

**Maryland – Public Services Commission
District of Columbia – Public Services Commission
Commonwealth of Virginia - State Corporation Commission
West Virginia – Public Services Commission**

**Comparability Study
of
Verizon's MDVW OSS
Final Report**

Version 1.0

Submitted by:



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Verizon Wholesale OSS Comparability Study for the MDVW Jurisdictions

Purpose of this Document

The Public Services Commission of the District of Columbia (DC-PSC) in its order #11712 determined that an independent, third party test of Verizon-DC's Operations Support Systems (OSS) should be undertaken in two stages; the first stage to determine the extent of similarity between the District's and Virginia's OSS and hence the need for District-specific testing and the second stage to execute such testing. Previously, the Virginia State Corporation Commission (VA-SCC) had drafted and approved a Master Test Plan (MTP) for a full-scale third party test of the Verizon OSS serving Competitive Local Exchange Carriers (CLECs) in Virginia. The logic of the DC-PSC order is based, in part, on Verizon's assertion that the OSS they use are common to Virginia (VA), Maryland (MD), West Virginia (WV), and the District of Columbia (DC). In fact, these jurisdictions were served before 1984 by a single operating telephone company, Chesapeake and Potomac Telephone, one of the predecessor companies to Verizon.

In order to "explore the effectiveness of a multi-jurisdictional OSS testing effort"¹, the DC-PSC also sought the participation of the Maryland Public Services Commission (MD-PSC) and the West Virginia Public Services Commission (WV-PSC) in a single study assessing the comparability of the OSS serving the four jurisdictions. Representatives from the DC-PSC, the MD-PSC, the VA-SCC and the WV-PSC met on 10/12/2000 with representatives from Verizon and KPMG Consulting, Inc. (KCI). The commission representatives expressed interest in exploring combined testing where feasible and appropriate as long as it would not impact the Virginia test schedule.

To assist the commissions in determining the extent to which the results of the Virginia test may be considered by each jurisdiction and thus how much additional testing might be required, the commissions requested KCI to draft a Project Plan for a Comparability Study across Maryland, the District of Columbia, Virginia, and West Virginia (MDVW) using Virginia as the basis of comparison. The VA-SCC took the lead as Project Administrator of this work. Using the Virginia MTP as a framework, KCI developed a project plan, which was reviewed and approved by representatives from the four commissions. This plan called for an analysis of presumed similarities and differences based on information gathered by KCI during interviews of Verizon personnel and reviews of Verizon documentation. The current document reports the results of this analysis.

Structure of the Virginia Master Test Plan

The Virginia Master Test Plan specifies that the areas subject to testing exist in four domains that correspond to the four respective business functions that comprise the Verizon/CLEC relationship:

- Pre-Order, Order and Provisioning
- Maintenance and Repair
- Billing
- Relationship Management and Infrastructure

The domains are useful in defining the areas to be tested and the specific tests to be conducted.

¹ Order No. 11712, Public Service Commission of the District of Columbia, June 14,2000

Pre-Order, Order and Provisioning (POP) Domain

This domain is comprised of the systems, processes and other operational elements associated with Verizon's support for Pre-Ordering, Ordering and Provisioning activities for wholesale services and unbundled network elements.

Maintenance and Repair Domain (M&R)

This domain is comprised of the systems, processes and other operational elements associated with Verizon's support for Wholesale Maintenance and Repair activities.

Billing Domain

This domain is comprised of the systems, processes and other operational elements associated with Verizon's support for Wholesale Billing and transfer of customer usage data to the CLECs.

Relationship Management & Infrastructure Domain (RMI)

This domain is comprised of the systems, processes and other operational elements associated with Verizon's establishment and maintenance of business relationships with the CLECs.

Tests in the POP, M&R and Billing domains are defined to evaluate functionality, procedures and management practices. Further, these domains test compliance with prescribed measurements, which can form the basis for comparing these operational areas with parallel systems and processes supporting Verizon's retail operations.

Test Families

The areas subject to testing have been organized into three test families that are composed of tests that require similar methods of evaluation. The three test families are:

- Performance Metrics Review
- Processes and Procedures Review
- Transaction Verification and Validation

These three test families are useful in organizing the areas to be tested and the specific tests to be conducted. The Performance Metrics Review (PMR) test family reviews the data collection and reporting functions performed by Verizon-VA, while the Processes and Procedures Review (PPR) test family reviews Verizon-VA's wholesale business processes and management practices. The third test family, Transaction Verification and Validation (TVV) is comprised of transaction-based tests.

Within each of these test families, specific test targets have been identified for testing. The POP, Billing and M&R domains will be addressed in each of the test families. RMI will be addressed completely within the PPR test family. The relationship between the test families and test domains is shown below.

Table 1: Domain/Test Family Matrix

	POP	Billing	M&R	RMI
PMR	X	X	X	
PPR	X	X	X	X
TVV	X	X	X	

In all there are 32 specific tests to be performed, including 5 PMR tests, 18 PPR tests, and 9 TVV tests. The MDVW Comparability Study was performed separately for each of these 32 tests.

MDVW Comparability Study

Verizon proposed and the Project Administrator from the VA-SCC determined that the scope of the study would be to examine comparability among the OSS in the four jurisdictions contingent upon the introduction of a new Verizon system, known as expressTRAK, which is currently being implemented in the MDVW jurisdictions. Any OSS element being replaced as part of the expressTRAK implementation was not evaluated and no conclusions have been made by KCI as to the comparability of these replaced elements, either between jurisdictions or to expressTRAK.

ExpressTRAK is Verizon's new customer care, billing and ordering system. It is replacing the current billing system, the Customer Record Information System (CRIS), and associated systems that process service orders and provide certain pre-ordering functions. The deployment of expressTRAK into the production environment is intended to standardize the ordering and billing processes, formats and account structure throughout Verizon's territory with an initial emphasis in the MDVW region. It will provide the same functionality for both Retail and Wholesale lines of business.

The ordering of products and services from Verizon is anticipated to become more consistent through a standard, smaller set of Universal Service Order Codes (USOCs). Internal Verizon "processes associated with expressTRAK are being re-engineered to eliminate certain billing errors such as Post Completion Discrepancies (PCD)"². Additionally, a new bill format is being introduced.

The implementation of expressTRAK is expected to have some impact on the following functions:

Table 2: expressTRAK Implementation Impacts

Domain	Function
Pre-Order	Customer Service Record Request
	Directory Listing
	Service Order Inquiry
	Product & Service Availability
Order	Local Service Request
	Products
	FlowThrough
	Confirmations
	Completions
Provisioning	none
Billing	Wholesale Bills
Repair & Maintenance	none
Relationship Management & Infrastructure	Interface Development

Between November 2000 and February 2001, KCI collected information from Verizon on the systems, interfaces, processes, metrics and personnel performing the OSS functions in the MDVW region. KCI then assessed the level of similarity through a series of structured reviews of:

- System Architecture diagrams
- Documentation

² expressTRAK CLEC Specifications, Verizon, version 07/31/2000

- Interviews of Verizon personnel
- Workshops
- Methods & Procedures

Based upon an examination of this information, KCI placed each of the 32 specific tests into four categories according to whether, in the professional judgment of KCI, the OSS involved in each test met the following criteria:

Table 3: Comparability Category Definitions

	Category Definition
Category 1	The systems, interfaces, and processes are presumed to be identical to Virginia. “Identical” means that the same systems, interfaces, processes, procedures, metrics, and personnel are used for the jurisdiction. For this category, KCI believes that the Virginia test results should be applicable to other MVDW jurisdictions subject to a verification at the time that these results are used that the systems, processes, procedures, metrics, or personnel have not materially changed.
Category 2	The systems, interfaces, and processes have significant similarity to those in Virginia. Significant similarity, as used for classification purposes, means “related in appearance or nature; alike though not identical.” For this category, KCI believes that the Virginia test results should be applicable to other MDVW jurisdictions.
Category 3	The systems, interfaces, and processes have some significant differences from those in Virginia. For this category, KCI believes that the Virginia test results might not be applicable to other MVDW jurisdictions.
Category 4	Similarities between the systems, interfaces, and processes can not sufficiently be assessed at this time. For this category, KCI believes that another assessment should be performed at a later date when additional details are available.

Two aspects of the commonality were examined for this evaluation. These were:

- **Functionality** – the degree to which there are differences in functionality between the OSS implementation in each of the jurisdictions. An example of a Functionality impact might be different product or service offerings resulting in additional POP order types that will need execution as well as additional bill types to evaluate.
- **Implementation** – the functionality (same or different) under examination in a jurisdiction is provided or supported by different systems, methods, procedures or personnel than in Virginia. An example of an Implementation impact might be that different metrics reporting systems are used across the MDVW jurisdictions, resulting in the need to examine additional application programs.

Based on the above definitions and analysis considerations, the comparability categories for each of the 32 specific tests examined are shown in the following table.

Table 4: Comparability Rating between VA and DC-MD-WV

	Category			VA MTP Cross-reference
	DC	MD	WV	
Pre-Order, Order, Provisioning				
POP Functional Evaluation	2/3	2/3	2	TVV1
POP Volume Performance	2	2	2	TVV2
Order "Flow-Through" Evaluation	1	1	1	TVV3
Provisioning Verification & Validation	2	2	2	TVV4
POP Manual Order Process	2	2	1	PPR8
POP Work Center Support	2	2	1	PPR9
Provisioning Process Parity	2	2	2	PPR10
Provisioning Coordination Process	1	1	1	PPR11
Billing				
Billing Work Center/Help Desk Support	1	1	1	PPR12
Daily Usage Production & Distribution	1	1	1	PPR13
Bill Production and Distribution	1	1	1	PPR14
Billing Functional Usage Evaluation	1	1	1	TVV8
Functional Carrier Bill Evaluation	2	2	2	TVV9
Maintenance and Repair				
M&R RETAS Functional Evaluation	1	1	1	TVV5
M&R RETAS Performance Evaluation	2	2	2	TVV6
End-to-End Trouble Report Processing	2	2	2	TVV7
End-to-End M&R Process	2	2	2	PPR15
M&R Work Center Support	1	1	1	PPR16
M&R Coordination	2	2	2	PPR17
Network Surveillance Support	1	1	1	PPR18
Relationship Management and Infrastructure				
Change Management Practices	1	1	1	PPR1
Account Establishment and Management	1	1	1	PPR2
System Administration Help Desk	1	1	1	PPR3
CLEC Training	1	1	1	PPR4
Interface Development	2	2	2	PPR5
Forecasting Development	1	1	1	PPR6
Network Design Request, Collocation and Interconnection Planning	2	2	2	PPR7
Metrics				
Metrics Standards and Definitions	4	4	4	PMR1
Data Collection and Storage	1	1	1	PMR2
Metrics Calculation and Reporting	4	4	4	PMR3
Metrics Data Filtering and Integrity	1	1	1	PMR4
Metrics Change Management	1	1	1	PMR5

Analysis Limitations and Other Considerations

As agreed in the original project plan, the scope of this investigation was to base the results largely on information supplied by Verizon to KCI in the form of diagrams, organizational charts, documents, and interviews of Verizon personnel. Although a limited amount of verification of the information provided was performed, the project was never intended to represent a full test of OSS comparability among the four jurisdictions. Thus, KCI has made no attempt to conduct any transaction or full process level testing to validate the information. The ratings are based solely upon the professional judgment of KCI after a thorough review of the information provided. Therefore, each commission must take into consideration the source of and level of verification performed on the information used in any decision that might be based upon this report.

Furthermore, it is important to note that the information from Verizon upon which this analysis is largely based is for an OSS environment that is evolving. Therefore, at the direction of the Project Administrator, KCI only examined an expressTRAK-based OSS environment. Any OSS element being replaced as part of the expressTRAK implementation was not evaluated and no conclusions can be made by KCI as to the comparability of these replaced elements, either between jurisdictions or to expressTRAK. Since expressTRAK has not yet been fully implemented, the analysis of any function impacted by expressTRAK was based entirely on representations and assertions made by Verizon. As a result, it is possible that the extent of comparability presented in this report might be different from what is currently expected once expressTRAK has been fully implemented across the MDVW jurisdictions.

In addition, this analysis is based on the current understanding of the state of the OSS systems across the four jurisdictions contingent upon the full implementation of expressTRAK. It is always possible that in the future the systems could evolve from this state such that the categorization is no longer valid. A change in categorization could happen in one of two ways: (1) there has been or soon will be a change in systems or processes for one or more of the MDVW jurisdictions but not for all, or (2) there has been or soon will be a change in systems or process that affects all MDVW jurisdictions but the change occurs after the VA OSS test has been completed.

Finally, this study was conducted prior to any testing associated with the full-scale evaluation of the VA OSS. As such, KCI has not had the opportunity to test the OSS being used as the 'benchmark' for this study. This may affect the certainty of the conclusions that can be drawn from the study.

For these reasons, the DC-PSC, the MD-PSC, and the WV-PSC must consider the limitations and considerations presented in all decisions concerning the option to rely on VA OSS test results for the components that appear substantially similar.

