



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 documentation²,

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 these 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