL/R SHL/C CEX/C,V UNE-P POTS/N,D,C,L,V,Z,T	POTS/All LS/D,T,N,C,V LNP/All LO/R SL/C CEX/C,V UNE-P POTS/N,D,C,L,V,Z,T
05/20/02	PATH #31	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #31	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY

Effective Date	PATH #	Column	Action	Description	Description II
Clarification		Path Heading	Change	PATH#37	PATH#32
Clarification	PATH #32	Product/Activity	Change	PO /N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UCEX/C UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/Z,V LO/R CEX/C UCEX/C UNE-P POTS/N,D,C,L
05/20/02	PATH #32	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #32	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#38	PATH#33
Clarification	PATH #33	Product/Activity	Change	POTS/V,T UBL/V CEX/V SHL/C UNE-P POTS/V,Z,T	POTS/V,T LS/V CEX/V SL/C UNE-P POTS/V,Z,T
05/20/02	PATH #33	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #33	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#39	PATH#34
Clarification	PATH #34	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS/N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS/N,D,C,L
05/20/02	PATH #34	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #34	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#40	PATH#35
Clarification	PATH #35	Product/Activity	Change	POTS/V,T UBL/V CEX/V SHL/C UNE-P POTS/V,Z,T	POTS/V,T LS/V CEX/V SL/C UNE-P POTS/V,Z,T
05/20/02	PATH #35	Time Delay 5	Change	Manual process Time delay may vary	Time delay may vary
05/20/02	PATH #35	Response 5	Change	Manually generated 865 JEOPARDY	865 JEOPARDY
Clarification		Path Heading	Change	PATH#41	PATH#36

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #36	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UCEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UCEX/C UNE-P POTS /N,D,C,L
Clarification		Path Heading	Change	PATH#42	PATH#37
Clarification	PATH #37	Product/Activity	Change	POTS/V,T UBL/V SHL/C UNE-P POTS /V,Z,T CEX/V	POTS/V,T LS/V SL/C UNE-P POTS /V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#43	PATH#38
Clarification	PATH #38	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS /N,D,C,L
Clarification		Path Heading	Change	PATH#44	PATH#39
Clarification	PATH #39	Product/Activity	Change	POTS/V,T UBL/V SHL/C UNE-P POTS /V,Z,T CEX/V	POTS/V,T LS/V SL/C UNE-P POTS /V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#45	PATH#40
Clarification	PATH #40	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UCEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UCEX/C UNE-P POTS/N,D,C,L
Clarification		Path Heading	Change	PATH#46	PATH#41
Clarification	PATH #41	Product/Activity	Change	POTS/V,T SHL/C UBL/V CEX/V UNE-P POTS /V,T,Z	POTS/V,T SL/C LS/V CEX/V UNE-P POTS /V,T,Z
Clarification		Path Heading	Change	PATH#47	PATH#42

Effective Date	PATH #	Column	Action	Description	Description II
Clarification	PATH #42	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/all LO/R CEX/C UNE-P POTS/N,D,C,L
Clarification		Path Heading	Change	PATH#48	PATH#43
Clarification	PATH #43	Product/Activity	Change	POTS/V,T UBL/V SHL/C UNE-P POTS /V,Z,T CEX/V	POTS/V,T LS/V SL/C UNE-P POTS/V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#49	PATH#44
Clarification	PATH #44	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UCEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UCEX/C UNE-P POTS /N,D,C,L
Clarification		Path Heading	Change	PATH#50	PATH#45
Clarification	PATH #45	Product/Activity	Change	POTS/V,T UBL/V SHL/C UNE-P POTS /V,Z,T CEX/V	POTS/V,T LS/V SL/C UNE-P POTS /V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#51	PATH#46
Clarification	PATH #46	Product/Activity	Change	POTS/N,C,Z,W,B,Y,D,L UBL/D,T,N,C LNP/Z,V DL/R CEX/C UNE-P POTS /N,D,C,L	POTS/N,C,Z,W,B,Y,D,L LS/D,T,N,C LNP/All LO/R CEX/C UNE-P POTS /N,D,C,L
Clarification		Path Heading	Change	PATH#52	PATH#47
Clarification	PATH #47	Product/Activity	Change	POTS/V,T UBL/V SHL/C UNE-P POTS /V,Z,T CEX/V	POTS/V,T LS/V SL/C UNE-P POTS /V,Z,T CEX/V
Clarification		Path Heading	Change	PATH#53	PATH#48

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