Pre-Order, Order, Provisioning — Commonality Analysis Detail

TVV1 — POP Functional Evaluation

VA MTP Test Description

The POP Functional Evaluation is a comprehensive review of all of the functional elements of pre-ordering, ordering and provisioning, the achievement of the prescribed measures and an analysis of performance in comparison to Verizon-VA's Retail system. The test will be performed via live transactions submitted over the generally available interfaces; both an application-to-application interface based on Electronic Data Interface (EDI) and an internet enabled, web-based Graphical User Interface (Web GUI). Where appropriate, manual transactions will be submitted as well.

Application-to-application interfaces will be tested through transactions generated via a Test Transaction Generator (TTG). KCI will also use the CLEC Test Environment (CTE) as part of the establishment of its electronic interfaces with Verizon-VA. Data from this process will be used in the Interface Development Process and Procedures Review Test (PPR5). The Web GUI will be tested through transactions entered directly through Verizon-VA's Web GUI interface. The TTG will capture and store all information required to produce the output reports.

The POP Functional Evaluation will look at an end-to-end view of the pre-ordering through provisioning process. It will include a mix of stand-alone pre-ordering and ordering transactions, along with pre-order transactions followed by orders, supplements and cancels. KCI will collect data on transaction submissions and responses and on provisioning activities. Where possible and appropriate, this information will be collected and maintained electronically. Both Access Service Request (ASR) and Local Service Request (LSR) orders will be tested. Planned errors as well as error free transactions will be tested. Not all orders will go through the physical provisioning process. Some will be future dated and others will be canceled before provisioning activities commence. The verification and validation of the provisioning activities will be performed in the Provisioning Verification and Validation test (TVV4).

As part of the POP Functional Evaluation, KCI will also seek qualitative input and quantitative data on the "real world" experience of CLECs operating in Virginia. CLECs willing to participate in this test will be interviewed and their experiences will be incorporated into the test results after validation by KCI. In addition, for some types of transactions, involvement will be sought from willing CLECs to participate in some aspects of the live transaction testing. This will be done for two principal purposes.

First, CLEC participation will be important for complex orders that cannot be simulated adequately in the test environment. Examples include complex facilities-based orders and orders, like those for unbundled loops with Local Number Portability (LNP), which require an actual CLEC switch to fully complete. Second, it is important to attempt to incorporate information to help control for "experiment bias" of the results. Therefore, KCI will ask CLECs for data that can be validated on live orders that replicate those sent over the test systems. As appropriate, some test orders may be sent over CLEC systems.

Of course, successful completion of all of these aspects of the test requires active participation of one or more CLECs. However, CLEC participation is voluntary and the scope of that participation is up to each individual CLEC.

Summary of Analysis

KCI examined the systems, interfaces, processes, procedures, metrics and personnel used by VA OSS to assess the level of similarity across the MDVW jurisdictions. This examination was conducted via four separate interviews with Verizon personnel (conducted on 12/11/00, 12/14/00, 12/18/00, and 01/24/01) as

well as review of system architecture diagrams and the documentation of Methods and Procedures (M&Ps) employed by Verizon-VA. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. Based on information obtained during this evaluation, KCI understands that with the complete and successful implementation of expressTRAK, the pre-ordering, ordering, and provisioning systems used by Verizon-VA will be identical to those used by the remaining MDVW jurisdictions. Furthermore, KCI understands that the Regional CLEC Coordination Center (RCCC) is responsible for the provisioning of the orders. They provide additional support to the Telecom Industry Services Operations Center (TISOC) facilities. For example, should an order "pass through" the TISOC and be sent to the Provisioning Group with an undetected error, the RCCC would review the order and contact the TISOC about the error. The TISOC would be responsible for contacting the individual responsible for initiating the order to correct the error. The RCCC is a regional center for Verizon-South (MD, VA, WV, DC, DE, NJ and PA), that is, the MDVW jurisdictions plus Delaware, New Jersey, and Pennsylvania. However, differences in processes and personnel occur for ordering transactions requiring manual handling.

Pre-ordering

CLECs can submit pre-ordering queries to Verizon via three interfaces: the Web GUI, EDI or via CORBA³. These transactions are routed to Verizon's gateway systems, located in Freehold, NJ. At that facility queries are directed to the appropriate down-stream system for processing. The following table shows each pre-order processing system and the queries for which it is responsible:

Table 5: Pre-Order Systems

System	Pre-Order Queries
WFA	<ul style="list-style-type: none"> ■ Installation Status Inquiry
BEACON/SOBER	<ul style="list-style-type: none"> ■ Directory Listing
PHOENIX	<ul style="list-style-type: none"> ■ ISDN Loop Qualification – Basic ■ ISDN Loop Qualification – Extended
LiveWire	<ul style="list-style-type: none"> ■ Address Validation ■ TN Selection ■ TN Reservation ■ Product and Service Availability ■ Due Date Availability ■ Reservation Maintenance ■ DSL Loop Qualification
expressTRAK	<ul style="list-style-type: none"> ■ Non-Parsed Customer Service Record ■ Parsed Customer Service Record ■ Service Order Inquiry

All of the pre-ordering processes are 100% mechanized and use the same processing systems and subsystems regardless of jurisdiction. Data located in the expressTRAK data repository are not segregated by jurisdiction or geography. However, telephone number (TN) and address data are stored in databases that are segregated by LATA within the LiveWire system. Thus, there is opportunity for some variance in response times and system performance based on the multiple data storage facilities being queried with each pre-order, although there is no evidence that this should vary significantly from jurisdiction to jurisdiction. Given this, KCI believes that pre-ordering should be placed in category 2.

³ the CORBA interface will not be tested in the VA OSS test and is currently in limited use by AT&T

Ordering

CLECs submit LSRs to Verizon via two possible interfaces: the Web GUI or EDI. According to the Verizon-South Order Process Flow, these transactions are routed to Verizon's gateway systems, located in Freehold, NJ. At that facility, Verizon's "Request Manager" system receives the information and transmits it to the Request Broker system. From Request Broker, a service order is then generated and submitted to the expressTRAK system, located at the Freehold, NJ data center. ExpressTRAK updates the customer's account and sends signals back through Request Broker instructing Request Manager to generate acknowledgements and confirmations.

If the request is a non-flow-through order, the LSR "falls out" upon reaching Request Broker, where it is assigned to the appropriate TISOC for manual handling. The TISOC located in Silver Spring, MD currently handles all manual Platform orders for all MDVW jurisdictions, as well as all Resale and Loop orders for Maryland and the District of Columbia. In addition, the Wilkinsburg, PA facility assists with processing platform orders. The Fairview Park, VA TISOC processes all manual Resale and Loop Service Requests for Virginia and West Virginia. All digital service requests, including Digital Subscriber Line (DSL) and line sharing, will be processed at a new TISOC facility in Chesapeake, VA. This facility opened in August, 2000 and is currently processing transactions. When the workload at these facilities reaches its maximum, Verizon has additional facilities, such as the Lexus Center in New York City and the facility located in Langhorne, PA, that are designated to handle the overflow of work.

Table 6: MDVW TISOC Support by Product

Product	MD	DC	VA	VW
Resale	Silver Spring MD	Silver Spring MD	Fairview Park VA	Fairview Park VA
UNE-P	Silver Spring MD	Silver Spring MD	Silver Spring MD	Silver Spring MD
	Wilkinsburg PA	Wilkinsburg PA	Wilkinsburg PA	Wilkinsburg PA
Loop	Silver Spring MD	Silver Spring MD	Fairview Park VA	Fairview Park VA
DSL	Chesapeake VA	Chesapeake VA	Chesapeake VA	Chesapeake VA
DSL Overflow	Lexus Center NY	Lexus Center NY	Lexus Center NY	Lexus Center NY
Overflow (all order types)	Langhorne PA	Langhorne PA	Langhorne PA	Langhorne PA

As shown above in Table 6, Resale and Loop orders are processed by different TISOCs depending upon jurisdiction. Verizon has asserted that both TISOCs follow the same business practices and procedures. However, the implementation of those practices and procedures may be different. Managers at each facility implement high level procedures in different ways, leading to potential variances. Based upon interviews with representatives from Verizon's TISOCs (conducted on 12/14/00 and 12/18/00), KCI determined that the two centers do have distinct detailed operating procedures. The Fairview Park TISOC has product specific teams and an independent call center, while Silver Spring facility uses a system where customer service representatives can work on any product that he/she is trained on. Additionally, the Fairview Park TISOC has a dedicated call center, while all representatives at the Silver Spring facility are required to answer CLEC

calls. The TISOCs also manage work-flow differently. The CLEC experience in dealing with one of the facilities might not be exactly replicated at the other.

In an interview on 01/24/01, Verizon disclosed to KCI their plans to align their TISOCs along product lines, meaning each center will process one particular order type. At this time, Verizon has not determined a time frame for this realignment, nor do they have an exact blueprint of this reorganization. However, Verizon has stated that they wish for this new structure to be in effect prior to the start of the Virginia trial.

KCI has examined available products in the various MDVW jurisdictions. With the exception of a few jurisdiction-specific optional calling plans, the available products are identical. The table contained in the *Verizon Resale handbook, Vol. III, 2.5 Option Calling Plans: Verizon-South*⁴ shows calling plans available in some, but not all of the MDVW jurisdictions (Note: DC is not included in the Resale handbook accessed on the Verizon web page).

The following table depicts KCI's assessment on a product line basis of the similarities in pre-order and order processing to Verizon-VA. These conclusions were reached after conducting interviews with Verizon staff and reviewing documentation. With the exception of Resale flow-through, KCI has concluded that all flow-through order types are the same within the MDVW jurisdictions. Because of the small differences that will arise from the different availability of optional calling plans, Resale flow-through ordering will be slightly different among the jurisdictions and therefore is placed in category 2. However, all non-flow-through Resale and Loop orders in MD and DC are considered to be a category 3 because differences may arise in the manual handling of these orders, since the applicable TISOC facilities are different from those used for VA and WV. It should be noted that if the proposed Verizon implementation of a realignment of TISOCs by product type does occur, it might be possible to reclassify Loop and UNE-P non-flow-through orders for MD and DC into category 2.

Table 7: TVV1 Cross Jurisdictional Categorization

	WV	DC	MD
UNE-P (flow-through)	1	1	1
UNE-P (non-flow-through)	1	1	1
Loop (flow-through)	1	1	1
Loop (non-flow-through)	1	3	3
Resale (flow-through) ⁵	2	2	2
Resale (non-flow-through)	1	3	3
DSL	1	1	1
Pre-orders ⁶	2	2	2

In summary, after conducting interviews with Verizon personnel and reviewing documentation provided, KCI determined that the systems/interfaces and the documented methods and procedures are the same across the MDVW region. However, KCI has also determined that differences may arise in the personnel, facilities and products/services (i.e. Optional Calling Plans). Based on these considerations, this test is placed in category 2

⁴ To access this information electronically, visit:

http://www.bellatlantic.com/wholesale/html/handbooks/resale/volume_3/r3s2_5.htm

⁵ Service packages are available in one jurisdiction but not another.

⁶ Limited retesting of Address Validation, TN Selection, TN Reservation, Product and Service availability, Due Date Availability, Reservation Maintenance, XDSL Loop Qualification may be warranted.

for WV.⁷ For DC and MD, the test is placed in category 2 for all product types except Loop and Resale non-flow-through transactions. These transactions are placed in category 3 because they are handled in a different TISOC.

TVV2 — POP Volume Performance Tests

VA MTP Test Description

The Volume Performance Test will identify whether a significantly higher capacity of orders can be correctly processed within a given time frame, at projected future transaction volumes. The Volume Performance Test will include application-to-application interfaces and the Verizon-VA systems and processes for responding to pre-ordering queries and for initial processing of orders. There will be three parts to the test: 1) a “normal volume” test using anticipated transaction volumes based on level of demand projections that are reasonably foreseeable in a competitive market, 2) a “peak” test and 3) a “stress” test. The peak test will be conducted using transaction volumes that will start at 125% (1.25 times) of the volumes identified in the “normal” volume portion of this test. These volumes may be scaled up to as much as, but not to exceed, 150% (1.5 times) of the normal volumes during the implementation of this portion of the test. The stress test will be a progressive test that begins using transaction volumes that are 150% of the “normal” volumes. This volume will be scaled up during the implementation of the test to as much as, but not exceeding 250% (2.5 times) of the “normal” volume transactions.

The Volume Performance Test will look at the performance of Verizon-VA’s pre-ordering and ordering systems and processes from the submission of queries, to the creation of internal service orders and the return of an order confirmation. The orders submitted in the Volume Performance Test will not go through the physical provisioning process. The test will include a mix of stand-alone pre-ordering and ordering transactions. Included in this mix will be planned errors, both business rules errors and flow-through dropout errors. Transactions will be submitted using the generally available application-to-application interfaces (e.g., EDI). Although most of the transactions submitted to Verizon-VA as part of this test will be designed to flow-through, transactions that fall out to the TISOC will be identified to KCI.

While transactions will be submitted throughout the entire transaction test period as part of the POP Functional Evaluation, the volume tests will only run on certain days during the testing period. There will be two “normal volume” days of testing. There will be one day for a “peak” test. There will be one 4-hour “stress” test. All the attributes and activities that apply to the POP Functional Evaluation for pre-ordering and ordering also apply to this test.

Summary of Analysis

KCI conducted interviews and reviewed Verizon documentation to evaluate the similarities across the MDVW region. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. Based on this information, KCI understands that, with the complete and successful implementation of expressTRAK, the preordering and ordering systems used for Verizon-VA will be those used by the remaining MDVW jurisdictions. Furthermore, CLECs will use the same interfaces and information gateways to access Verizon’s systems for all MDVW jurisdictions. KCI also understands that the volume trial in Virginia will be based upon forecasts of ordering and preordering transactions across all of the Verizon states.

⁷ As the front end systems, back end systems, and manual ordering processes are identical in Virginia and West Virginia, an isolated assessment between these two states would likely result in the ordering portion of this test being placed in category 1.

CLECs submit LSRs and pre-service orders to Verizon via multiple interfaces. These transactions are routed to Verizon's gateway systems, located in Fairland, MD. The process flow for the volume orders and pre-orders, once they reach the gateway system, is described in Summary of Analysis for TVV1. As indicated there, flow-through orders follow an identical route for all four jurisdictions up to the point at which a service order is created. Furthermore, volume testing in Virginia will be restricted to flow-through orders.

Since the same systems and subsystems used to process order and pre-order transactions to be examined as part of the Virginia volume test service the entire MDVW footprint, KCI believes that TVV2 for ordering alone could be placed in category 1. However, as indicated in the TVV1 discussion above, there are likely to be small differences in responsiveness for processing preordering transactions among the jurisdictions, requiring a category 2 for preordering. Nevertheless, since the numbers of orders and preorders submitted for Virginia volume test are based upon forecasts for all of the Verizon footprint, the number of volume transactions should be directly applicable to the others states in the MDVW region. Based on these considerations, this test is placed into category 2.

TVV3 — Order “Flow-Through” Evaluation

VA MTP Test Description

The Order “Flow Through” Evaluation tests the ability of orders to flow through from the CLEC through the interface into the Verizon-VA ordering systems without any human intervention. Verizon-VA will update the list of “flow through” ordering scenarios and USOC “flow through” indicators during the testing period if changes in the Verizon-VA business rules or systems warrant. Changes to the list will be incorporated into the test. This test will be conducted as a part of the POP Functional Evaluation (TVV1).

The order transactions that will be submitted as part of TVV1 will be monitored to determine their flow-through status.

Summary of Analysis

To evaluate Flow Through similarities within the MDVW region, KCI conducted interviews with Verizon personnel and reviewed documentation. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. The Order Flow Through Evaluation analyzes those orders that go Level 5⁸ or flow through Verizon systems with no manual intervention. KCI understands that the ordering systems used by Verizon to process such transactions in VA are identical to those used in DC, MD, and WV up to the point where the internal Verizon service orders are created⁹.

The Verizon Order Business Rules are identical across the MDVW jurisdictions with the implementation of expressTRAK. Verizon has published a detailed list of “generic flow-through order scenarios” on its web site at: <http://www.bell-atl.com/wholesale/html/pdfs/VZSOFT120100W.pdf>.

This list of scenarios is applicable to all four jurisdictions. CLECs submitting order transactions into the expressTRAK system will use a single consolidated USOC list to identify particular order types and billing codes. Based on this information, KCI expects the same results from each state within the MDVW region. Since flow-through orders require no manual handling, personnel and facilities were not applicable to this evaluation. Based on these considerations, this test is placed in category 1.

⁸ Level 5 describes a Local Service Request that results in an electronically generated firm order and requires no human intervention prior to provisioning.

⁹ See TVV1 results for more information.

TVV4 — Provisioning Verification & Validation

VA MTP Test Description

The Provisioning Verification and Validation test is a comprehensive review of Verizon-VA's ability to complete accurately and expeditiously the provisioning of CLEC orders. This test will be conducted as a part of the POP functional testing (TVV1). While most kinds of orders will be included, the test will concentrate on those types of orders that require physical provisioning.

This test will involve verification that orders submitted have been properly provisioned and that the provisioning has been completed on time. Included in the test will be orders that have been supplemented and canceled, as well as those submitted with anticipated errors, to test the impact on provisioning.

For some orders, particularly the more complex ones, the involvement of CLECs operating in Virginia will be solicited to volunteer use of their facilities to enhance the "real world" nature of the test. The CLECs will also be asked to provide data on their experiences with provisioning, after verification and validation by KCI.

Summary of Analysis

A total of ten interviews were conducted with nine Verizon participants on 11/30/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the Provisioning Verification & Validation (TVV4) evaluation. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. TVV4 subtests span three major categories that must be addressed separately to evaluate the provisioning of CLEC orders: Coordinated Conversions (UNE Loops), Non-coordinated Conversions (DSL, HiCap, IOF, Dark Fiber), and Database Reconciliation/Verification (Directory Listings, Switch Translations, Customer Service Records).

Coordinated Conversions:

All provisioning coordination for the MDVW jurisdictions is performed by the RCCC located in Hunt Valley, MD according to the *Provisioning Documentation, Systems, and Centers Supporting the Former C&P Region* (12/00) document provided to KCI by Verizon. While the provisioning coordination is controlled by the RCCC, provisioning activity is performed by a number of down-stream work groups and a considerable amount of manual intervention is required. Verizon's RCCC manager stated that work groups are not geographically aligned and geography does not factor into work assignments.

Although the RCCC performs coordination activity, translation work is performed at multiple Recent Change Memory Administration Center (RCMAC) locations. Verizon also indicated that technicians are assigned from multiple centers across the MDVW jurisdictions. The role of dispatch centers varies from servicing CLEC-only work to servicing a combination of CLEC and Retail work. According to Verizon each dispatch center follows a common dispatch strategy; however, the implementation of the dispatch strategy may vary from center to center.

The process is fully documented in *Verizon RCCC Two wire Analog Loop Job Aid including LNP IDLC* (RC-99-1014 08/29/00). This document explains the M&Ps for coordinated activity for organizations that service the MDVW jurisdictions.

Non-coordinated Conversions:

Verizon's Customer Services Center (CSC) staff indicated that all CSC facilities in the MDVW region follow the dispatch strategy outlined in the *National Operations Standard Customer Priority Matrix*. However, each of the nine CSC facilities dispatches work to an allocated staff of technicians who are trained locally. Therefore, uniform execution of M&Ps cannot be guaranteed without physical observation of the work being performed by technicians. It is possible that TVV4 testing results could vary throughout the MDVW

jurisdictions based on technician skill sets and equipment utilized, despite having a common dispatch strategy.

Database Reconciliation/Verification:

The *Northeast and Midatlantic Provisioning Presentation* (08/01/00) presents the fact that provisioning systems are similar across the four states of the MDVW region; however, each of the work centers (including the Assignment Provisioning Center (APC) and the RCMAC) have a unique staff that may perform at differing levels of accuracy and timeliness.

The *Northeast and Midatlantic Provisioning Presentation* (08/01/00) indicates that the service order system is the same for all four states of the MDVW region and each of the following centers follow the same M&Ps for their organizations across the MDVW jurisdictions: Circuit Provisioning Center (CPC), Network Assignment Center (NAC), Network Operations Center (NOC), APC, Special Services Center (SSC), and CSC. Verizon stated that 15-20% of APC orders fall out for manual processing by the APC staff. Requests for Manual Assistance (RMAs) are manually processed at five different APCs across the MDVW region. The process of transferring work from the APC to the Facilities Management Center (FMC) and Construction and the supporting systems utilized (AARDWOLF, RAVEN, fax) differ between Virginia and the other states in the MDVW region. Verizon stated to KCI on 02/06/01 that the AARDWOLF system will replace RAVEN throughout the MDVW region by 07/01/01. However, fax usage in West Virginia will continue over the near term (see Provisioning Process Parity Evaluation (PPR 10) for additional detail). In addition, Verizon has indicated that manual fallout for translation work at the RCMAC is performed at nine different centers.

Since different staff will be performing the manual processing steps under different management across the centers, the potential exists for different results to be obtained.

However, Verizon has provided KCI with the Dispatch Priority Matrix – NDRC document (Doc. No. 2001-00053-MDP), which is a recently introduced standardized priority matrix that serves as a guideline to ensure dispatch consistency across the entire Verizon footprint. Additionally, Verizon provided KCI a copy of the Quality Assurance Operational Review (QAOR) document for CSCs. The CSC QAOR is designed to provide a means to monitor functional work activities performed by the CSC to determine whether procedures are being followed. The QAOR is conducted by the National Operations group when metrics relating to the CSC indicate that a review is warranted. Verizon stated that the QAOR is a best practice process which is being migrated from the former GTE footprint (Verizon-West) to all former Bell Atlantic jurisdictions (Verizon-East) with the first review being conducted in Verizon-East prior to 03/01/01.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes and personnel associated with the Provisioning Verification and Validation (TVV4) test are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although the process is similar across the MDVW region, process execution requires manual activity including processing of APC assignments and RCMAC translation work and dispatch from multiple CSCs where management has the ability to prioritize work and control dispatch functionality. Nevertheless, successful implementation of the Dispatch Priority Matrix and QAORs should regulate local dispatch center management's ability to prioritize work and control dispatch functionality thereby standardizing the dispatch implementation strategy across the MDVW region. Based on these considerations, this test is placed in category 2.

PPR8 — POP Manual Order Process Evaluation

VA MTP Test Description

The POP Manual Order Processing Evaluation is a comprehensive review of the methods and procedures used to handle orders that have been manually submitted or require manual intervention by Verizon-VA during order processing. Operational analysis techniques will be used to conduct this test. This test will include a review of the procedures in place to plan for and manage projected growth in order processing.

Summary of Analysis

In order to determine the similarities between the MDVW states, KCI conducted three interviews on 12/11/00, 12/18/00 and 01/24/01. In addition, KCI reviewed documentation provided by Verizon. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. As mentioned in TVV1, Verizon disclosed to KCI their plans to realign their TISOCs according to product lines prior to the start of the Virginia trial. This could alter KCI's finding and may require further assessment when this new structure is fully operational.

Manual orders submitted on accounts from the MDVW jurisdictions are processed by one of three different TISOC facilities. They are located in Silver Spring, MD, Falls Church (Fairview Park), VA and Chesapeake, VA, with other backup centers including Wilkinsburg, PA, Langhorne, PA and the Lexus Center, NY. The Fairview Park facility processes all Loop and Resale orders for the states of Virginia and West Virginia. The Silver Spring facility processes all Resale and Loop orders for Maryland and the District of Columbia as well as all Platform transactions for all MDVW jurisdictions. Platform orders are also processed in the Wilkinsburg, PA. The Chesapeake facility handles all DSL service requests for MDVW jurisdictions.

Operations at the Fairview Park facility are designed around product specific teams; there is a loop order team and a resale order team. Orders are electronically assigned to these teams when they "fall out" of the Request Manager system for manual handling by the TISOC. Transactions at the Silver Spring facility are assigned based on the service representative's skill set. A resale order, for example, is assigned to a representative who is trained on resale orders only. Representatives may be trained on one or more order types, including complex orders. Complex orders include, but are not limited to, DSL, point-to-point facilities, etc. These products are becoming more significant as CLEC order volumes for these services increase. There is greater potential for variance in the processing if there are multiple work forces. All platform orders are routed to and processed by the Silver Spring TISOC for the entire four jurisdiction region. All DSL orders are routed to the Chesapeake TISOC for the entire region. Each center manages its workforce, training and quality control locally.

KCI understands that the M&Ps for the Silver Spring and Fairview Park TISOCs are similar. However, there are distinguishable areas of difference. The Silver Spring facility handles all orders (Loop, Resale and Platform) from Maryland and the District of Columbia, whereas the Fairview Park facility handles Loop and Resale orders from Virginia and West Virginia. There are minor differences in the training curriculums, quality control procedures, and capacity management procedures at each TISOC. The dissimilarity in training curriculums results primarily from jurisdictional regulatory differences and product availability variances. Quality control and capacity management procedure variances may exist because procedural decisions are made by managers locally at each individual TISOC.

The following table depicts KCI's assessment of the comparability categories, based on jurisdiction and product type:

Table 8: TISOC Support by Product Type

	WV	DC	MD
UNE-P	1	1	1
UNE-Loop	1	2	2
EEL	1	2	2
Resale	1	2	2
DSL	1	1	1

KCI would need to review operations at the Silver Spring, Fairview Park and Chesapeake TISOCs to verify compliance with stated policies and procedures and to ensure that the CLEC experience is the same throughout the region.

Although the identical manual order process exists for VA and WV, there are some differences between VA and MD and DC, since different TISOCs are used for some products at the present time. However, KCI believes that the processes used in the TISOCs are largely the same. Therefore, since PPR8 is a process review, it is placed in category 2 for MD and DC, and category 1 for WV. If the projected realignment of TISOCs around product lines occurs, the entire PPR8 test might be placed in category 1.

PPR9 — POP Work Center Support Evaluation

VA MTP Test Description

The POP Work Center Support Evaluation is a comprehensive operational analysis of the work center/help desk processes developed by Verizon-VA to provide support to CLECs with OSS questions, escalations, problems and issues related to pre-ordering, ordering and provisioning. Basic functionality, performance and escalation procedures will be evaluated. This test will include a review of the procedures in place to plan for and manage projected growth in POP work center support requirements.

Summary of Analysis

In order to determine the similarities between the MDVW states, KCI conducted three interviews on 12/11/00, 12/18/00 and 01/24/01. In addition, KCI reviewed documentation provided by Verizon. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. As mentioned in TVV1, Verizon has disclosed to KCI their plans to realign their TISOCs according to product lines prior to the start of the Virginia trial. This could alter KCI's finding and may require further assessment when this new structure is fully operational.

All CLECs call a toll-free number (1-888-TISOC-88) to address questions or resolve issues concerning service requests. These calls are answered and routed via a Voice Response Unit/Automated Call Distribution system (VRU/ACD) to a customer service representative within a TISOC as determined by the caller's selection of state. Inquiries for VA and WV are routed to the Fairview Park, VA TISOC, while inquiries for MD and DC are directed to the TISOC in Silver Spring, MD.¹⁰ A customer service representative answers these calls and attempts to resolve the caller's issue(s). KCI understands that when the proposed TISOC realignment is implemented, calls to the VRU/ACD will route by product type, instead of jurisdiction.

Verizon trains CLEC representatives on the various Verizon products and services on an ongoing basis. Generally, the longer a representative works at a TISOC, the greater his/her knowledge base will become.

¹⁰ For details regarding TISOC call in information, escalation process and management contact information, see Verizon Wholesale web site: www.bellatlantic.com/wholesale/html/tisoc.htm

However, the two centers staff their call centers differently. At the Silver Spring facility, every representative is able to take calls on all product types in addition to his/her assigned transaction volume. These calls are assigned to the representatives randomly by call center management software. Representatives at this center are trained on all of the different products and, in most cases, attempt to help the customer themselves.

At the Fairview Park facility, representatives are rotated through a stand-alone call center, where they answer calls exclusively. These representatives come from teams that are dedicated to a particular product type (i.e. Resale, Loop) and attempt to answer questions in accordance with their knowledge base. If the representative cannot resolve the customer's issue the issue is escalated to a stand-alone escalation group within at the Fairview Park facility. There is no analogous group at the Silver Spring facility.

Both the Fairview Park and Silver Spring facilities handle Resale and Loop service inquiries for their respective jurisdictions. However, at the present time, the Silver Spring facility is handling the processing of Platform service inquiries for the entire MDVW footprint. If a caller is inquiring about platform service in VA or WV, the representative at the Fairview Park facility answering the call forwards the issue to the Silver Spring TISOC. A representative from the Silver Spring TISOC will then call the CLEC back in an attempt to resolve the issue.

The standard operating procedures of the Silver Spring and the Fairview Park Work Centers are similar. There is one telephone number for both Work Centers with Maryland and District of Columbia callers being directed to Silver Spring and Virginia and West Virginia callers being directed to Fairview Park. There are, however, jurisdictional and procedural differences between the two facilities. Calls are assigned to representatives differently at each center and there are variances in the methods used to manage the two facilities. The two TISOCs may handle similar issues differently because of the notable differences highlighted.

Although the specific TISOCs involved can be different for the different jurisdictions, KCI believes that the processes used are largely the same. Therefore, since PPR9 is a process evaluation, it is placed in category 2 for MD and DC, and category 1 for WV. If the projected realignment of TISOCs around product lines occurs, the entire test might be placed in category 1.

PPR10 — Provisioning Process Parity Evaluation

VA MTP Test Description

The Provisioning Process Parity Evaluation is a review of the processes, systems and interfaces that provide provisioning for CLEC and Reseller orders. The review will focus on these areas:

- Workflow definitions
- Workforce scheduling
- Memory administration
- Service activation
- Test and acceptance
- Exception handling
- Completion notices
- Jeopardy notifications

The focus of the evaluation will be “downstream” interfaces from manual processing and the gateway system that serves as the interface to all order processing.

As appropriate, provisioning processes for different products and services will be evaluated separately. This will be required in those cases where the process and/or systems used for provisioning are different by product.

An operational analysis technique will be used to evaluate Verizon-VA's systems and processes for parity with the corresponding Verizon-VA Retail functions. It will consist of targeted interviews of key development and process-owner personnel along with structured reviews of processes, systems and interfaces documentation.

Summary of Analysis

A total of twenty-five interviews were conducted with twenty-three Verizon participants on 11/30/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the Provisioning Process Parity Evaluation (PPR10). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. According to the *Northeast and Midatlantic Provisioning Presentation* (08/01/00) provided by Verizon the provisioning systems are common for the Basic Service Order Flow and the Design Service Order Flow. However, Verizon indicated that there are areas where provisioning systems cannot complete all functions and manual work is required to complete provisioning activity (i.e. RMAs). In addition, Verizon has indicated that manual fallout for translation work at the RCMAC is performed at nine different centers.

According to Verizon 80-85% of all service orders flow through the system without manual involvement from Assignment. If an Assignment RMA for outside facilities cannot be resolved by the employee in the Assignment Office, the RMA gets referred to the Workforce Management Center (WMC) (Engineering) because the WMC is responsible for locating a facility. Often obtaining a non-defective facility requires sending an Engineering Work Order (EWO) to Construction to clear a previously reported defective facility or to perform some type of facility rearrangement.

In discussions with Verizon, it was determined that over the four states different systems are used to communicate an RMA requiring facility acquisition from Assignment to WMC/Construction: RAVEN, AARDWOLF and fax based processes are utilized. KCI requested that Verizon provide the results of the orders processed using the different systems and found that between 09/01/00 and 12/01/00 there were 56,509 orders run through this process. The success rate of the systems indicated a wide range of results. The success rate for RAVEN orders was 95.9%, the success rate for AARDWOLF was 80.5% and the success rate where a fax machine was used was 20.6%. The following chart provided by Verizon identifies system usage across the MDVW region.

Table 9: RMA Communications Systems

Jurisdiction	Location	System
DC	DC	RAVEN
MD	BMET/WMD	RAVEN
	WASAM	RAVEN
	Chesapeake	AARDWOLF
VA	Richmond	AARDWOLF
	NOVA	
	Culpepper	
	Eastern	
WVA	Charleston	AARDWOLF
		Manual/fax based process

Although different systems are utilized by jurisdiction, orders are handled in the same way within each center regardless of order origin (i.e. wholesale or retail). Verizon has stated that the AARDWOLF system will replace RAVEN throughout the MDVW region by 07/01/01. However, fax usage in West Virginia will continue over the near term

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes and personnel associated with the Provisioning Process Parity Evaluation (PPR10) are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although wholesale and retail work is prioritized using the same criteria within a center, orders are processed by different personnel in five APCs and nine RCMACs across the MDVW region. Based on these considerations, this test is placed in category 2.

PPR11 — Provisioning Coordination Process Evaluation

VA MTP Test Description

The POP Provisioning Coordination Process Evaluation is a review of the procedures, processes and operational environment used to support coordinated provisioning with CLECs.

The evaluation will address products and situations that require coordinated provisioning to minimize customer disruption. The requirement for coordination may come from either Verizon-VA policy or a CLEC request. An operational analysis test approach supplemented by case studies will be used to evaluate Verizon-VA's Provisioning Coordination Processes.

Summary of Analysis

A total of twenty-three interviews were conducted with twenty-one Verizon participants on 11/30/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the Provisioning Coordination Process Evaluation (PPR11). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. All provisioning coordination for the MDVW jurisdictions is performed by the RCCC located in Hunt Valley, MD as documented in the table: *Provisioning Documentation, Systems, and Centers Supporting the Former C&P Region (12/00)*, provided by Verizon.

According to Verizon, work is assigned without regard to geographic region, all processes are the same, work is processed and controlled by the same staff and the methods and procedures make no reference to any specific state as indicated by the *Verizon RCCC Two wire Analog Loop Job Aid including LNP IDLC (RC-99-1014 08/29/00)* which is the M&P document used by the entire footprint. Additionally, work is prioritized by date due/time and geography is not a consideration for assigning work. The RCCC is responsible for CLEC coordination across the seven Verizon-South states.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel and facilities associated with the Provisioning Coordination Process Evaluation (PPR11) are the same across the MDVW region. Based on these considerations, this test is placed in category 1.

Billing — Commonality Analysis Detail

PPR12 — Billing Work Center/Help Desk Support Evaluation

VA MTP Test Description

The Billing Work Center/Help Desk Support Evaluation is an operational analysis of the work center/help desk processes and documentation developed by Verizon-VA to provide support to CLECs with usage (Daily Usage Feed) and/or billing related questions, problems and issues. Basic functionality, performance, escalation procedures, and security are evaluated.

Summary of Analysis

A total of two interviews with four Verizon participants were conducted on 11/13/00 and on 11/14/00 to evaluate the issues associated with the Billing Work Center/Help Desk Support Evaluation (PPR 12). The information provided by these Verizon personnel was supplemented and validated by documentation (including methods & procedures, organizational charts, etc.) provided by the same organizations. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees.

Verizon operates the Wholesale Customer Care Center (WCCC) and the Billing & Collections Operations Center (B&COC) to support CLECs and Resellers operating in the MDVW region with Billing Work Center/Help Desk inquiries and disputes. The WCCC processes and resolves inquiries and issues involving Billing Data Tapes (BDTs) and Daily Usage Files (DUFs) submitted by CLECs operating in the former Bell Atlantic territory (including the MDVW region). Calls to the WCCC are received and resolved using the same systems, interfaces and methods & procedures, regardless of the state/jurisdiction or CLEC. All CLECs operating in the MDVW region contact the WCCC through the same toll-free number (1-877-946-5222); once the call is answered it is routed via a VRU/ACD to the appropriate functional group within the WCCC.¹¹ All inquiries and disputes raised by CLECs are logged by the WCCC in a common trouble management system known as TIVOLI.

A review of the WCCC's documented M&Ps revealed that the WCCC representatives use non-jurisdiction-specific methods and procedures for handling and resolving Billing calls. In addition, along with the non-jurisdiction specific methods and procedures and the routing of CLEC inquiries, the personnel of the WCCC are aligned by function rather than by state/jurisdiction. This was validated by an examination of a WCCC organizational chart provided by Verizon. The WCCC is located in Newark, NJ, and serves all jurisdictions in the Verizon-North and Verizon-South territories. The functions of the WCCC are overseen by one group of managers. While the WCCC addresses CLECs' inquiries and disputes associated with BDTs and DUFs, the B&COC addresses issues and disputes found on wholesale bills.

The B&COC receives, researches and responds to wholesale customer inquiries and disputed items on wholesale bills. B&COC personnel are aligned by function rather than by jurisdiction (as is evidenced in the B&COC organizational chart provided by Verizon). The claims and disputes on bills submitted to the B&COC fall into several categories: Monthly Recurring Charges (MRCs), Non-Recurring Charges (NRCs), pro-rated charges and usage charges. The B&COC processes claims and disputes submitted via email, fax and regular mail. Once a claim is received by the B&COC, it is entered into the Claims & Acknowledgements Tracking System (CATS). KCI reviewed the methods and procedures for processing and resolving claims used by B&COC personnel and found these M&Ps to be non-jurisdiction-specific and

¹¹ See the *CLEC/Resale, Vol. II, 5.3 Help Desk and Assistance Information* on the Verizon Wholesale website

organized according to issue. Differences in the researching of disputes may arise because of differences in the rates and tariffs filed in each of the respective states/jurisdictions.

The B&COC has three locations. The location in Newark, NJ services CLECs operating in the seven states of the Verizon-South region. This location is overseen by one manager for all of the functions of the B&COC within these jurisdictions.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel, facilities, management structure and product/service types associated with the WCCC and the B&COC are the same across the MDVW region. Based on these considerations, this test is placed in Category 1.

PPR13 — Daily Usage Production and Distribution – Process Evaluation

VA MTP Test Description

The Daily Usage Production and Distribution Process Evaluation is an operational analysis of the process and documentation used by Verizon-VA to create and transmit the Daily Usage Feed (DUF).

Summary of Analysis

One interview with four Verizon participants was conducted on 11/30/00 to evaluate the issues associated with the Daily Usage Production & Distribution Process Evaluation (PPR 13). The information provided by these Verizon personnel was supplemented and validated by documentation (including methods & procedures, organizational charts, etc.) provided by the same organizations. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees.

Verizon operates common facilities and systems to support DUF Production and Distribution in the MDVW region. Processes, procedures and supporting systems used by the Event Processing System (EPS) group and the Daily Usage Processing group (also known as the B/CC – NPD Billing group) are the same across the MDVW region.

KCI's interviews with Verizon personnel and a review of process flows provided by Verizon revealed that usage data generated at the various central offices located across the jurisdictions is collected by collector switches specific to those jurisdictions. This usage data (regardless of jurisdiction) is then forwarded onto the EPS group where it is converted from Automatic Message Accounting (AMA) records into Electronic Message Interface (EMI) standard files in the Event Pre-Processor (EPP). The usage is then routed to the appropriate billing system (e.g., expressTRAK or CABS) and is also used to produce DUFs which are then transmitted to the appropriate CLEC.

The EPS group is located in Beltsville, MD, Arlington, VA and Philadelphia, PA, and has responsibility for processing usage data gathered from across the entire Verizon-South region. Personnel in the group are aligned by function according to the EPS organizational chart provided by Verizon. The management structure in the EPS group is such that the functions of the EPS group for all states in the region fall under the oversight of the same managers.

The Daily Usage Processing group, located in Philadelphia, PA, has responsibility for the production of the DUFs and the routing of the usage to the appropriate billing system for the MDVW region. The managers in the Daily Usage Processing group oversee the functions of the group responsible for the MDVW region according to the Daily Usage Processing group organizational chart provided by Verizon.

Finally, all CLECs operating in the MDVW region have the option of receiving the DUFs electronically via Connect:Direct (Network Data Mover) or via overnight carrier or courier service on cartridge tape.¹²

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel, facilities, management structure and product/service types associated with the EPS and the Daily Usage Processing groups are the same across the MDVW region. Based on these considerations, this test is placed in Category 1.

PPR14 — Bill Production and Distribution – Process Evaluation

VA MTP Test Description

The Bill Production Process Evaluation is an operational analysis of the processes employed by Verizon-VA to produce and distribute carrier bills.

Summary of Analysis

Four interviews with twenty-five Verizon participants were conducted on 11/15/00, 11/28/00, 12/04/00 and 12/06/00 to evaluate the issues associated with the Bill Production & Distribution Process Evaluation (PPR 14). In addition, the information provided by these Verizon personnel was supplemented and validated by documentation (including methods & procedures, organizational charts, etc.) provided by the same organizations. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees.

This evaluation involved an examination of the expressTRAK billing system and the Customer Access Billing System (CABS). The expressTRAK billing system was reviewed because Resale bills and certain Unbundled Network Elements (formerly billed out of CRIS) are billed out of the system. However, though the expressTRAK billing system is replacing the legacy CRIS system, certain Unbundled Network Elements will still be billed out of the CABS billing system (i.e., unbundled common transport usage charges).¹³ This fact precipitated the need to examine the CABS billing system as well.

Verizon operates common facilities to support Bill Production and Distribution in the MDVW region. Processes, procedures and supporting systems used to produce and distribute paper formatted expressTRAK invoices, paper formatted CABS invoices, CABS billing data tapes and CD-ROM invoices are the same for CLECs operating in the MDVW region.

Verizon's production of carrier bills for the entire Verizon-South territory from its CABS and expressTRAK billing systems is based on order activity that enters into the billing systems and is rated appropriately according to rate tables. The rate tables in both the CABS and expressTRAK billing systems are updated using the same processes across the MDVW jurisdictions, though the rates may differ according to the state specific tariffs and/or contracts. The usage is routed to the billing systems regardless of jurisdiction and using the same processes.

The CABS personnel are aligned by function and are located in Beltsville, MD. This group has responsibility for the maintenance of the CABS billing system for the Verizon-South region (including MDVW) and its functions are overseen by managers assigned to only the Verizon-South region according to the organizational chart provided by Verizon. The expressTRAK billing system organization is also aligned by function and is located in Arlington, VA. The expressTRAK billing system organization has responsibility for all

¹² See the *Verizon CLEC Handbook, Vol. III, Section 10.2* found on the Verizon Wholesale website.

¹³ See the *Verizon CLEC Handbook, Vol. III, Section 10.3* found on the Verizon Wholesale website.

jurisdictions in Verizon territory in which the expressTRAK billing system has been implemented (including the jurisdictions in the MDVW region). Likewise, the groups within the expressTRAK billing system organization are overseen by managers with responsibility for the jurisdictions in Verizon territory in which the expressTRAK billing system has been implemented according to the organizational chart provided by Verizon and the statements made by Verizon personnel.

Verizon's printing and distribution centers for the expressTRAK and CABS bills are set up according to bill format (expressTRAK paper, CABS paper, CD-ROM, billing data tapes). The processes followed in these centers do not differ by jurisdiction or by CLEC. The Richmond, VA Bill Print & Distribution center produces the expressTRAK and legacy billing system paper invoices and uses the same processes for printing, enclosing and mailing of the invoices for the MDVW region. The CABS paper formatted invoices are printed and distributed from the Monroeville, PA Bill Print & Distribution center using the same processes for printing, enclosing and mailing invoices for the MDVW region. The CABS billing data tapes are produced and distributed from the Verizon offices in Fairland, MD using the same processes for producing and mailing the billing data tapes for the MDVW region. The Massapequa, NY Bill Print & Distribution center produces CD-ROM format invoices using the same processes for producing, enclosing and mailing the invoices for the MDVW region. In each of these centers, the personnel are aligned by function and report to managers who have responsibility within the centers for jurisdictions including the MDVW region. A review of the process flows and the organizational charts for these groups provided verification of and support for the statements made by Verizon personnel in the course of the interviews.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel, facilities, management structure and product/service types associated with the Bill Print & Distribution organization, the CABS billing system organization, the expressTRAK billing system organization, the Electronic Billing Accuracy Control (EBAC) group, the Quality Billing Center (QBC) and the Production Management Support group are the same across the MDVW region. Based on these considerations, this test is placed in Category 1.

TVV8 — Billing Functional Usage Evaluation

VA MTP Test Description

The Functional Usage Evaluation is an analysis of Verizon's daily message processing to ensure usage record types including access records, headers, trailers, rated records, uncrated records and credit records appear accurately on the Daily Usage Feed (DUF) according to the defined schedule.

Summary of Analysis

Two interviews with eight Verizon participants were conducted on 11/20/00 and 12/06/00 to evaluate the issues associated with the Billing Functional Usage Evaluation (TVV8). In addition, the information provided by these Verizon personnel was supplemented and validated by documentation (including methods & procedures, organizational charts, etc.) provided by the same organizations. Summaries of these interviews were compiled by KCI and validated by the Verizon interviewees.

The EBAC group is responsible for the processing of usage data collected from the central offices across the entire MDVW region. Even though there are different switch types (e.g., 1A, 5ESS, DMS200, etc.) in the MDVW region, the same type of call detail records are collected and processed from the switches to produce DUFs in EMI standard format. The AMA records from each of the central offices in a given jurisdiction are aggregated at a collector switch in that jurisdiction. Though there are multiple collector switches in the

MDVW region, the collector switches are of the same type. The collected AMA records are then sent on to the EPS group for processing.

The EPS group uses the same software, code and scheduling for processing usage from across the MDVW region. This translation of the AMA records to EMI standard files occurs in the EPP. The EPP is located in the Verizon Fairland 2 data center in Fairland, MD and processes all of the usage for the Verizon-South region (including MDVW). The EPS group is located in Maryland, Virginia and Pennsylvania and the personnel in the group are aligned by function. The management structure in the EPS group is such that the functions of the EPS group for all states in the region fall under the oversight of the same managers according to the organizational chart provided by Verizon.

The processes used by the EBAC group are non-jurisdiction specific and the data for the MDVW states is processed in the same manner. The EBAC group is located in Hagerstown, MD and the technicians in the EBAC group are organized by collector switch.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel, facilities, management structure and product/service types associated with the EPS, EBAC and Daily Usage Processing groups are the same across the MDVW region. Based on these considerations, this test is placed in Category 1.

TVV9 — Functional Carrier Bill Evaluation

VA MTP Test Description

The Functional Carrier Bill Evaluation is an analysis of Verizon-VA's ability to accurately bill usage plus MRCs and NRCs on the appropriate type of bill. An accurately billed item will contain the correct rate and correct supporting information, such as start/end dates, duration, standard amounts and discount amounts. This test will also evaluate the timeliness of bill delivery to the CLECs. To establish a baseline, KCI will ensure that a bill cycle has been completed before any order activity occurs.

Monthly charges will be examined for both Resale and UNE billing on CABS and expressTRAK bills. A number of key characteristics of Retail and UNE billing information will be used in the design of test cases. Information includes the various charge components and their destination bill.

Summary of Analysis

Four interviews with twenty-five Verizon participants were conducted on 11/15/00, 11/28/00, 12/04/00 and 12/06/00 to evaluate the issues associated with the Functional Carrier Bill Evaluation (TVV9). In addition, the information provided by these Verizon personnel was supplemented and validated by documentation (including methods & procedures, organizational charts, etc.) provided by the same organizations. The summaries from these interviews were compiled by KCI and validated by the Verizon interviewees.

KCI determined that there are significant similarities in the systems, interfaces, processes, personnel, facilities and management structure used by Verizon to produce expressTRAK and CABS invoices in the MDVW region (see PPR14 above for details). However, KCI also found there to be some differences in calling plans¹⁴ and product offerings based on switch type across the MDVW region. Product offerings are sometimes restricted by the switch type. For example, the Centrex Automatic Callback Calling service and the Centrex Call Waiting-Originating service are not available from DMS10 switches and the Centrex

¹⁴ See the *Verizon Resale Handbook, Vol. III, Section 2.5* on the Verizon Wholesale website (http://www.bell-atl.com/wholesale/html/handbooks/resale/volume_3/r3s2_5.htm#TopOfPage).

Executive Busy Override service is only available from DMS100 switches.¹⁵ There are a number of different switch types in the MDVW region. These are detailed in the table below.

Table 10: Switch Types in Service in the MDVW Region

Switch Type	VA	MD	DC	WV
Lucent 5ESS	✓	✓	✓	✓
Lucent 1AESS	✓	✓	✓	N/A
Nortel DMS10	N/A	N/A	N/A	✓
Nortel DMS100	✓	✓	✓	✓
Nortel DMS200	✓	✓	✓	N/A
Siemens	✓	✓	N/A	✓

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel, facilities and management structure associated with the Bill Print & Distribution organization, the CABS billing system organization, the expressTRAK billing system organization, the EBAC group, the QBC and the Production Management Support group are the same across the MDVW region.

KCI also determined in the course of its evaluation that though the product/service types may be significantly similar across the MDVW region, small differences may arise based on documented product offerings (i.e., calling plans and switch type limitations on service availability). Since this comparability study was non-transactional in nature, KCI did not generate order activity and therefore could not validate the resultant carrier invoices to assess the output of these documented processes (i.e., the carrier bills) for similarities or differences. Based on these considerations, this test is placed in Category 2.

¹⁵ See the *Verizon Resale Handbook, Vol. III, Section 2.3.7, 2.3.15 and 2.3.21* on the Verizon Wholesale website (http://www.bell-atl.com/wholesale/html/handbooks/resale/volume_3/r3s2_3.htm).

Maintenance and Repair — Commonality Analysis Detail

TVV5 — M&R RETAS Functional Evaluation

VA MTP Test Description

The RETAS Functional Evaluation is a comprehensive review of all of the functional elements of the RETAS System and their conformance to documentation.

Summary of Analysis

A total of two interviews were conducted with two Verizon participants on 12/05/00 and 01/18/01 to evaluate the issues associated with the M&R RETAS Functional Evaluation (TVV5). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. The Repair Trouble Administration System (RETAS) was developed in Verizon-North and deployed in Verizon-South to standardize interaction with CLECs. According to Verizon there is a single RETAS interface and a single instance of the RETAS application that services the MDVW region. The *RETAS Student Users Guide* indicates that the system interfaces, functions and features are exactly the same for the seven southern states of Verizon which include the MDVW jurisdictions.

According to the *RETAS Student Users Guide*, RETAS is a transaction-based system provided for the CLEC community (external use only) to interface with Verizon backend systems. When the CLEC enters a transaction, it is processed as are other CLEC transactions across the MDVW region. The system is not dependent on nor impacted by Verizon manual activity.

According to Verizon, Caseworker is a transactional-based system designed for Verizon internal employees to service retail customers and serve as an interface to backend operational support systems. Caseworker is used across the MDVW region.

Both RETAS and Caseworker perform trouble administration activities and are transaction-based systems that interface with backend OSS. Differences between RETAS and Caseworker would be experienced equally across the four jurisdictions of the MDVW region.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces and processes associated with the M&R RETAS Functional Evaluation (TVV5) are the same across the MDVW region. Based on these considerations, this test is placed in category 1.

TVV6 — M&R RETAS Performance Evaluation

VA MTP Test Description

The RETAS performance evaluation is a transaction-driven test designed to evaluate the behavior of the RETAS system and its interfaces under load conditions. This test will be conducted in three segments, normal volume, peak volume and stress volume. The first execution will use transaction sets based on the level of demand projections that are reasonably foreseeable in a competitive market. This quantity of transactions will be known as the “normal volume”. The second “peak” execution will use a multiple of 1.5 times the “normal” volumes that were used in the first execution. Finally, the last “stress” execution will use transaction volumes that are 1.5 times the volumes used for the peak test.

Summary of Analysis

A total of two interviews were conducted with two Verizon participants on 12/05/00 and 01/22/01 to evaluate the issues associated with the M&R RETAS Performance Evaluation (TVV6). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. According to the *Maintenance and Repair System Flow* (12/05/00) provided by Verizon for the MDVW comparability study, the RETAS system sends the same transactions regardless of the state or CLEC generating the transactions. The RETAS performance testing process measures response time for each transaction from transaction submission through to receipt of response. RETAS performance testing therefore incorporates processing time associated with the RETAS application in addition to network transport time and processing time associated with additional OSS. Most of the functions performed by RETAS require interface only with Loop Maintenance Operations System (LMOS) and Work Force Administration (WFA). However, when RETAS performs a Hekimian Test or Mechanized Loop Test (MLT), connectivity to the serving central office for the customer line being tested is required. For example, to perform a basic MLT the transaction entered in RETAS is transferred to both DELPHI and LMOS for processing. LMOS must establish connectivity with the customer's serving central office where the MLT is performed. Once the MLT is completed, the response is received in LMOS and evaluated by DELPHI. RETAS then receives a response that includes both the MLT result and the DELPHI recommendation. Different response times may be experienced based on variability in network infrastructure and associated OSS. In processing high volumes of transactions, differences in network capabilities could result in different choke points or transaction response times from area to area.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces and processes associated with the M&R RETAS Performance Evaluation (TVV6) are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although the systems/interfaces are similar, response times may vary somewhat based on network design details and processing time associated with additional OSS, although there is no evidence that this should vary significantly from jurisdiction to jurisdiction. Actual testing would be required to determine response times in the MDVW jurisdictions. Based on these considerations, this test is placed in category 2.

TVV7 — End-to-End Trouble Report Processing

VA MTP Test Description

This test involves the execution of selected M&R test scenarios to evaluate Verizon's performance in making repairs under the conditions of various wholesale maintenance scenarios.

Summary of Analysis

A total of twelve interviews were conducted with eight Verizon participants on 12/05/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the End-to-End Trouble Report Processing (TVV7) evaluation. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. According to Verizon the call receipt process is the same for the four states of the MDVW region. After call receipt, troubles are tested for fault isolation and dispatched to the appropriate downstream group. Verizon indicated that the CSC handles all dispatches to outside technicians for wholesale maintenance reports except those that involve a dispatch for a physical repair (e.g. a loop is down) or central office trouble. Further, Verizon explained that the dispatch centers locally control system tables to prioritize work and organize workflow.

The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region* (01/01) document states that there are nine CSCs that service the MDVW region. Some centers have CLEC only maintenance and others have a combination of CLEC and Retail activity. Verizon discussed the fact that the Wholesale Customer Services Center (WCSC) handles work in rural areas for all lines of business (wholesale, carrier,

enterprise, and general business). The WCSC addresses wholesale maintenance for CLECs on digital loops (DYVU and ARDU) and physical troubles for TXNU and TXSU loops as well as Access troubles.

Verizon has recently introduced the Dispatch Priority Matrix – NDRC document (Doc. No. 2001-00053-MDP), which is a standardized priority matrix that serves as a guideline to ensure dispatch consistency for the entire Verizon footprint. Additionally, Verizon provided KCI a copy of the Quality Assurance Operational Review (QAOR) document for CSCs. The CSC QAOR is designed to provide a means to monitor functional work activities performed by the CSC to determine whether procedures are being followed. The QAOR is conducted by the National Operations group when metrics relating to the CSC indicate that a review is warranted. Verizon stated that the QAOR is a best practice process which is being migrated from the former GTE footprint (Verizon-West) to all former Bell Atlantic jurisdictions (Verizon-East) with the first review being conducted in Verizon-East prior to 03/01/01.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes and personnel associated with End-to-End Trouble Report Processing (TVV7) are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although the process is similar across the MDVW region, local dispatch center management manually control system tables to prioritize work and organize workflow in both centers that handle CLEC-only maintenance and centers that handle CLEC and Retail activity. Nevertheless, successful implementation of the Dispatch Priority Matrix and QAORs should regulate local dispatch center management's ability to prioritize work and control dispatch functionality thereby standardizing the dispatch implementation strategy across the MDVW region. Based on these considerations, this test is placed in category 2.

PPR15 — End-to-End M&R Process Evaluation

VA MTP Test Description

This test will evaluate the functional equivalence of M&R processing for wholesale and retail trouble reports, by reviewing and evaluating the wholesale and retail process flow. It will include a review of procedures in place to plan for and manage the projected growth in M&R processing requirements.

Summary of Analysis

A total of fourteen interviews were conducted with eleven Verizon participants on 12/05/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the End-to-End M&R Process Evaluation (PPR15). Representatives from organizations involved in the end-to-end M&R process were interviewed, including the Customer Repair Service Center (CRSC), Regional CLEC Maintenance Center (RCMC), CSC, Network Test Center (NTC), NOC/DI, SSC, and WCSC. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. Whereas there are similarities between the end-to-end M&R processes and supporting systems employed across the MDVW jurisdictions, differences do exist in systems utilized and dispatch strategy employed. For example, according to Verizon RCMC agents enter trouble reports for CLECs using an interface called Netcenter. According to the *RETAS Student Users Guide* supplied by Verizon, CLECs enter trouble reports directly into the RETAS interface. Additionally Verizon identified Caseworker as a system utilized for retail trouble administration. The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region* (01/01) document indicates that common downstream systems are used for trouble administration (i.e. LMOS, WFA/C, WFA/DI, and WFA/DO).

The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region* (01/01) document states that there are nine CSCs that service the MDVW region. Some centers have CLEC-only maintenance and others have a combination of CLEC and Retail activity. Verizon explained that the dispatch centers locally control system tables to prioritize work and organize workflow.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes and personnel associated with the End-to-End M&R Process Evaluation (PPR15) are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although the process is similar, work is dispatched by different personnel in nine CSCs across the MDVW region. Nevertheless, since PPR15 is a process evaluation only, this test is placed in category 2.

PPR16 — M&R Work Center Support Evaluation

VA MTP Test Description

The M&R work center support evaluation is an operational analysis of the work center/help desk process developed by Verizon to provide support to CLECs with questions, problems, and issues related to wholesale trouble reporting and repair operations.

Summary of Analysis

A total of two interviews were conducted with one Verizon participant on 12/05/00 and 01/16/01 to evaluate the issues associated with the M&R Work Center Support Evaluation (PPR16). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. The *CLEC Handbook vol iii* identifies that all maintenance is performed under the control of the RCMC. The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region (01/01)* document states that the RCMC has one center in Richmond, VA and two virtual centers in New Jersey. Virtual centers are physically distinct facilities operating as part of the same organization and managing with common M&Ps, systems, goals and objectives. Verizon discussed the fact that the Richmond center receives and enters all troubles for CLECs except for troubles on high caps, collocation, and line sharing. The two virtual centers in New Jersey handle troubles on high caps, collocation, line sharing; and also handle customer care functions. Customer care functions include escalations, complaints, and questions. The two virtual centers provide a fully staffed help desk to assist CLECs attempting to electronically enter their own troubles via RETAS.

Verizon indicated that there is no distinction within the M&Ps based on geography. Work is prioritized on a first in – first out basis without consideration for geography. RCMC staff are not organized by geography. The process for taking, inserting, monitoring and responding to CLECs is the same across all four of the jurisdictions being reviewed. The same systems are utilized by work function for each of the three centers.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel and facilities associated with the M&R Work Center Support Evaluation (PPR16) are the same across the MDVW region. Based on these considerations, this test is placed in category 1.

PPR17 — M&R Coordination Process Evaluation

VA MTP Test Description

The Maintenance and Repair coordination process evaluation is a test of the systems, processes, procedures, and other operational elements associated with M&R coordination activities between Verizon and CLEC operations organizations.

Summary of Analysis

A total of ten interviews were conducted with five Verizon participants on 12/05/00 and between 01/08/01 and 01/17/01 to evaluate the issues associated with the M&R Coordination Process Evaluation (PPR17).

Representatives from organizations involved in the M&R process were interviewed, including the RCMC, CSC, NTC, NOC/DI, SSC, and WCSC. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. Whereas there are similarities between the M&R processes and supporting systems employed across the four states, differences do exist in systems utilized and dispatch strategy employed. The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region (01/01)* document states that there are nine CSCs that service the MDVW region. Some centers have CLEC-only maintenance and others have a combination of CLEC and Retail activity.

The *CLEC Handbook vol iii*, available on the Verizon public website, indicates that CLEC M&R coordination work requests come in through the RCMC. According to Verizon, reports are handed off from the RCMC to down-stream dispatch centers. Different staff in dispatch centers across the MDVW region perform manual processing steps to complete work.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes and personnel associated with the M&R Coordination Process Evaluation (PPR17) are similar across the MDVW region. However, KCI also determined in the course of its evaluation that although the process is similar, work is dispatched by different personnel in nine CSCs across the MDVW region. Nevertheless, since PPR17 is a process evaluation only, this test is placed in category 2.

PPR18 — Network Surveillance Support Evaluation

VA MTP Test Description

The network surveillance evaluation is a review of the process and other operational elements associated with Verizon's network surveillance and network outage notification process and procedures as they relate to wholesale operations. It also involves a review of the procedures followed by the Network Surveillance Center (NSAC) and NOC, which reference CLEC operations.

Summary of Analysis

A total of two interviews were conducted with two Verizon participants on 12/05/00 and 01/18/01 to evaluate the issues associated with the Network Surveillance Support Evaluation (PPR18). Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. Network surveillance is performed by the NSAC. The *M&R Documentation, Systems, and Centers Supporting the Former C&P Region (01/01)* document states that there is one NSAC facility, located in Newark, NJ, which uses common systems to service the MDVW region. According to Verizon there is no distinction within M&P documentation based on geography. Work is prioritized based on the criticality of issues received and geography is not a consideration in assigning work. Additionally, the *CLEC Handbook vol iii* provides CLECs with a standard explanation of the types of network outages that get reported and contact information for subscription to the outage distribution list.

After conducting interviews with Verizon personnel and reviewing the documentation provided, KCI determined that the systems/interfaces, processes, personnel and facilities associated with the Network Surveillance Support Evaluation (PPR18) are the same across the MDVW region. Based on these considerations, this test is placed in category 1.

Relationship Management and Infrastructure — Commonality Analysis Detail

PPR1 — Change Management Practices Verification & Validation Review

VA MTP Test Description

This test evaluates the overall policies and practices for managing change in the procedures and systems necessary for establishing and maintaining effective Verizon-VA/CLEC relationships. This test will rely on checklists and inspections.

Summary of Analysis

KCI conducted one (1) interview with the Director of Change Management, and a formal data request was issued on 11/14/00 to evaluate and identify any differences in Verizon's Change Management process between the MDVW jurisdictions. A summary was compiled based on the interview conducted, and was validated by the Verizon interviewee.

The Verizon Change Management policies and procedures applicable to the MDVW jurisdictions provide the outline for interested parties to communicate their desired changes to documentation, interfaces, business rules and functions. These processes and procedures, such as Change Request (CR) submission, software timelines, escalation procedures, CR prioritization, and communications with the industry are documented and made publicly available through the Verizon Wholesale Markets web site:

http://www.bellatlantic.com/wholesale/html/cd_ind_change_mngmt.htm.

Verizon-initiated (Type 4) and CLEC-initiated (Type 5) change request notification intervals for change management documentation are seventy-three (73) calendar days for business rules and sixty-six (66) days for technical specifications prior to implementation. The change request process for CLEC CR proposal requires a formal CR form to be filled out and submitted to Verizon Change Control. Verizon will assign a CR number and it will be prioritized at the monthly Prioritization meetings between CLECs.

Verizon has a day-to-day Change Control Operations team consisting of a Change Control Operations Manager and four (4) assistance. The assistants monitor day-to-day activities that support the change management process such as correspondence, database administration, and preparation of meeting materials. The system impact of a CR is determined by looking at the overall complexity of the change request and the number of individual components that the change request will impact.

The process of escalation is outlined in the change control practice document. The customer documents a problem and the key requirement is to address what kind of system and business impact there is to the CLEC. The initiator of the escalation is required to notify the industry where the Director of Verizon Change Control is required to respond to the escalation within five (5) business days. If the CLEC community is not satisfied with the response, they can escalate the issue to the Vice-President of Verizon for a response on Verizon's final position. If neither parties can come to a resolution, they can seek other relief by escalating it to the appropriate jurisdiction's commission.

After conducting interviews with Verizon and reviewing documentation provided, KCI understands that Verizon employs the same Change Management processes, personnel, management structure and products/service types across the entire Verizon footprint, including the MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

PPR2 — Account Establishment & Management Verification & Validation Review

VA MTP Test Description

This test evaluates Verizon-VA's policies and practices for establishing and managing CLEC account relationships. This test will rely on checklists, inspections, and reviews of historical data and measurements where available.

Summary of Analysis

KCI conducted interviews with the Director of CLEC Account Management Wholesale Services and the Manager of the Verizon Handbook Team on 11/16/00 and 11/27/00 respectively. Formal data requests were issued on 11/14/00 to allow the evaluation and identification of any differences in Verizon's Account Establishment and CLEC/Reseller Handbook process across the MDVW jurisdictions. A summary was compiled based on the interviews conducted, and was validated by the Verizon interviewees.

KCI has verified that Verizon Account Managers respond to customer inquiries on a timely basis after reviewing the Account Manager call logs. The process used to log calls and the format (forms) for recording account inquiry information is identical for the four regions. The Verizon Account Management staff are aligned to cover customers by CLEC/Reseller as opposed to being geographically aligned.

The Verizon Account Managers are the primary point of contact for the customer. Their role as an Account Manager begins after negotiations of the interconnection agreement are completed between Verizon and the customer. Each Account Manager has a primary role of liaison between the customer and Verizon. The Verizon Account Manager will introduce the customer to the policies, procedures, and processes that are employed by Verizon. Another function for Verizon Account Managers is relationship management with the customer where they will handle customer complaints, requests for information, and general updating of procedures. All the customers have their Verizon Account Manager's phone/fax numbers and email addresses. Voice mail greeting messages are updated on a regular basis and information about the Verizon Account Manager's working status/availability is noted. In addition, the customers can reach the Verizon Account Manager through a response section on the Verizon Wholesale Markets web site. The Verizon Account Managers contact information can also be found on the Verizon Wholesale Markets web site.

The management structure of Verizon's Account Management team is composed of two (2) Directors and several Account Managers. Account Managers are assigned to specific customers regardless of the state(s) in which the customers do business. Larger accounts will have Account Teams, which consist of several Account Managers.

The Verizon CLEC and Resale Handbooks are published every first and third quarter respectively. Updates are distributed through industry mailings in which a database is used to keep track of customers who need to be notified. A change log of the Verizon CLEC/Resale Handbooks is maintained on the Verizon Wholesale Markets web site: http://www.bellatlantic.com/wholesale/html/customer_doc.htm.

The assignment of personnel for the CLEC and Resale Handbook Team includes an owner of a particular volume, who has a subordinate, and a couple of staff members to handle posting information to the Verizon Wholesale Markets web site. The CLEC/Reseller Handbook teams are assigned by volume and not by a particular state. There are currently five (5) volumes for the CLEC/Resale Handbooks. For the CLEC and Reseller Handbooks, there are three separate volumes for each. Volume Two for the CLEC and Resale Handbook are identical.

After reviewing the information gathered during the interviews and document reviews, KCI understands that the Account Management process including the distribution of CLEC and Resale Handbooks is uniform across the MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

PPR3 — System Administration Help Desk Functional Review

VA MTP Test Description

This test is the process-oriented evaluation of the system administration help desk function. This test will rely on checklists, inspections and walk-throughs. It will include a review of the procedures in place to plan for and manage projected growth in help desk utilization.

Summary of Analysis

KCI understands, through an interview conducted with the Director of the Verizon WCCC on 11/13/00, and a formal data request was issued to on 11/14/00 to evaluate and identify any differences in Verizon's WCCC across the MDVW jurisdictions. A summary was compiled based on the interview conducted and was validated by the Verizon interviewee.

Verizon employs a common system administration help desk where WCCC help desk representatives respond to CLEC questions or problems regarding connectivity and administration of the CLECs system interfaces with Verizon. CLECs contact the WCCC via a common telephone number to report and resolve errors, exceptions, and make inquiries. The Verizon WCCC Call Agent will open a trouble ticket, and follow up with a status update and resolution until closure of the trouble ticket. Calls for problems not within the scope of the WCCC services are referred to the appropriate Verizon groups. When a matter has to be referred to another Verizon group, the WCCC Call Agent completes and sends a form and the trouble ticket via Lotus Notes to that group. Verizon uses a tracking tool called TIVOLI where it is capable of tracking the status of trouble tickets, and generating performance reports.

Internal process documentation is available for use by WCCC Call Agents. The documentation includes guides on how to answer calls, create trouble tickets, etc. There is also an internal WCCC Training Guide manual for conducting internal training sessions with new WCCC Call Agents. Job aides and documentation are updated and distributed to team members when changes are made to Help Desk procedures

There are forty (40) WCCC Call Agents to address calls for Verizon-South. The WCCC is composed of five (5) groups that correspond to the different customer response groups and issues: Systems, Purchase Order Numbers (PONs), Billing, Escalations, and Off-line. The WCCC has one Manager for day to day operations for the WCCC Help Desk team.

After conducting interviews with Verizon and reviewing documentation provided, KCI understands that Verizon employs the same WCCC Help Desk processes, personnel, management structure and products/service types across the Verizon footprint, including the MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

PPR4 — CLEC Training Verification & Validation Review

VA MTP Test Description

This test evaluates key aspects of Verizon-VA's training program for CLECs. This test will rely on checklists and inspections.

Summary of Analysis

KCI conducted an interview with the Manager of the CLEC Training Program, and a formal data request was issued on 11/14/00 to evaluate and identify any differences in Verizon's CLEC Training program in the MDVW jurisdictions. A summary was compiled based on the interview conducted, and was validated by the Verizon interviewee.

The objective of the Verizon CLEC Training Program is to help customers do business with Verizon and make them knowledgeable in Verizon products and services. Verizon's CLEC training process is divided into two separate regions, Verizon-North and Verizon-South. There is no geographical or jurisdictional differentiation in the program within Verizon-South. The only difference known to exist is in course training material that contains region-specific tariff requirements. CLECs are able to view and register for training courses through the Verizon Wholesale Markets web site:

http://www.bellatlantic.com/wholesale/html/ie_course_descr.htm

where course descriptions, dates, location, and costs are published.

Verizon course evaluations are made available to students at the end of the training session where comments about the course and instructor may be filled in. The original surveys are maintained. The Verizon CLEC Training Manager reviews all the surveys. Each survey is entered into a database that allows the Verizon CLEC Training Manager to have a consolidated view and report of the overall results. Evaluation forms are provided by the Verizon CLEC Trainer to review, and are then passed onto the Verizon CLEC Training Manager for review. The feedback from the trainees is entered into a database.

The Verizon CLEC Training team is divided into two regions, Verizon-North and Verizon-South. For training sessions in Verizon-North and Verizon-South, there are three and two Verizon CLEC trainers respectively.

Training sites are uniform for CLECs operating in the MDVW region. The training location for Verizon-South is at the Mount Washington Conference Center in Baltimore, MD. There are a total of fifteen (15) computers with a T1 connection to the Web GUI. This configuration allows trainees to get hands-on training in navigating the Web GUI.

After conducting interviews with Verizon and reviewing documentation provided, KCI understands that Verizon employs the same CLEC Training Program processes, personnel, management structure, facilities and products/service types across the entire Verizon footprint, including the MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

PPR5 — Interface Development Verification & Validation Review

VA MTP Test Description

This test evaluates key methods and procedures for developing and maintaining OSS interfaces which enable the Verizon-VA/CLEC relationship. These apply to interfaces such as Verizon's GUI interfaces, application-to-application interfaces and data transfer interfaces required for the following activities:

- Pre-Ordering
- Ordering
- Provisioning
- Billing
- Maintenance & Repair
- 911 Database Updates

This test will rely on checklists and inspections.

Summary of Analysis

A total of four interviews with Verizon personnel were conducted on 11/20/00 and 01/24/01 to evaluate the issues associated with the Interface Development Verification and Validation Review (PPR5). In addition, the information provided by Verizon personnel was supplemented and validated by internal Verizon documentation such as organizational charts, publicly available documentation available at: <http://www.bellatlantic.com/wholesale/index.htm>, and correspondence from Verizon's Change Control electronic mail distribution list. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees.

Verizon has represented that the same electronic interfaces for conducting business with Verizon are available to CLECs operating in the MDVW jurisdictions. Each of the electronic interfaces made available for use are the same version of software. KCI understands that Verizon employs a common approach and common personnel for interface development across its entire footprint for existing electronic interfaces. Similarly, Verizon has indicated that common processes, procedures, personnel, and systems are used in the development of expressTRAK for deployment in the MDVW jurisdictions.

When production-level electronic transactions are processed by Verizon, it has been represented to KCI that regardless of the transactions' origins (e.g., any of the MDVW jurisdictions), transactions are processed equivalently by common Verizon systems.

The CLEC Test Environment (CTE), which is used by CLECs to test their electronic interfaces in a non-production environment, and the process surrounding releasing software into the CTE is common for all of Verizon's regions. It has been represented to KCI that the systems that comprise the CTE are commonly used by all CLECs and there are no jurisdiction-specific systems within the CTE. Regardless of the market(s) in which a CLEC conducts business, it connects to the same CTE. In addition, the processes that surround and support the CTE have been represented to KCI as being common for all states. When expressTRAK functionality is included in the CTE, it is supposed to be introduced simultaneously and provide the same functionality for all MDVW jurisdictions. The test decks that are produced by Verizon for use by CLECs are geographically dependent due to customer account and product/service offerings; however, Verizon has indicated the processes used to develop, execute, and assess the test deck results are common for all states. It should be noted that for the February 2001 system release Verizon has not publicly released test decks for West Virginia and the District of Columbia but test decks have been made available for CLECs wishing to execute transactions in Virginia and Maryland.

The process and tools used to develop, generate, and publish business rules documentation for use by CLECs are common for the MDVW jurisdictions. There is a team responsible for pre-order business rules and a separate team to handle order business rules. Both teams support the entire Verizon footprint. There may be slight differences in the actual business rules due to differences in product availability by jurisdiction but the approaches used to generate the business rules are equivalent across all geographic regions.

The E911 system update process is currently a common manual activity for each of the MDVW jurisdictions. If a CLEC wishes to make a E911 database entry, it submits a manual request to Verizon. A centralized Verizon team located in Philadelphia, PA handles the initial processing and manually enters the request into its E911 system. The Master Street Address Guide (MSAG) is a database of street names and address number ranges which the E911 database entry update transaction is verified against as an error check. The MSAG is unique based on jurisdiction. The ALISA system is centrally located in two locations and contains the actual E911 data. From a management structure perspective, there is one team responsible for West Virginia and

Virginia, and a separate team for Maryland and the District of Columbia; however, both teams report to a common Director and common practices are employed.

On 03/12/01, Verizon intends to introduce a common electronic graphical user interface across the MDVW jurisdictions for use by the CLECs to submit requests to the E911 system. It has been indicated to KCI that the Private Switch/Automatic Location Identification (PS/ALI) electronic interface is not planned to be introduced in Maryland until approximately the third quarter of the year 2001 due to current differences with the architecture of the public switched network in Maryland compared to the other MDVW jurisdictions. This graphical user interface is named PS/ALI and will replace the current manual process for those states. Essentially, the step of having a CLEC manually submit a transaction to Verizon for further manual processing has been replaced by the PS/ALI interface. Verizon has represented that the data entries or transactions into the E911 system from the MDVW jurisdictions will be handled by common computing systems and the MSAG databases and ALISA system will remain unchanged and continue to provide the same service and functionality. In general, Verizon has represented that only the interface by which CLECs provide E911 system updates to Verizon has changed and all the back-office and back-end functions will remain unchanged from today. The personnel and management structure that support the current E911 system update process has been presented to KCI as will remaining intact and will continue with their existing responsibilities once the PS/ALI system has been introduced.

Assuming the expected common implementation of expressTRAK across the MDVW region, the only differences in this test across jurisdictions will be minor differences in the CTE test decks and the E911 process. Based on these considerations, this test is placed in a category 2.

PPR6 — Forecasting Verification & Validation Review

VA MTP Test Description

This test verifies and validates key aspects of the Verizon-VA/CLEC forecasting process. This test will rely on checklists and inspections.

Summary of Analysis

A total of one interview with Verizon personnel was conducted on 11/15/00 to evaluate the issues associated with the Forecasting Verification and Validation Review (PPR6). In addition, the information provided by Verizon personnel was supplemented and validated by publicly available documentation available at: <http://www.bellatlantic.com/wholesale/index.htm>. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees.

KCI understands that the forecasting process for Virginia is the same as the one used for the other MDVW jurisdictions. Local tariffs may determine the types of products/services available for forecasting but the processes used to collect, process, and analyze the CLEC forecasted data is understood by KCI to be common for all Verizon markets.

Based on information provided by Verizon, KCI believes the processes, personnel, facilities, management to be the same and based on these considerations, this test is placed in category 1.

PPR7 — Network Design Request, Collocation and Interconnection Planning Verification & Validation Review

VA MTP Test Description

This test evaluates Verizon-VA's policies and practices for collocation and network design related to establishing and maintaining CLEC ability to access unbundled network elements. This test will rely on checklists, interviews and inspections. (This test is not intended to examine interconnection for other purposes, such as an inter-exchange carrier's network-to-network level interconnection.)

Summary of Analysis

KCI conducted a total of two interviews. The Interview for Network Design Request (NDR) included both administrative and technical team participation and was conducted on 01/22/01 to evaluate the issues associated with NDRs. The Interview for Collocation was conducted on January 24, 2001 and included the Project management, tracking, power space and frame, real estate, Local Co-location Coordinator functions to evaluate the issues associated with Co-location. Summaries of the interviews were compiled by KCI and validated by the Verizon interviewees. In addition, the information provided by Verizon personnel was supplemented and validated by Verizon documentation such as organization charts and publicly available documentation at: <http://www.bellatlantic.com/wholesale/index.htm> and in the CLEC handbook.

Verizon has represented that the same processes and procedures, tracking mechanism and management personnel are used for CLECs operating in each of the MDVW jurisdictions. KCI understands that the processes and procedures related to Network Design Requests and Collocation are the same across the MDVW jurisdictions. In addition the same methods and procedures are used.

The NDR process is used for CLECs wishing to offer products via UNE Platform. CLECs are asked for all of the necessary information to establish their presence in a given switch or LATA depending upon if Line Class Codes or Advanced Intelligent Network (AIN) triggering is used. Depending on where the CLECs presence is established the testing of the NDR implementation may be done in two different locations. The Systems Design Engineers (SDE) as well as the provisioning team all use the same databases and tracking tools across all of the MDVW states including Virginia. The management personnel for all MDVW states including Virginia are the same.

KCI also notes that the collocation processes and procedures are the same across the MDVW jurisdictions. The actual implementation of a collocation relies upon local resources. This means that the local collocation coordinator and the associated field personnel will be from the Central office, tandem, facility or region where the collocation will occur. The tracking systems used by the Project Manager and the Local Collocation Coordinator (LCC) are the same across the MDVW jurisdictions including Virginia.

Based on these considerations, this test is placed in category 2.

Metrics — Commonality Analysis Detail

PMR1 — Metrics Standards and Definitions Verification & Validation Review

VA MTP Test Description

This test evaluates the state of the documentation of metrics definitions and standards and the overall policies and practices for documenting these definitions and standards. This would include the documentation of and the documentation policies and practices associated with both CLEC measurements and, for standards that involve retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

Summary of Analysis

A one-on-one comparison was conducted of the Virginia Guidelines (08/11/00) with the Maryland (10/20/00) and the District of Columbia (11/01/00) Draft Guidelines. KCI found that no guidelines have yet been filed by Verizon for West Virginia.

In this comparison, each metric was analyzed for similarities, metric differences and metric representation in each jurisdiction. KCI analysis shows that the Maryland and DC Draft Guidelines had significant similarity to Virginia's adopted Guidelines. KCI found 19 instances (reference Table 11) where either; 1) an adopted Virginia metric is not contained in the DC and Maryland Draft Guidelines, 2) a metric in the DC and Maryland Draft Guidelines is not contained in the adopted Virginia Guidelines, or 3) a difference exists between the adopted Virginia metrics and similar DC and Maryland draft metrics. The breakdown of dissimilar metrics is as follows:

Table 11: Identified Metrics Differences

Virginia Metric #	Function	MD	DC
Pre-Ordering			
PO-1-08	% Timeouts		
PO-1-10	Parsed CSR-CLEC Total		
PO-4-04	% Change Management Notices and Change Management Confirmations Sent on Time (Type 1-5, each type measured separately)		
PO-4-05	Average Delay days-Change Management Notices and Confirmations (Type 1-5, each type measured separately)		
PO-4-06	Average Delay Days – 8 plus days – Change Management Notices and Change Management Confirmations (Type 1-5, each type measured separately)		
	Change Management Notices and Change Management Confirmations – Delay 1 to 7 Days	PO-4-02	PO-4-02
	Change Management Notices and Change Management Confirmations – Delay 8 or more days	PO-4-03	PO-4-03
Ordering			
OR-1	Order Confirmation Timeliness	X ^a	X ^a
OR-3	Percent Rejects	X ^b	X ^b
	% Resubmission Rejection	OR-3-02	OR-3-02
OR-4-03	% Orders excluded from % On Time Measurement		
OR-10	Lost Order Trouble Tickets		

Virginia Metric #	Function	MD	DC
Provisioning			
PR-1-10	Average Interval Offered-Disconnects-No Dispatch	X ^c	X ^c
PR-2-10	Average Interval Completed-Disconnects-No Dispatch	X ^c	X ^c
PR-2-13	Average Interval Completed-2 Wire xDSL (With DD-2 Test Results, w/800 # & w/serial #)	X ^c	X ^c
PR-4-14	% Completed On Time - 2 Wire xDSL (With DD-2 Test Results, w/800 # & w/serial number)	X ^c	X ^c
PR-9-02	% Early Cuts-Lines		
Maintenance & Repair			
MR-3-04	% Missed Repair Appointment-No Double Dispatch		
MR-4-09	Mean Time to Repair-No Double Dispatch		

Where:

Xa - The MD C2C October 2000 Draft Guidelines and DC C2C November 2000 Draft Guidelines refers to this metric function as 'LSR/ASR Confirmation Timeliness'.

X^b - The MD C2C October 2000 Draft Guidelines and DC C2C November 2000 Draft Guidelines also measures the '% Resubmission Rejection'.

X^c - The MD C2C October 2000 Draft Guidelines and the DC C2C November 2000 Draft Guidelines measures metric with different level of disaggregation.

Empty – metric not present in guidelines for this jurisdiction

NOTE – The VA C2C Guideline numbering for the PO-4 sub-metrics are PO-4-01, PO-4-04, PO-4-05, PO-4-06. The numbers PO-4-02 and PO-4-03 are not present.

KCI understands that the MD-PSC and the DC-PSC have not yet formally adopted the draft Guidelines. Until such time that Maryland, DC, and West Virginia adopt finalized metrics, KCI is unable to draw definite conclusions as to the degree of similarity of these metrics with the Virginia adopted metrics. Based on these considerations, this test is placed in category 4.

PMR2 — Data Collection and Storage Verification & Validation Review

VA MTP Test Description

This test evaluates key policies and practices for collecting and storing raw and filtered data necessary for the creation of performance metrics. The procedures for data used in the calculation of the metrics will be included. This test will rely on checklists and inspections.

Summary of Analysis

KCI conducted surveys of Verizon metrics Subject Matter Experts (SMEs) to evaluate issues associated with the Data Collection and Storage Verification and Validation Review (PMR2). A total of 49 surveys were submitted to Verizon SMEs during November 2000. Responses were returned to KCI during the period 11/22/2000 through 12/08/2000.

The survey form was designed to document the response from Verizon to four key metrics topics for the MDVW region:

- Identification by name of the systems and processes used to collect and store metrics data.
- A high-level diagram of the systems and processes employed to collect, calculate and store metrics data.
- An estimate of the degree of similarity (or difference, if any) between the reports and logs generated by the capture of raw or unprocessed metrics data.

- Identification of the metrics process subject matter expert in each jurisdiction.

For each survey question Verizon was asked to positively confirm those instances where the metrics-impacting systems, reports and SMEs at issue were the same across the MDVW region.

The survey responses and associated documentation submitted from Verizon were reviewed by KCI and the results of that analysis were compiled.

After review of the survey responses and documentation provided, KCI determined that the systems, processes, and personnel that control the collection and storage of metrics data are the same across the MDVW region. Based on these considerations, this test is placed in Category 1.

PMR3 — Metrics Calculation and Reporting Verification & Validation Review

VA MTP Test Description

This test evaluates the processes used to calculate and report performance metrics and retail analogs. The test will rely on re-calculating CLEC metrics and retail analogs and reconciling discrepancies to verify and validate the production of metrics values. The test will use both retrospective data and data collected by KCI and Verizon-VA from the execution of transactions. This test will also analyze the consistency between the definition documentation and the procedures used for calculating metrics. The test will rely on checklists, document reviews, inspections and computer programming.

Summary of Analysis

Verizon's processes involving the calculation and reporting of metrics results would probably be very similar throughout the MDVW jurisdictions. However, as discussed in the PMR1 section there are slight differences in metrics adopted by the VA-SCC and the Guidelines filed by Verizon in Maryland and DC. Verizon has not filed Guidelines in West Virginia.

Until such time that Maryland, DC, and West Virginia adopt finalized metrics, KCI is unable to make a statement on the similarity of the metrics calculation and reporting processes.

Based on these considerations, this test is placed in category 4.

PMR4 — Metrics Data Filtering and Integrity Verification & Validation Review

VA MTP Test Description

This test evaluates the overall policies and practices for processing the data used by Verizon-VA in the production of the reported performance metrics. This test will rely on document reviews, inspections and sampling of partially converted data. Both CLEC and retail data will be included in the test. In addition, both retrospective data and data derived from the transactions submitted by KCI will be included.

Summary of Analysis

KCI conducted surveys of Verizon metrics SMEs to evaluate issues associated with the Metrics Data Filtering and Integrity Verification and Validation Review (PMR4). A total of 49 surveys were submitted to Verizon SMEs during November 2000. Responses were returned to KCI during the period 11/22/2000 through 12/08/2000.

The survey form was designed to document the response from Verizon to two key metrics topics for the MDVW region:

- Description of the processing of data
- Indication of the similarity of the reports/logs generated in each state for raw/unprocessed data.

For each survey question Verizon was asked to positively confirm those instances where the metrics-impacting processes and reports/logs were the same across the MDVW region.

The survey responses and associated documentation submitted from Verizon were reviewed by KCI and the results of that analysis were compiled.

KCI's analysis indicates that the processing of data is similar in all four MDVW jurisdictions. Once expressTRAK is fully operational in all four jurisdictions such that performance metrics are being reported from a common set of systems and with an assumption that Maryland, DC and West Virginia adopt metric guidelines consistent with those approved in Virginia, the policies and practices Verizon uses to process data subsequently used to calculate OSS performance metrics appear to be identical in the MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

PMR5 — Metrics Change Management Verification & Validation Review

VA MTP Test Description

This test evaluates the overall policies and practices for managing the change of the standards and definitions in the Verizon-VA metrics. This evaluation is conducted by analyzing the calculation of the metrics and the communication of metric changes to the VA-SCC and the CLECs. This will include policies and practices associated with both CLEC and, where the standards are retail analogs, retail measurements. This test will rely on checklists, document reviews and inspections.

Summary of Analysis

KCI conducted a survey of Verizon metrics change management experts to evaluate issues associated with the Metrics Change Management Verification and Validation Review (PMR5). KCI received a response to this survey on 11/17/00.

Verizon provided an extract in the form of screen prints from its Metrics Change Control Database for two metrics changes: CC2000-00075-Ord and CC2000-00005-Ord. These extracts indicate that the Change Control Request Form, Change Control Response Document, Data Provider's Response Document, and Jeopardy Notice Document are the same across the MDVW region.

Based on this review of the Metrics Change Control Database, KCI's analysis indicates that the Metrics Change Management policies and practices utilized by Verizon are identical in all four MDVW jurisdictions. Based on these considerations, this test is placed in category 1.

Conclusions

General

As KCI has already indicated, this analysis is based largely on documentation supplied by Verizon and representations made by Verizon as part of interviews. Furthermore, the analysis was performed contingent upon the full implementation of expressTRAK. However, a full, production ready expressTRAK-based OSS environment does not currently exist in the four jurisdictions. The actual implementation and deployment of expressTRAK may have a significant impact on the extent to which the categorizations remain valid with the passage of time. In addition, unforeseen events in the future may change the level of comparability among the OSS in the four jurisdictions. Furthermore, this study has been conducted prior to full-scale testing in Virginia. As a result, it is possible that the extent of comparability presented in this report may be different from what is currently expected once expressTRAK has been fully implemented in all MDVW jurisdictions.

The following table summarizes the results of the comparability assessment of the 32 tests included in the Virginia MTP for OSS testing.

Table 12: Summary of MDVW Comparability Results

		MD	DC	WV	
Same	Category 1	Number	17	17	19
		Percentage	53%	53%	60%
	Category 2	Number	12	12	11
		Percentage	38%	38%	34%
Different	Category 3	Number	1	1	0
		Percentage	3%	3%	0%
Additional Information Needed	Category 4	Number	2	2	2
		Percentage	6%	6%	6%

It is the opinion of KCI that for Category 1 and Category 2, the systems, interfaces, processes, procedures, personnel, management structure and metrics can be considered the “same” across the MDVW jurisdictions. Differences identified for those OSS areas rated Category 2 are not considered to be material in nature; therefore, the results of the Virginia test should be applicable to the other MDVW jurisdictions.

The POP Functional Evaluation (TVV1) has a mixed Category 2 / Category 3 rating for Maryland and DC. This mixed rating was assigned to highlight the degree of differences found when compared to Virginia on a product type-by-product type basis. The Loop and Resale products were found to have significant differences as a direct result of the different TISOCs which process these orders. If the proposed Verizon implementation of a realignment of TISOCs by product types does occur prior to the start of the Virginia test, the overall rating could become a Category 2 for all product types. Alternatively, a small number of Maryland and DC non-flow-through Loop and Resale transactions could be added into the Virginia test to demonstrate comparable results between the TISOCs.

KCI was provided insufficient information to determine a comparability rating for two tests; Metrics Standards and Definitions (PMR1) and Metrics Calculations and Reporting (PMR3). Once metrics guidelines have been adopted by Maryland, DC and West Virginia, an assessment of their comparability to the Virginia guidelines can be determined.

KCI was unable to make any assessment as to what impact, if any, that this study would have on the Virginia test schedule. Such an impact analysis will not be possible until such time as the DC-PSC, MD-PSC, and

WV-PSC each determine the extent to which testing may be necessary for their respective jurisdiction and the VA-SCC agrees that combined testing is appropriate and desired.